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 Florida Power and Light Company  
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SUBJECT: ST. LUCIE UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: ADMINISTRATIVE CHANGES (TAC NOS. M90782 AND M90783)

Dear Mr. Goldberg:

The Commission has issued the enclosed Amendment Nos. 134 and 73 to Facility Operating License Nos. DPR-67 and NPF-16 for the St. Lucie Plant, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated October 27, 1994.

These administrative amendments correct editorial errors, remove deleted pages, clarify confusing statements and eliminate inconsistencies identified by the plant operations staff.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

(Original Signed By)

Jan A. Norris, Senior Project Manager  
 Project Directorate II-2  
 Division of Reactor Projects - I/II  
 Office of Nuclear Reactor Regulation

Docket Nos. 50-335 and 50-389

Enclosures:

1. Amendment No. 134 to DPR-67
2. Amendment No. 73 to NPF-16
3. Safety Evaluation

cc w/enclosures:  
 See next page

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DATE	<i>3/1/95</i>	<i>3/2/95</i>	<i>3/14/95</i>	<i>3/2/95</i>	
COPY	<u>Yes/No</u>	<u>Yes/No</u>	<u>Yes/No</u>	<u>Yes/No</u>	

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St. Lucie Plant  
Units 1 and 2

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DATED: March 15, 1995

AMENDMENT NO. 134 TO FACILITY OPERATING LICENSE NO. DPR-67 - ST. LUCIE, UNIT 1  
AMENDMENT NO. 73 TO FACILITY OPERATING LICENSE NO. NPF-16 - ST. LUCIE, UNIT 2

Docket File

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

FLORIDA POWER & LIGHT COMPANY

ORLANDO UTILITIES COMMISSION OF

THE CITY OF ORLANDO, FLORIDA

AND

FLORIDA MUNICIPAL POWER AGENCY

DOCKET NO. 50-389

ST. LUCIE PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 73  
License No. NPF-16

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power & Light Company, et al. (the licensee), dated October 27, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility Operating License No. NPF-16 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.2 to read as follows:

2. Technical Specifications

- The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 73 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 15, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 73

TO FACILITY OPERATING LICENSE NO. NPF-16

DOCKET NO. 50-389

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

<u>Remove Pages</u>	<u>Insert Pages</u>
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X	X
XIV	XIV
XVI	XVI
XVIII	XVIII
XXI	XXI
XXIII	XXIII
XXIV	XXIV
XXV	XXV
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TABLE 3.3-1 (Continued)

TABLE NOTATION

\* With the protective system trip breakers in the closed position, the CEA drive system capable of CEA withdrawal, and fuel in the reactor vessel.

# The provisions of Specification 3.0.4 are not applicable.

- (a) Trip may be manually bypassed below 0.5% of RATED THERMAL POWER in conjunction with (d) below; bypass shall be automatically removed when THERMAL POWER is greater than or equal to 0.5% of RATED THERMAL POWER.
- (b) Trip may be manually bypassed below 705 psig; bypass shall be automatically removed at or above 705 psig.
- (c) Trip may be bypassed below 15% of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL POWER is greater than or equal to 15% of RATED THERMAL POWER.
- (d) Trip may be bypassed during testing pursuant to Special Test Exception 3.10.3.
- (e) Trip may be bypassed below  $10^{-4}\%$  and above 15% of RATED THERMAL POWER; bypass shall be automatically removed when THERMAL power is  $\geq 10^{-4}\%$  or  $\leq 15\%$  of RATED THERMAL POWER.
- (f) Each channel shall be comprised of two trip breakers; actual trip logic shall be one-out-of-two taken twice.
- (g) There shall be at least two decades of overlap between the Wide Range Logarithmic Neutron Flux Monitoring Channels and the Power Range Neutron Flux Monitoring Channels.

ACTION STATEMENTS

- ACTION 1 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and/or open the protective system trip breakers.

ACTION STATEMENTS

- ACTION 2 -
- a. With the number of channels OPERABLE one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may continue provided the inoperable channel is placed in the bypassed or tripped condition within 1 hour. If the inoperable channel is bypassed, the desirability of maintaining this channel in the bypassed condition shall be reviewed in accordance with Specification 6.5.1.6m. The channel shall be returned to OPERABLE status no later than during the next COLD SHUTDOWN.
  - b. With the number of channels OPERABLE one less than the Minimum Channels OPERABLE, STARTUP and/or POWER OPERATION may continue provided the following conditions are satisfied:
    1. Verify that one of the inoperable channels has been bypassed and place the other inoperable channel in the tripped condition within 1 hour.
    2. All functional units affected by the bypassed/tripped channel shall also be placed in the bypassed/tripped condition.

With a channel process measurement circuit that affects multiple functional units inoperable or in test, bypass or trip all associated functional units as listed below:

Process Measurement Circuit	Functional Unit Bypassed
1. Safety Channel - Nuclear Instrumentation	
Wide Range	Rate of Change of Power-High (RPS)
Linear Range	Variable Power Level-High (RPS) Local Power Density-High (RPS) Thermal Margin/Low Pressure (RPS)
2. Pressurizer Pressure -	Pressurizer Pressure - High (RPS) Thermal Margin/Low Pressure (RPS) Pressurizer Pressure-Low (ESF)
3. Containment Pressure -	Containment Pressure - High (RPS) Containment Pressure - High (ESF)
4. Steam Generator Pressure -	Steam Generator Pressure - Low (RPS) Thermal Margin/Low Pressure (RPS) AFAS-1 and AFAS-2 (AFAS) Steam Generator Pressure-Low (ESF)
5. Steam Generator Level -	Steam Generator Level - Low (RPS) If SG-2A, then AFAS-1 (AFAS) If SG-2B, then AFAS-2 (AFAS)

TABLE 3.3-3 (Continued)

TABLE NOTATION

- (a) Trip function may be bypassed in this MODE when pressurizer pressure is less than 1836 psia; bypass shall be automatically removed when pressurizer pressure is greater than or equal to 1836 psia.
  - (b) An SIAS signal is first necessary to enable CSAS logic.
  - (c) Trip function may be bypassed in this MODE below 700 psia; bypass shall be automatically removed at or above 700 psia.
- \* The provisions of Specification 3.0.4 are not applicable.

ACTION STATEMENTS

**ACTION 12 -** With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

**ACTION 13 -** With the number of channels OPERABLE one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may continue provided the inoperable channel is placed in the bypassed or tripped condition within 1 hour. If the inoperable channel is bypassed, the desirability of maintaining this channel in the bypassed condition shall be reviewed in accordance with Specification 6.5.1.6m. The channel shall be returned to OPERABLE status no later than during the next COLD SHUTDOWN.

With a channel process measurement circuit that affects multiple functional units inoperable or in test, bypass or trip all associated functional units as listed below.

Process Measurement Circuit	Functional Unit Bypassed
1. Containment Pressure -	Containment Pressure - High (SIAS, CIAS, CSAS) Containment Pressure - High (RPS)
2. Steam Generator Pressure -	Steam Generator Pressure - Low (MSIS) AFAS-1 and AFAS-2 (AFAS) Thermal Margin/Low Pressure (RPS) Steam Generator Pressure-Low (RPS)
3. Steam Generator Level -	Steam Generator Level - Low (RPS) If SG-2A, then AFAS-1 (AFAS) If SG-2B, then AFAS-2 (AFAS)
4. Pressurizer Pressure -	Pressurizer Pressure - High (RPS) Pressurizer Pressure - Low (SIAS) Thermal Margin/Low Pressure (RPS)



TABLE 3.3-3 (Continued)

TABLE NOTATION

**ACTION 14 -** With the number of channels OPERABLE one less than the Minimum Channels OPERABLE, STARTUP and/or POWER OPERATION may continue provided the following conditions are satisfied:

- a. Verify that one of the inoperable channels has been bypassed and place the other inoperable channel in the tripped condition within 1 hour.
- b. All functional units affected by the bypassed/tripped channel shall also be placed in the bypassed/tripped condition as listed below.

	Process Measurement Circuit	Functional Unit Bypassed/Tripped
1.	Containment Pressure -	Containment Pressure - High (SIAS, CIAS, CSAS) Containment Pressure - High (RPS)
2.	Steam Generator Pressure -	Steam Generator Pressure - Low (MSIS) AFAS-1 and AFAS-2 (AFAS) Thermal Margin/Low Pressure (RPS) Steam Generator Pressure-Low (RPS)
3.	Steam Generator Level -	Steam Generator Level-Low (RPS) If SG-2A, then AFAS-1 (AFAS) If SG-2B, then AFAS-2 (AFAS)
4.	Pressurizer Pressure -	Pressurizer Pressure - High (RPS) Pressurizer Pressure - Low (SIAS) Thermal Margin/Low Pressure (RPS)

**ACTION 15 -** With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channels to OPERABLE status within 48 hours or be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

**ACTION 16 -** With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or declare the associated valve inoperable and take the ACTION required by Specification 3.7.1.5.

**ACTION 17 -** With the number of OPERABLE Channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or place the inoperable channel in the tripped condition and verify that the Minimum Channels OPERABLE requirement is demonstrated within 1 hour; one additional channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.

TABLE 3.3-6 (Continued)

ACTION STATEMENTS

- ACTION 22 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, perform area surveys of the monitored area with portable monitoring instrumentation at least once per 24 hours.
- ACTION 23 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.4.6.1.
- ACTION 24 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, suspend all operations involving movement of fuel within the spent fuel storage pool and crane operations with loads over the spent fuel storage pool.
- ACTION 25 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, comply with the ACTION requirements of Specification 3.9.9.
- ACTION 26 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation.
- ACTION 27 - With the number of OPERABLE Channels less than required by the Minimum Channels OPERABLE requirement, either restore the inoperable Channel(s) to OPERABLE status within 72 hours, or:
- 1) Initiate the preplanned alternate method of monitoring the appropriate parameter(s), and
  - 2) Prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
1. AREA MONITORS				
a. Fuel Storage Pool Area				
i. Criticality and Ventilation System Isolation Monitor	S	R	M	*
b. Containment - Isolation	S	R	M	6
c. Control Room Isolation	S	R	M	ALL MODES
d. Containment Area - High Range	S	R	M	1, 2, 3, & 4
2. PROCESS MONITORS				
a. Fuel Storage Pool Area - Ventilation System				
i. Gaseous Activity	S	R	M	**
ii. Particulate Activity	S	R	M	**
b. Containment				
i. Gaseous Activity				
a) RCS Leakage Detection	S	R	M	1, 2, 3, & 4
ii. Particulate Activity				
a) RCS Leakage Detection	S	R	M	1, 2, 3, & 4

\* With fuel in the storage pool or building

\*\* With irradiated fuel in the storage pool

TABLE 4.3-3 (Continued)

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
<b>PROCESS MONITORS (Continued)</b>				
<b>c. Noble Gas Effluent Monitors</b>				
i. Reactor Auxiliary Building Exhaust System (Plant Vent Low Range Monitor)	S	R	M	1, 2, 3 & 4
ii. Reactor Auxiliary Building Exhaust System (Plant Vent High Range Monitor)	S	R	M	1, 2, 3, & 4
iii. Steam Generator Blowdown Treatment Building Exhaust System	S	R	M	1, 2, 3 & 4
iv. Steam Safety Valve Discharge#	S	R	M	1, 2, 3 & 4
v. Atmospheric Steam Dump Valve Discharge#	S	R	M	1, 2, 3 & 4
vi. ECCS Exhaust	S	R	M	1, 2, 3 & 4

# The steam safety valve discharge monitor and the atmospheric steam dump valve discharge monitor are the same monitor.

INSTRUMENTATION

INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

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3.3.3.2 The incore detection system shall be OPERABLE with:

- a. At least 75% of all incore detector locations, and
- b. A minimum of two quadrant symmetric incore detector locations per core quadrant.

An OPERABLE incore detector location shall consist of a fuel assembly containing a fixed detector string with a minimum of three OPERABLE rhodium detectors.

APPLICABILITY: When the incore detection system is used for:

- a. Recalibration of the excore axial flux offset detection system,
- b. Monitoring the AZIMUTHAL POWER TILT,
- c. Calibration of the power level neutron flux channels, or
- d. Monitoring the linear heat rate.

ACTION:

- a. With the incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.3.3.2 The incore detection system shall be demonstrated OPERABLE:

- a. By performance of a CHANNEL CHECK within 7 days prior to its use when required for:
  1. Recalibration of the excore axial flux offset detection system,
  2. Monitoring the linear heat rate pursuant to Specification 4.2.1.4,

TABLE 3.3-10  
ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Containment Pressure	2	1
2. Reactor Coolant Outlet Temperature - T <sub>Hot</sub> (Narrow Range)	2	1
3. Reactor Coolant Inlet Temperature - T <sub>Cold</sub> (Wide Range)	2	1
4. Reactor Coolant Pressure - Wide Range	2	1
5. Pressurizer Water Level	2	1
6. Steam Generator Pressure	2/steam generator	1/steam generator
7. Steam Generator Water Level - Narrow Range	1/steam generator	1/steam generator
8. Steam Generator Water Level - Wide Range	1/steam generator*	1/steam generator*
9. Refueling Water Storage Tank Water Level	2	1
10. Auxiliary Feedwater Flow Rate (Each pump)	1/pump*	1/pump*
11. Reactor Cooling System Subcooling Margin Monitor	2	1
12. PORV Position/Flow Indicator	2/valve***	1/valve**
13. PORV Block Valve Position Indicator	1/valve**	1/valve**
14. Safety Valve Position/Flow Indicator	1/valve***	1/valve***
15. Containment Sump Water Level (Narrow Range)	1****	1****
16. Containment Water Level (Wide Range)	2	1
17. Incore Thermocouples	4/core quadrant	2/core quadrant
18. Reactor Vessel Level Monitoring System	2*****	1*****

\* These corresponding instruments may be substituted for each other.

\*\* Not required if the PORV block valve is shut and power is removed from the operator.

\*\*\* If not available, monitor the quench tank pressure, level and temperature, and each safety valve/PORV discharge piping temperature at least once every 12 hours.

\*\*\*\* The non-safety grade containment sump water level instrument may be substituted.

\*\*\*\*\* Definition of OPERABLE: A channel consists of eight (8) sensors in a probe of which four (4) sensors must be OPERABLE.

ST. LUCIE - UNIT 2

3/4 3-42

Amendment No. 2, 19.

TABLE 4.3-7

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Containment Pressure	M	R
2. Reactor Coolant Outlet Temperature - $T_{Hot}$ (Narrow Range)	M	R
3. Reactor Coolant Inlet Temperature - $T_{Cold}$ (Wide Range)	M	R
4. Reactor Coolant Pressure - Wide Range	M	R
5. Pressurizer Water Level	M	R
6. Steam Generator Pressure	M	R
7. Steam Generator Water Level - Narrow Range	M	R
8. Steam Generator Water Level - Wide Range	M	R
9. Refueling Water Storage Tank Water Level	M	R
10. Auxiliary Feedwater Flow Rate (Each pump)	M	R
11. Reactor Coolant System Subcooling Margin Monitor	M	R
12. PORV Position/Flow Indicator	M	R
13. PORV Block Valve Position Indicator	M	R
14. Safety Valve Position/Flow Indicator	M	R
15. Containment Sump Water Level (Narrow Range)	M	R
16. Containment Water Level (Wide Range)	M	R
17. Incore Thermocouples	M	R
18. Reactor Vessel Level Monitoring System	M	R

ST. LUCIE - UNIT 2

3/4 3-43

Amendment No. 19, 73

Pages 3/4 3-45 through 3/4 3-46 (Amendment No. 55) have been deleted from the Technical Specifications. The next page is 3/4 3-47.



Pages 3/4 3-49 through 3/4 3-52 (Amendment No. 61) have been deleted from the Technical Specifications. The next page is 3/4 3-53.

TABLE 3.3-13  
EXPLOSIVE GAS MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABILITY</u>	<u>ACTION</u>
1. WASTE GAS DECAY TANKS EXPLOSIVE GAS MONITORING SYSTEM			
a. Oxygen Monitors	1	*	35

TABLE NOTATION

\* During waste gas system operation.

ACTION 35 - With the number of channels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, operation of this system may continue for up to 30 days provided samples of O<sub>2</sub> are analyzed by the lab gas partitioner at least once per 24 hours.

TABLE 4.3-9

EXPLOSIVE GAS MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. WASTE GAS DECAY TANKS EXPLOSIVE GAS MONITORING SYSTEM					
a. Oxygen Monitor	D		Q(1)	M	*
b. Oxygen Monitor (alternate)	D		Q(1)	M	*

TABLE NOTATION

\* During waste gas holdup system operation.

(1) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent oxygen, balance nitrogen, and
2. Four volume percent oxygen, balance nitrogen.

Pages 3/4 3-57 through 3/4 3-59 (Amendment No. 61) have been deleted from the Technical Specifications. The next page is 3/4 3-60.

Pages 3/4 11-2 through 3/4 11-13 (Amendment No. 61) have been deleted from the Technical Specifications. The next page is 3/4 11-14.

## 3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

### BASES

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#### 3/4.5.1 SAFETY INJECTION TANKS

The OPERABILITY of each of the Reactor Coolant System (RCS) safety injection tanks ensures that a sufficient volume of borated water will be immediately forced into the reactor core through each of the cold legs in the event the RCS pressure falls below the pressure of the safety injection tanks. This initial surge of water into the core provides the initial cooling mechanism during large RCS pipe ruptures.

The limits on safety injection tank volume, boron concentration, and pressure ensure that the assumptions used for safety injection tank injection in the safety analysis are met.

The safety injection tank power-operated isolation valves are considered to be "operating bypasses" in the context of IEEE Std. 279-1971, which requires that bypasses of a protective function be removed automatically whenever permissive conditions are not met. In addition, as these safety injection tank isolation valves fail to meet single failure criteria, removal of power to the valves is required.

The limits for operation with a safety injection tank inoperable for any reason except an isolation valve closed minimizes the time exposure of the plant to a LOCA event occurring concurrent with failure of an additional safety injection tank which may result in unacceptable peak cladding temperatures. If a closed isolation valve cannot be immediately opened, the full capability of one safety injection tank is not available and prompt action is required to place the reactor in a mode where this capability is not required.

#### 3/4.5.2 and 3/4.5.3 ECCS SUBSYSTEMS

The OPERABILITY of two separate and independent ECCS subsystems ensures that sufficient emergency core cooling capability will be available in the event of a LOCA assuming the loss of one subsystem through any single failure consideration. Either subsystem operating in conjunction with the safety injection tanks is capable of supplying sufficient core cooling to limit the peak cladding temperatures within acceptable limits for all postulated break sizes ranging from the double-ended break of the largest RCS hot leg pipe downward. In addition, each ECCS subsystem provides long-term core cooling capability in the recirculation mode during the accident recovery period.

## EMERGENCY CORE COOLING SYSTEMS

### BASES

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#### ECCS SUBSYSTEMS (Continued)

In Mode 3 with RCS pressure < 1750 psia and in Mode 4, one OPERABLE ECCS subsystem is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the limited core cooling requirements.

The trisodium phosphate dodecahydrate (TSP) stored in dissolving baskets located in the containment basement is provided to minimize the possibility of corrosion cracking of certain metal components during operation of the ECCS following a LOCA. The TSP provided this protection by dissolving in the sump water and causing its final pH to be raised to greater than or equal to 7.0.

The requirement for one high pressure safety injection pump to be rendered inoperable prior to entering MODE 5, although the analysis supports actuation of safety injection in a water solid RCS with pressurizer heaters energized, provides additional administrative assurance that a mass addition pressure transient can be relieved by the operation of a single PORV or SDCRV.

The Surveillance Requirements provided to ensure OPERABILITY of each component ensure that at a minimum, the assumptions used in the accident analyses are met and that subsystem OPERABILITY is maintained. Surveillance Requirements for throttle valve position stops and flow balance testing provide assurance that proper ECCS flows will be maintained in the event of a LOCA. Maintenance of proper flow resistance and pressure drop in the piping system to each injection point is necessary to: (1) prevent total pump flow from exceeding runout conditions when the system is in its minimum resistance configuration, (2) provide the proper flow split between injection points in accordance with the assumptions used in the ECCS-LOCA analyses, and (3) provide an acceptable level of total ECCS flow to all injection points equal to or above that assumed in the ECCS-LOCA analyses. The requirement to dissolve a representative sample of TSP in a sample of RWT water provides assurance that the stored TSP will dissolve in borated water at the postulated post-LOCA temperatures.

#### 3/4.5.4 REFUELING WATER TANK

The OPERABILITY of the Refueling Water Tank (RWT) as part of the ECCS ensures that a sufficient supply of borated water is available for injection by the ECCS in the event of a LOCA. The limits on RWT minimum volume and boron concentration ensure that (1) sufficient water is available within containment to permit recirculation cooling flow to the core, and (2) the reactor will remain subcritical in the cold condition following mixing of the RWT and the RCS water volumes with all control rods inserted except for the most reactive control assembly. These assumptions are consistent with the LOCA analyses.

3/4.11 RADIOACTIVE EFFLUENTS

BASES

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Pages B 3/4 11-2 through B 3/4 11-3 (Amendment No. 61) have been deleted from the Technical Specifications. The next page is B 3/4 11-4.





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 134 AND 73  
TO FACILITY OPERATING LICENSE NO. DPR-67 AND NO. NPF-16  
.. FLORIDA POWER AND LIGHT COMPANY, ET AL.  
ST. LUCIE PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-335 AND 50-389

## 1.0 INTRODUCTION

By letter dated October 27, 1994, Florida Power & Light Company (FPL, the licensee) requested various changes to the Technical Specifications (TS) for the St. Lucie Plant, Unit Nos. 1 and 2. The licensee proposed to make administrative changes to achieve consistency throughout TS by removing outdated material, removing deleted pages, making minor text changes for purposes of clarification, making editorial corrections and resolving inconsistencies identified by plant operations staff.

## 2.0 DESCRIPTION AND EVALUATION

### 2.1 ST. LUCIE UNIT 1

- a. The following changes in text will improve consistency within the Unit 1 TS by revising and/or deleting outdated material, providing proper references, and correcting spelling and/or nomenclature errors.

(1) On Page Ia: Add "TABLE 1.1 Frequency Notation ... 1-8" and "TABLE 1.2 Operational Modes ... 1-9." The location of these topics is not otherwise identified in the index.

(2) On Page III:

- a) Under 3/4.1 REACTIVITY CONTROL SYSTEMS, revise "Shutdown Margin -  $T_{avg} > 200$  °F" to read, "Shutdown Margin -  $T_{avg} > 200$  °F" and thereby reflect the proper subscript for average temperature.
- b) Under 3/4.1.2 BORATION SYSTEMS, revise the page reference for "Borated Water Sources - Operating" from "3/4 1-4" to read "3/4 1-18."

- (3) On Page IV: Under 3/4.3 INSTRUMENTATION, delete "Fire Detection Instrumentation ... 3/4 3-37".

This TS was deleted by Amendment 115.

- (4) On Page V, under 3/4.4.10 STRUCTURAL INTEGRITY:
- a) Revise "Safety Class 1 Components" to read, "ASME Code Class 1, 2, and 3 Components."
  - b) Delete "Safety Class 2 Components ... 3/4 4-37" and "Safety Class 3 Components ... 3/4 4-53."

These requirements were merged into one specification pursuant to Amendment 90.

- (5) On Page VI: Under 3/4.7 PLANT SYSTEMS, delete "Secondary Water Chemistry ... 3/4 7-10."

This TS was deleted by Amendment 86.

- (6) On Page VII:
- a) Delete the entire section, "3/4.7.11 FIRE SUPPRESSION SYSTEMS" and the referenced pages.
  - b) Delete "3/4.7.12 PENETRATION FIRE BARRIERS ... 3/4 7-45."

The specifications were deleted by Amendment 115.

- (7) On Page IX: For Bases Section 3/4.2.2, replace the words "TOTAL PLANAR RADIAL PEAKING FACTOR" with the word, "DELETED."

This TS and its bases were deleted by Amendment 109.

- (8) On Page X: For Bases Section 3/4.5.4, revise "REFUELING WATER STORAGE TANK (RWST)" to read, "REFUELING WATER TANK (RWT)."

The proposed wording reflects the proper nomenclature for Unit 1 and is consistent with both the TS and the Bases Section for this system.

- (9) On Page XI:
- a) Delete "3/4.7.11 FIRE SUPPRESSION SYSTEMS...B 3/4 7-7."
  - b) Delete "3/4.7.12 PENETRATION FIRE BARRIERS ... B 3/4 7-7."

The Bases sections were deleted by Amendment 115.

(10) On Page XII:

a) Under 3/4.11 RADIOACTIVE EFFLUENTS:

- i) Replace "LIQUID EFFLUENTS" with the word "DELETED."
- ii) Replace "3/4.11.2 GASEOUS EFFLUENTS ... B 3/4 11.2" with "3/4.11.2.5 EXPLOSIVE GAS MIXTURE ... B 3/4 11-4."
- iii) Replace "3/4.11.3 SOLID RADIOACTIVE WASTE" with "3/4.11.2.6 GAS STORAGE TANKS".
- iv) Delete "3/4.11.4 TOTAL DOSE ... B 3/4 11-5."

b) Delete the entire section 3/4.12 RADIOLOGICAL ENVIRONMENTAL MONITORING.

The Bases sections were revised by Amendment 123.

(11) On Pages XIII, XIV, and XV: Revise the page references as indicated.

The topics do not appear on the pages presently indicated.

(12) On Page 3/4 2-2: In the footnote #, revise "core" to read "incore" and the referenced Specification "4.2.1" to read "4.2.1.3".

The proposed changes will correct the footnote to reflect the proper system nomenclature and the appropriate reference specification. Unit 1 has no TS number 4.2.1; and if the incore system is inoperable, linear heat rate would be monitored by the excore system per TS 4.2.1.3.

(13) On Page 3/4 3-25, Surveillance Requirement 4.3.3.2.a.2: Revise the reference specification "4.2.1.3" to read "4.2.1.4."

The proposed change rectifies an improper reference. TS 4.2.1.4 is the proper reference for the incore monitoring system.

(14) On Page 3/4 3-44, TABLE 4.3-7: In item 6, revise "postition" to properly read "position."

b. The following reorganization of text will restore coherency to the tabular format of TS 3/4.3.3.10.

(1) On Page 3/4 3-51, TABLE 3.3-13: Incorporate all of the TABLE NOTATION text that is currently printed on Page 3/4 3-53 (Amendment 123).

TABLE 3.3-13 was fragmented as a result of deletions made pursuant to Amendment 123. The proposed change is a simple relocation of existing text in order to combine these fragments on a single page and thereby restore the consistency of the TS format.

- (2) On Page 3/4 3-52: Delete the word "DELETED". On this page, incorporate all of the TABLE 4.3-9 text that is currently printed on page 3/4 3-54 (Amendment 123), and all of the associated TABLE NOTATION text that is currently printed on Page 3/4 3-56 (Amendment 123).

TABLE 4.3-9 was fragmented as a result of deletions made pursuant to Amendment 123. The proposed change is a simple relocation of existing text in order to combine these fragments on a single page and thereby restore the consistency of the TS format. Printing TABLE 4.3-9 in its entirety on page 3/4 3-52 will facilitate deletion of blank pages without interrupting the continuity of pagination, per item 1.d.(3) below.

- c. The following changes in text will provide accountability for the applicable pages listed in section 1.d that FPL has selected for deletion from the technical specifications.

- (1) On Page 3/4 3-37: Replace the word "DELETED" with the text, "Pages 3/4 3-38 through 3/4 3-40 (Amendment No. 115) have been deleted from the Technical Specifications."
- (2) On Page 3/4 3-45: Replace the word "DELETED" with the text, "Pages 3/4 3-46 through 3/4 3-49 (Amendment No. 123) have been deleted from the Technical Specifications"
- (3) On Page 3/4 4-27: Replace the word "DELETED" with the text, "Pages 3/4 4-28 through 3/4 4-55 (Amendment No. 90), and Pages 3/4 4-56 through 3/4 4-57 (Amendment No. 80) have been deleted from the Technical Specifications."
- (4) On Page 3/4 7-10: Replace the words "THIS PAGE LEFT INTENTIONALLY BLANK" with the text, "Pages 3/4 7-11 through 3/4 7-12 (Amendment No. 86) have been deleted from the Technical Specifications."
- (5) On Page 3/4 11-1: Replace the word "DELETED" with the text, "Pages 3/4 11-2 through 3/4 11-13 (Amendment No. 123) have been deleted from the Technical Specifications."
- (6) On Page B 3/4 11-1: Add the words, "Pages B 3/4 11-2 through B 3/4 11-3 (Amendment No. 123) have been deleted from the Technical Specifications."

The text proposed in each of the above items will preserve the continuity of pagination. The pages that are referred to in the text are blank, and will be removed from the TS.

d. FPL proposes to delete the following blank pages from the Unit 1 Technical Specifications.

- (1) Delete pages 3/4 3-38 through 3/4 3-40 (Amendment 115).
- (2) Delete pages 3/4 3-46 through 3/4 3-49 (Amendment 123).
- (3) \*Delete pages 3/4 3-53 through 3/4 3-56 (Amendment 123). The existing text on pages 3/4 3-54 and 3/4 3-56 will appear on page 3/4 3-52 per item 1.b.(2) above.
- (4) Delete pages 3/4 4-28 through 3/4 4-55 (Amendment 90) and pages 3/4 4-56 through 3/4 4-57 (Amendment 80).
- (5) Delete pages 3/4 7-11 through 3/4 7-12 (Amendment 86).
- (6) \*Delete pages 3/4 7-32 through 3/4 7-39a (Amendment 83).
- (7) Delete pages 3/4 11-2 through 3/4 11-13 (Amendment 123).
- (8) \*Delete pages 3/4 11-16 through 3/4 11-17 (Amendment 123)
- (9) \*Delete pages 3/4 12-1 through 3/4 12-12 (Amendment 123).
- (10) Delete pages B 3/4 11-2 through B 3/4 11-3 (Amendment 123).
- (11) \*Delete pages B 3/4 12-1 through B 3/4 12-2 (Amendment 123).

Except as noted by \*, continuity of pagination will be preserved by a note on the page immediately preceding each page group as proposed in section 1.c above.

\* Pages denoted by a single asterisk are the last pages in the applicable TS section, and deletion of these pages will not interrupt the page numbering sequence.

e. The following changes in text will rectify errors in the stated ranges for the Unit 1 Radioactivity RCS Leakage Detection instruments listed in TABLE 3.3-6.

On Page 3/4 3-22, TABLE 3.3-6:

- (1) For item 2.a.i, Gaseous Activity RCS Leakage Detection, change the indicated MEASUREMENT RANGE from " $10^{-7} - 10^{-2} \mu\text{Ci/cc}$ " to properly read, " $10 - 10^6$  cpm."

- (2) For item 2.a.ii, Particulate Activity RCS Leakage Detection, change the indicated MEASUREMENT RANGE from "1 - 10<sup>6</sup> cpm/hr" to properly read, "10 - 10<sup>6</sup> cpm."

The ratemeters for both of the above listed instruments have measurement ranges of 10 - 10<sup>6</sup> cpm. The ranges currently listed in TABLE 3.3-6 for these instruments are the result of an inadvertent revision made pursuant to Amendment 59, which incorporated Radiological Effluent Technical Specifications for Unit 1 modeled as close as practicable to those of Unit 2. This proposed change will rectify that error by restoring the listed measurement ranges to their original values which are consistent with the Unit 1 plant configuration.

- f. The following minor change in text will correct errors in the stated secondary system design pressure and the basis for operability of Main Steam Safety Valves found in Bases Section 3/4.7.1.

On Page B 3/4 7-1, under Section 3/4.7.1.1 SAFETY VALVES: In the first sentence, revise "...limited to within its design pressure of 1025 psig..." to read, "...limited to within 110% of its design pressure of 1000 psia..."

The Unit 1 steam generator design pressure is 1000 psia. The plant safety analyses demonstrate that the existing lift setpoints for the safety valves satisfy the acceptance criteria by limiting steam generator pressure to less than 110% of design during the postulated worst case over-pressurization transient. The proposed change in text will more accurately reflect the Bases for TS 3/4.7.1.1.

- g. The following minor change in text will correct an error in the stated Bases for the Unit 1 Thermal Margin/Low Pressure (TM/LP) trip setpoints.

On Page B 2-7, under Thermal Margin/Low Pressure: Delete "of 30 psia" from the second sentence of paragraph 3.

The bases presently state that an allowance of 30 psia is included in the TM/LP trip setpoint to compensate for the time delay associated with effective termination of the event that exhibits the most rapid decrease in margin to the DNBR limit. This pressure bias has been superseded and is incorrect, e.g., a value of 42 psia was established for this allowance as part of the core reload safety analyses for Unit 1 Cycle 11.

Simply deleting the specific numerical value from the text will both rectify the existing error and preclude the need for an amendment to the Bases section each time this parameter is adjusted. Concurrently, the syntax of this sentence will be more consistent with the context of the

third paragraph in that only the types of setpoint allowances are identified.

## 2.2 ST LUCIE UNIT 2

- a. The following changes in text will improve consistency within the Unit 2 TS by revising and/or deleting outdated material, providing proper references, and correcting spelling and/or nomenclature errors.

- (1) On Page V: Under 3/4.3 INSTRUMENTATION, delete "FIRE DETECTION INSTRUMENTATION ... 3/4 3-44."

This TS was deleted by Amendment 55.

- (2) On Page VIII:

- a) Delete the entire section "3/4.7.11 FIRE SUPPRESSION SYSTEMS" and the referenced pages.

- b) Delete "3/4.7.12 FIRE RATED ASSEMBLIES ... 3/4 7-39."

The specifications were deleted by Amendment 55.

- (3) On Page X:

- a) Delete "3/4.11 RADIOACTIVE EFFLUENTS"

- b) Delete "3/4.12 GASEOUS EFFLUENTS"

- c) Add the appropriate SECTION number "3/4.11.2.5" preceding EXPLOSIVE GAS MIXTURE, and "3/4.11.2.6" preceding GAS STORAGE TANKS.

The revisions will make the Index consistent with TS changes implemented pursuant to Amendment 61.

- (4) On Page XIV:

- a) Delete "3/4.7.11 FIRE SUPPRESSION SYSTEMS...B 3/4 7-7"

- b) Delete "3/4.7.12 FIRE RATED ASSEMBLIES...B 3/4 7-8"

The Bases sections were deleted pursuant to Amendment 55.

- (5) On Page XVI:

- a) Under 3/4.11 RADIOACTIVE EFFLUENTS

- i) Delete "3/4.11.1 LIQUID EFFLUENTS...B 3/4 11-1."
  - ii) Replace "3/4.11.2 GASEOUS EFFLUENTS...B 3/4 11-2" with "3/4.11.2.5 EXPLOSIVE GAS MIXTURE ... B 3/4 11-4."
  - iii) Replace "3/4.11.3 SOLID RADIOACTIVE WASTE" with "3/4.11.2.6 GAS STORAGE TANKS."
  - iv) Delete "3/4.11.4 TOTAL DOSE ... B 3/4 11-5."
- b) Delete the entire section "3/4.12 RADIOACTIVE ENVIRONMENTAL MONITORING" and the referenced pages.

The Bases sections were changed pursuant to Amendment 61.

- (6) On Pages XVIII and XXI: Revise the page references as indicated.

The topics do not appear on the pages presently indicated.

- (7) On Page XXIII:

- a) For TABLE 3.3-2, replace "REACTOR PROTECTIVE INSTRUMENTATION RESPONSE TIMES ... 3/4 3-6" with the word "DELETED"
- b) For TABLE 3.3-5, replace "ENGINEERED SAFETY FEATURES RESPONSE TIMES ... 3/4 3-19" with the word "DELETED"

The tables were removed from the TS per Amendment 67.

- (8) On Page XXIV:

- a) For TABLE 3.3-11, replace "FIRE DETECTION INSTRUMENTS ... 3/4 3-45" with the word "DELETED." This table was deleted by Amendment 55.
- b) For TABLE 3.3-12, replace "RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION ... 3/4 3-49" with the word "DELETED."

This table was deleted by Amendment 61.

- c) For TABLE 4.3-8, replace "RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION...3/4 3-51" with the word "DELETED."

This table was deleted by Amendment 61.

- d) For TABLE 3.3-13, replace "RADIOACTIVE GASEOUS EFFLUENT" with the words "EXPLOSIVE GAS."

This table was revised by Amendment 61.



- e) For TABLE 4.3-9, replace "RADIOACTIVE GASEOUS EFFLUENT" with the words "EXPLOSIVE GAS," and revise the reference page "3/4 3-57" to read "3/4 3-55."

The table content was revised by Amendment 61, and the reference page for TABLE 4.3-9 will change as proposed in section b.(2) below.

(9) On Page XXV:

- a) For TABLE 3.7-4, replace "FIRE HOSE STATIONS ... 3/4 7-36" with the word "DELETED."

This table was deleted by Amendment 55.

- b) For TABLE 3.7-5, replace "YARD FIRE HYDRANTS AND ASSOCIATED HYDRANT HOSE HOUSES ... 3/4 7-38" with the word "DELETED."

This table was deleted by Amendment 55.

- c) For each of the following tables, replace the title and associated reference page with the word "DELETED." The tables were deleted from the TS by Amendment 61.

- i) TABLE 4.11-1, "RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS PROGRAM...3/4 11-2"
- ii) TABLE 4.11-2, "RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM...3/4 11-8"
- iii) TABLE 3.12-1, "RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM...3/4 12-3"
- iv) TABLE 3.12-2, "REPORTING LEVELS FOR RADIOACTIVITY CONCENTRATIONS IN ENVIRONMENTAL SAMPLES...3/4 12-7"
- v) TABLE 4.12-1, "DETECTION CAPABILITIES FOR ENVIRONMENTAL SAMPLE ANALYSIS...3/4 12-8"

- (10) On Page 3/4 3-30, Surveillance Requirement 4.3.3.2.a.2: Revise the reference Specification "4.2.1.3" to read, "4.2.1.4."

The proposed change rectifies an improper reference. TS 4.2.1.4 is the proper reference for the incore monitoring system.

- (11) On Page 3/4 3-43, TABLE 4.3-7: Renumber the Containment Sump Water Level (Narrow Range) instrument as item "15."

The table lists item 16 twice.

b. The following reorganization of text will restore coherency to the tabular format of TS 3/4.3.3.10.

- (1) On Page 3/4 3-54, TABLE 3.3-13: As shown in Attachment 4 to this submittal, incorporate all of the TABLE NOTATION text that is currently printed on Page 3/4 3-56 (Amendment 61).

TABLE.3.3-13 was fragmented as a result of deletions made pursuant to Amendment 61. The proposed change is a simple relocation of existing text in order to combine these fragments on a single page and thereby restore the consistency of the TS format.

- (2) On Page 3/4 3-55: Delete the word "DELETED". On this page as shown in Attachment 4 to this submittal, incorporate all of the TABLE 4.3-9 text that is currently printed on page 3/4 3-57 (Amendment 61), and all of the associated TABLE NOTATION text that is currently printed on Page 3/4 3-59 (Amendment 61).

TABLE 4.3-9 was fragmented as a result of deletions made pursuant to Amendment 61. The proposed change is a simple relocation of existing text in order to combine these fragments on a single page and thereby restore the consistency of the TS format. Printing TABLE 4.3-9 in its entirety on page 3/4 3-55 will facilitate deletion of blank pages as described in item 2.d.(3) below.

c. The following changes in text will provide accountability for the applicable pages listed in section 2.d that FPL has selected for deletion from the technical specifications.

- (1) On Page 3/4 3-44: Replace the word "DELETED" with the text, "Pages 3/4 3-45 through 3/4 3-46 (Amendment 55) have been deleted from the Technical Specifications."
- (2) On Page 3/4 3-48: Replace the word "DELETED" with the text, "Pages 3/4 3-49 through 3/4 3-52 (Amendment 61) have been deleted from the Technical Specifications."
- (3) On Page 3/4 3-56: Delete the existing text, and add the statement, "Pages 3/4 3-57 through 3/4 3-59 (Amendment 61) have been deleted from the Technical Specifications." (The text presently printed on page 3/4 3-56 will be relocated to page 3/4 3-54 per 2.b.(1) above).
- (4) On Page 3/4 11-1: Replace the word "DELETED" with the text, "Pages 3/4 11-2 through 3/4 11-13 (Amendment 61) have been deleted from the Technical Specifications."

- (5) On Page B 3/4 11-1: Add the text, "Pages B 3/4 11-2 through B 3/4 11-3 (Amendment 61) have been deleted from the Technical Specifications."

The text proposed in each of the above items will preserve the continuity of pagination. The pages that are referred to in the text will be removed from the TS.

- d. FPL proposes to delete the following pages from the Unit 2 Technical Specifications.

- (1) Delete pages 3/4 3-45 through 3/4 3-46 (Amendment 55).
- (2) Delete pages 3/4 3-49 through 3/4 3-52 (Amendment 61).
- (3) **\*\*Delete** pages 3/4 3-57 through 3/4 3-59 (Amendment 61).
- (4) Delete pages 3/4 11-2 through 3/4 11-13 (Amendment 61).
- (5) **\*Delete** pages 3/4 11-16 through 3/4 11-17 (Amendment 61).
- (6) **\*Delete** pages 3/4 12-1 through 3/4 12-12 (Amendment 61).
- (7) **\*Delete** page B 3/4 2-3 (Amendment 8).
- (8) Delete pages B 3/4 11-2 through B 3/4 11-3 (Amendment 61).
- (9) **\*Delete** pages B 3/4 12-1 through B 3/4 12-2 (Amendment 61).
- (10) **\*Delete** page 6-24 (Amendment 61).

Except as noted by \*, continuity of pagination will be preserved by a note on the page immediately preceding each page group as proposed in section 2.c above.

\* Pages denoted by a single asterisk are the last pages in the applicable TS section, and deletion of these pages will not interrupt the page numbering sequence.

\*\* The existing text on Pages 3/4 3-57 and 3/4 3-59 will appear on page 3/4 3-55 per item 2.b.(2) above.

- e. The following changes in text will rectify errors in nomenclature relevant to the Auxiliary Feedwater Actuation System (AFAS); will correct errors of omission involving multiple functional units of the Reactor Protection System (RPS) and the Engineered Safeguards Actuation

System (ESFAS) that would be affected by an inoperable process measurement circuit; and will improve consistency in Unit 2 TS format.

(1) On Page 3/4 3-4, TABLE 3.3-1, ACTION 2:

a) For Process Measurement Circuit 2, "Pressurizer Pressure - High:"

i) Delete the modifier " - High" from the process measurement circuit description.

The modifier is misleading in this context since measurement is not restricted to one direction, and inoperability of the process measurement circuit either high or low would affect the associated functional units.

ii) Add the functional unit "Pressurizer Pressure-Low (ESF)" to the Functional Unit Bypassed column.

The pressurizer pressure process measurement circuit provides data to both the RPS and the Safety Injection Actuation Signal (SIAS) of the ESFAS. Omission of this functional unit from the list provides a potential for operator error when implementing ACTION 2. In addition, cross-referencing the two systems (RPS, ESF) for this parameter is consistent with the format of corresponding Table 3.3-3 for the ESFAS.

b) For Process Measurement Circuit 3, "Containment Pressure - High," delete the modifier " - High" from the process measurement circuit description.

The modifier is misleading in this context since measurement is not restricted to one direction, and inoperability of the process measurement circuit either high or low would affect the associated functional units.

c) For Process Measurement Circuit 4, "Steam Generator Pressure - Low:"

i) Delete the modifier " - Low" from the process measurement circuit description.

The modifier is misleading in this context since measurement is not restricted to one direction, and inoperability of the process measurement circuit either high or low would affect the associated functional units.

- ii) Delete functional unit "Steam Generator  $\Delta P$  1 and 2 (AFAS 1 and 2)" from the Functional Unit Bypassed column, and add functional unit "AFAS-1 and AFAS-2 (AFAS)."

The Steam Generator  $\Delta P$  function is included in the AFAS to identify a faulted steam generator, but has no specific manual bypass feature in the system designed for Unit 2. The proposed terminology is the proper nomenclature for the functional unit to be bypassed in the Unit 2 AFAS, and is in agreement with the labelling on the bypass (pushbutton) switches. FPL has obtained concurrence from the vendor that the proposed change would be appropriate for the purpose of minimizing potential operator confusion when implementing ACTION 2.

- iii) Add functional unit "Steam Generator Pressure-Low (ESF)" to the Functional Unit Bypassed column.

The steam generator pressure process measurement circuit provides data to both the RPS and the Main Steam Isolation Signal (MSIS) of the ESFAS. Omission of this functional unit from the list provides a potential for operator error when implementing ACTION 2. In addition, cross-referencing the two systems (RPS, ESF) for this parameter is consistent with the format of corresponding Table 3.3-3 for the ESFAS.

- d) For Process Measurement Circuit 5, "Steam Generator Level:"
- i) Delete functional unit "Steam Generator  $\Delta P$  (AFAS)" from the Functional Unit Bypassed column, and
  - ii) Add functional unit "If SG-2A, then AFAS-1 (AFAS)", and
  - iii) Add functional unit "If SG-2B, then AFAS-2 (AFAS)."

The Steam Generator  $\Delta P$  function is included in the AFAS to identify a faulted steam generator, but has no specific manual bypass feature in the system designed for Unit 2. The proposed terminology is the proper nomenclature for the functional unit to be bypassed in the Unit 2 AFAS, and is in agreement with the labelling on the bypass (pushbutton) switches. FPL has obtained concurrence from the vendor that the proposed change would be appropriate for the purpose of minimizing potential operator confusion when implementing ACTION 2.

The steam generator (SG) level process measurement circuits do not have cross-train functions within the AFAS. Thus, if the level measurement circuit for SG-2A is inoperable, only

the corresponding AFAS-1 would be affected. Likewise, if the level measurement circuit for SG-2B is inoperable, only AFAS-2 would be affected. The proposed wording clarifies the required action and is consistent with the Unit 2-AFAS configuration.

(2) On Page 3/4 3-15, TABLE 3.3-3, ACTION 13:

- a) For Process Measurement Circuit 1, "Containment Pressure - High," delete the modifier " - High" from the process measurement circuit description.

The modifier is misleading in this context since measurement is not restricted to one direction, and inoperability of the process measurement circuit either high or low would affect the associated functional units.

- b) For Process Measurement Circuit 2, "Steam Generator Pressure - Low:"

- i) Delete the modifier " - Low" from the process measurement circuit description.

The modifier is misleading in this context since measurement is not restricted to one direction, and inoperability of the process measurement circuit either high or low would affect the associated functional units.

- ii) Delete functional unit "Steam Generator  $\Delta P$  1 and 2 (AFAS)" from the Functional Unit Bypassed column, and add functional unit "AFAS-1 and AFAS-2 (AFAS)."

The Steam Generator  $\Delta P$  function is included in the AFAS to identify a faulted steam generator, but has no specific manual bypass feature in the system designed for Unit 2. The proposed terminology is the proper nomenclature for the functional unit to be bypassed in the Unit 2 AFAS, and is in agreement with the labelling on the bypass (pushbutton) switches. FPL has obtained concurrence from the vendor that the proposed change would be appropriate for the purpose of minimizing potential operator confusion when implementing ACTION 13.

- iii) Add functional unit "Steam Generator Pressure-Low (RPS)" to the Functional Unit Bypassed column.

The steam generator pressure process measurement circuit provides data to both the Main Steam Isolation Signal (MSIS) of the ESFAS, and the RPS. Omission of this functional unit from the list provides a potential for operator error when implementing ACTION 13. In addition, cross-referencing the two systems (ESF, RPS) for this parameter is consistent with the format of corresponding Table 3.3-1 for the RPS.

- c) For Process Measurement Circuit 3, "Steam Generator Level:"
- i) Delete "Steam Generator Level-Low (AFAS, RPS)" from the Functional Unit Bypassed column, and
  - ii) Add "Steam Generator Level-Low (RPS)", and
  - iii) Add "If SG-2A, then AFAS-1 (AFAS)", and
  - iv) Add "If SG-2B, then AFAS-2 (AFAS)."

The steam generator (SG) level process measurement circuits do not have cross-train functions within the AFAS. Thus, if the level measurement circuit for SG-2A is inoperable, only the corresponding AFAS-1 would be affected. Likewise, if the level measurement circuit for SG-2B is inoperable, only AFAS-2 would be affected. The proposed wording clarifies the required action and is consistent with the Unit 2 AFAS configuration.

(3) On Page 3/4 3-16, TABLE 3.3-3, ACTION 14:

- a) For Process Measurement Circuit 1, "Containment Pressure Circuit," delete the word "Circuit" from the description. The word is redundant, and is not consistent with the format of Table 3.3-1 (ACTION 2) or Table 3.3-3 (ACTION 13).
- b) For Process Measurement Circuit 2, "Steam Generator Pressure - Low:"
  - i) Delete the modifier " - Low" from the process measurement circuit description.

The modifier is misleading in this context since measurement is not restricted to one direction, and inoperability of the process measurement circuit either high or low would affect the associated functional units.

- ii) Delete functional unit "Steam Generator  $\Delta P$  1 and 2 (AFAS)" from the Functional Unit Bypassed column, and add functional unit "AFAS-1 and AFAS-2 (AFAS)."

The Steam Generator  $\Delta P$  function is included in the AFAS to identify a faulted steam generator, but has no specific manual bypass feature in the system designed for Unit 2. The proposed terminology is the proper nomenclature for the functional unit to be bypassed in the Unit 2 AFAS, and is in agreement with the labelling on the bypass (pushbutton) switches. FPL has obtained concurrence from the vendor that the proposed change would be appropriate for the purpose of minimizing potential operator confusion when implementing ACTION 14.

- iii) **Add** functional unit "Steam Generator Pressure-Low (RPS)" to the Functional Unit Bypassed column.

The steam generator pressure process measurement circuit provides data to both the Main Steam Isolation Signal (MSIS) of the ESFAS, and the RPS. Omission of this functional unit from the list provides a potential for operator error when implementing ACTION 14. In addition, cross-referencing the two systems (ESF, RPS) for this parameter is consistent with the format of corresponding Table 3.3-1 for the RPS.

- c) For Process Measurement Circuit 3, "Steam Generator Level - Low:"

- i) **Delete** the modifier " - Low" from the process measurement circuit description.

The modifier is misleading in this context since measurement is not restricted to one direction, and inoperability of the process measurement circuit either high or low would affect the associated functional units. In addition, the description will be consistent with the same circuit listed in TABLE 3.3-3, ACTION 13.

- ii) **Delete** "Steam Generator Level-Low (RPS)(AFAS)" from the Functional Unit Bypassed column, and  
 iii) **Add** "Steam Generator Level-Low (RPS)", and  
 iv) **Add** "If SG-2A, then AFAS-1 (AFAS)", and  
 v) **Add** "If SG-2B, then AFAS-2 (AFAS)."

The steam generator (SG) level process measurement circuits do not have cross-train functions within the AFAS. Thus, if the level measurement circuit for SG-2A is inoperable, only the corresponding AFAS-1 would be affected. Likewise, if the level measurement circuit for SG-2B is inoperable, only AFAS-2 would be affected. The proposed wording clarifies



the required action, and is consistent with the Unit 2-AFAS configuration and the proposed wording for TABLE 3.3-3, ACTION 13.

- f. The following change in text will correct an error in the action statement for an inoperable process monitor in the Unit 2 Fuel Handling Building Ventilation System (FHBVS), and will achieve consistency between the corresponding TS for Unit 1 and Unit 2.

On Page 3/4 3-27, TABLE 3.3-6, under ACTION STATEMENTS: revise ACTION 24 by replacing, "comply with the ACTION requirements of Specification 3.6.6.1," with the proper requirement, "suspend all operations involving movement of fuel within the spent fuel storage pool and crane operations with loads over the spent fuel storage pool."

Background: TS 3.3.3.1 requires the Gaseous Activity and the Particulate Activity Process Monitors for the Fuel Storage Pool Area Ventilation System (part of the FHBVS) to be OPERABLE "with irradiated fuel in the storage pool or whenever there is fuel movement within the pool or crane operation with loads over the storage pool." These monitors sample the air stream, which includes the normal exhaust from the storage pool area, as it exits the Fuel Handling Building (FHB) via the FHB vent. If either of the process monitors is inoperable, ACTION 24 of TABLE 3.3-6 must be implemented.

ACTION 24 presently directs the operator to comply with the action requirements of TS 3.6.6.1, which apply to the Shield Building Ventilation System (SBVS). During operational MODES 1, 2, 3, and 4, the stated ACTION is, "With one SBVS inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours." For MODES 5 and 6 the stated ACTION is, "With one SBVS inoperable, restore the inoperable system to OPERABLE status within the next 7 days or suspend fuel movement within the spent fuel storage pool and crane operations over the spent fuel storage pool."

The SBVS is designed to collect and filter radioactive airborne fission products that may leak from the primary containment to the shield building annulus following the postulated LOCA. The system design also includes provisions for exhaust filtration in the event of a fuel handling accident in the reactor containment or the FHB. The SBVS exhausts to the Plant Vent, and is typically isolated from the FHBVS during normal plant operation.

Should a fuel handling accident occur in the FHB, the fuel storage pool area "criticality and ventilation system isolation monitor," which is composed of safety-related Area Radiation Monitors, will alarm and automatically isolate the FHB, shut off the FHBVS, and start the SBVS. The contaminated air will then be processed through the SBVS prior to

being discharged to the environment. The FHBVS Process Monitors are not related to this series of automatic functions.

Evaluation: The subject reference to TS 3.6.6.1 is an error that has no pertinent design or safety related basis, and provides the potential for inappropriate operator actions in response to an inoperable process monitor. The FHBVS Process Monitors do not sample the SBVS air stream, are not part of the SBVS actuation logic that is designed to mitigate a fuel handling accident, and the operating status of these monitors is not otherwise related to SBVS operability. Moreover, the action statements of TS 3.6.6.1 are mode dependent, and the action specified for Modes 1-4 considers SBVS equipment availability for LOCA mitigation. Accident mitigation is not a function of the subject process monitors.

The operability requirements for the FHBVS Process Monitors are mode independent and related only to normal storage pool activities with irradiated fuel in the pool. The revised action statement will properly require such fuel pool activities to be suspended in the event that even one of the monitors becomes inoperable during any mode of plant operation. The proposed change in text will make ACTION 24 consistent with NUREG-0212, "Standard Technical Specifications for Combustion Engineering Pressurized Water Reactors," which was used for guidance during development of the Unit 2 TS; and, in addition, is in agreement with the corresponding TS for St. Lucie Unit 1.

- g. The following minor change in text will correct an error of contradiction stated in the bases for the Emergency Core Cooling Systems (ECCS) found in Unit 2 Bases Section 3/4.5.

On Page B 3/4 5-2, under the heading "ECCS SUBSYSTEMS (Continued):" Revise the first sentence by replacing the phrase "With the RCS temperature below 325 °F" with, "In MODE 3 with RCS pressure less than 1750 psia and in MODE 4."

Limiting Condition for Operation (LCO) 3.5.3 requires at least one Emergency Core Cooling System (ECCS) subsystem to be OPERABLE in MODE 3 with pressurizer pressure less than 1750 psia, and in MODE 4. One operable ECCS subsystem is acceptable for these plant conditions without single failure consideration, based on the stable reactivity condition of the reactor and the limited core cooling requirements.

The present wording of the subject bases section implies, erroneously, that one subsystem is acceptable only when RCS temperature is below 325°F. This is a contradiction since, by definition, the average RCS temperature for MODE 3 conditions is  $\geq 325$  °F. The proposed wording will rectify the error and more accurately reflect the bases for LCO 3.5.3.

### 3.0 TECHNICAL FINDING

The staff has reviewed all of the proposed changes and determined that they correct grammar, spelling, syntax, and errors. They also eliminate unnecessary deleted pages, clarify statements, rectify references, improve consistency within and between Units, and eliminate contradictions to more accurately reflect the actual bases for the associated LCOs. The changes are administrative in nature. For those reasons the staff finds the proposed changes acceptable.

### 4.0 STATE CONSULTATION

Based upon the written notice of the proposed amendments, the Florida State official had no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding (59 FR 60379). Accordingly, these 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 need be prepared in connection with the issuance of these amendments.

### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. Norris

Date: March 15, 1995