

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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 118 License No. DPR-31

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power and Light Company (the licensee) dated January 30, 1986, as supplemented July 30, 1986, 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-31 is hereby amended to read as follows:

8608270383 860813 PDR ADDCK 05000250

PDR

(B) Technical Specifications

The Technical Specifications contained in Appendix A and B, as revised through Amendment No.118, 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 the date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

£ S. Ruhuslin

Lester S. Rubenstein, Director PWR Project Directorate #2 Division of PWR Licensing-A Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 13, 1986

- 2 -



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

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 112 License No. DPR-41

- · 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power and Light Company (the licensee) dated January 30, 1986, as supplemented July 30, 1986, 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.
 - Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-41 is hereby amended to read as follows:

(B) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A and B, as revised through Amendment No.112, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective immediately and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

L. S. Richard Win

Lester S. Rubenstein, Director PWR Project Directorate #2 Division of PWR Licensing-A Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 13, 1986

- 2 -

ATTACHMENT TO LICENSE AMENDMENT AMENDMENT NO. 118 FACILITY OPERATING LICENSE NO. DPR-31 AMENDMENT NO. 112 FACILITY OPERATING LICENSE NO. DPR-41 DOCKET NO. 50-250 AND 50-251

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
i	i
ii	ii
iii	iii
iv	iv
1.9	1.9
3.20-1	3.20-1
4.21-1	4.21-1
6.23	6.23
B3.20-1	B3.20-1
B4.21-1	B4.21-1

TABLE OF CONTENTS

Section.

4

<u>Title</u>

Page

TECHNICAL S	SPEC	CIFIC.	ATIONS
-------------	------	--------	--------

	· •		
1.0	DEFINITIONS	1-1	
1.1	Safety Limits	1-1	
1.2	Limiting Safety System Settings	1-1	
1.3	Limiting Conditions for Operation	1-1	
1.4	Operable	• 1–1	
15	Containment Integrity	1-2	
1.6	Protoctive Instrumentation Logic	1-9	
1.7	Instrumentation Surveillance	1-2	
L+(1 0	(Deleted)	1-3	
1.0		1-3	
1.9	Action One Alteration	1 4	
1.10	Core Alteration	1-4	
1.11	Rated Power	1-4	
1.12	Thermal Power	1-4	
1.13	Design Power	1-4	
1.14	Dose Equivalent I-131	1-5	
1.15	Power Tilt	1-5	
1.16	Interim Limits	1-6	
1.17	Low Power Physics Tests	1-6	
1.18	Engineered Safety Features	1-6	
1.19	Reactor Protection System	1-6	
1.20	Safety Related Systems and Components	1-6	
1.21	Per Annum	1-6	
1.22	Reactor Coolant System Pressure Boundary Integrity	1-6	
1.23	Coolant Loop	1-7	
1.24	E-Average Disintegration Energy	1-7	
1.25	Gas Decay Tank System	1-8	
1 26	Ventilation Frhaust Treatment System	1-8	
1.07	Process Control Program (PCP)	1-8	
1.00	Officite Dece Colculation Manual (ODCM)	1_8	
1.40	Dece Equivalent L121	1-0	
1.29	Dose Equivalent 1-131	1-0	
1.30	Purge-Purging	1-9	
1.31	venting	1-9	
1.32	Site Boundary	1-9	
1.33	Unrestricted Area	1-9	
1.34	Member(s) of the Public	1-9	
1.35	Heavy Loads	1-9	
1.36	Operational Modes	1-9	
1.37	Staggered Test Basis	1-9	I
2.0	SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS	2.1-1	
2.1	Safety Limit. Reactor Core	· 2.1-1	
2.2	Safety Limit, Reactor Coolant System Pressure	2.2 - 1	
2.3	Limiting Safety System Setting, Protective		
2.0	Instrumentation	2.3-1	
3.0	LIMITING CONDITIONS FOR OPERATION	3.0-1	
3.1	Reactor Coolant System	3.1-1	
0.1	Operational Components	3.1-1	
	Drossuno-Tomponotuno Limita	3 1_9	
	Fressure-remperature Dimits	2 1 2	
	Leakage Manimum Baaatan Gaalant Aativitu	2 1_4	
	Maximum Reactor Coolant Activity	0.1-4	
	Reactor Coolant Chemistry	3.1-0	
	DNB Parameters	3.1-7	

Amendment Nos. 118 and 112

TABLE OF CONTENTS (Continued)

.

.

•

•

Section .	Title	Page
3.2	Control Rod and Power Distribution Limits	3.2-1
	Control Rod Insertion Limits	3.2-1
	Misaligned Control Rod	3.2-2
	Rod Drop Time	3.2-2
	Inoperable Control Rods	3.2-2
	Control Rod Position Indication	3.2-3
	Power Distribution Limits	3.2-3
	In-Core Instrumentation	3.2-7
	Axial Offset Alarms	3.2-8
3.3	Containment	3.3-1
3.4	Engineering Salety Features	3.4-1
	Safety Injection and RFR Systems	3.4-1
	Emergency Containment Cooling Systems	3.4-3
	Component Cooling System	3.4-4
	Inteke Cooling Water System	3.4-5
	Post Aggident Containment Vent System	3.4-6
	Control Room Ventilation	3.4-6
3 5	Instrumentation	3.5-1
3.6	Chemical and Volume Control System	3.6-1
3.7	Electrical Systems	3.7-1
3.8	Steam Power Conversion Systems	3.8-1
3.9	Radioactive Materials Release	3.9-1
	Liquid Effluents	3.9-1
	Gaseous Effluents	3.9-9
	Containerized Effluents	3.9-19
3.10 .	Refueling	3.10-1
3.11	Miscellaneous Radioactive Materials Sources	3.11-1
3.12	Cask Handling	3.12-1
3.13	Snubbers	3.13-1
3.14	Fire Protection Systems	3.14-1
3.15	Overpressure Mitigating System	3.15-1
3.16	Reactor Coolant System Pressure Isolation Valves	3.16-1
3.17	Spent Fuel Storage	3.17-1
3.20	Standby Feedwater System	3.20-1
4.0	SURVEILLANCE REQUIREMENTS	4.1-1
4.1	Operational Safety Review	4.1-1
4.2	Reactor Coolant System In Service Inspection	4.2-1
4.3	Reactor Coolant System Integrity	4.3-1
4.4	Internated Leakare Rate Test - Post Operational	4.4-1
	Integrated Deakage Rate Test - Post Operational	4 A-9
	Local reneuration lesis	4 4-3
	Bosidual Haat Ramoval System	4 4-3
	Tendon Surveillance	4.4-4
	End Anchorage Concrete Surveillance	4.4-6
	Liner Surveillance	4.4-7
4.5	Safety Injection	4.5-1
4.6	Emergency Containment Cooling Systems	4.6-1
4.7	Emergency Containment Filtering. Post Accident	
_ . .	Containment Vent Systems and Control Room	
	Ventilation System	4.7-1
4.8	Emergency Power System Periodic Tests	4.8-1
4.9	Main Steam Isolation Valves	4.9-1

ļ

TABLE OF CONTENTS (Continued)

Section	<u>Title</u>	Page
4.10	Auxiliary Feedwater System	4.10-1
4.11	Reactivity Anomalies	4.11-1
4.12	Environmental Radiation Survey	4.12-1
4.13	Radioactive Materials Sources Surveillance	4.13-1
4.14	Snubbers	4.14-1
4.15	Fire Protection Systems	· 4.15-1
4.16	Overpressure Mitigating System	4.16-1
4.17	Reactor Coolant System Pressure Isolation Valves	4.17-1
4.18	Safety Related Systems Flowpath	4.18-1
4.19	Reactor Coolant Vent System	4.19-1
4.20	Reactor Materials Surveillance Program	4.20-1
4.21	Standby Feedwater System	4.21-1
5.0	DESIGN FEATURES	5.1-1
5.1	, Site	5.1-1
5.2	Reactor	5.2-1
5.3	Containment	5.3-1
5.4	Fuel Storage	5.4-1
6.0	ADMINISTRATIVE CONTROLS	6-1
6.1	Responsibility	6-1
6.2	Organization	6-1
6.3	Facility Staff Qualifications	6-5
6.4	Training	6-5
6.5	Review and Audit	6-6
6.6	Reportable Occurrence Action	6-14 C 14
6.7	Safety Limit violation	0-14
6.8	Procedures Deserting Desuinements	0~14 616
6.9 6.10	Reporting Requirements	6-10
0.1U 6.11 #	Redord Retention Rediction Protection Program	6-20
0.11 6 1 9	High Rediction Area	6-29
613	Post Aggident Sempling	6-30
6 1 /	Sustans Integrity	6-30
6 1 5	Jodine Monitoring	6-30
616	Back-up Methods for Determining Subcooling Margin	6-30
6.17	Process Control Program (PCP)	6-31
6.18	Offsite Dose Calculation Manual (ODCM)	6-31
B2.1	Bases for Safety Limit, Reactor Core	B2.1-1
B2.2	Bases for Safety Limit, Reactor Coolant System Pressure	B2.2-1
B2.3	Bases for Limiting Safety System Settings,	
	Protective Instrumentation	B2.3-1
B3.0	Bases for Limiting Conditions for Operation, Applicability	B3.0-1
B3.1	Bases for Limiting Conditions for Operation,	D9 1-1
D0 0	Reactor Coolant System Bases for Limiting Conditions for Operation	D3.1-1
B3.2	Dases for Limiting Conditions for Operation,	R2 9_1
B 3 3	Bases for Limiting Conditions for Operation	10.4-1
D0.0	Contoinment	B3_3-1
B3 /	Bases for Limiting Conditions for Operation	~0.0 I
DUT	Engineered Safety Restures	B3.4-1
i -	Turbuioton paroti routaron .	

۰,

Amendment Nos. 118 and 112

,

I

TABLE OF CONTENTS (Continued)

Section	Title	Page
B3.5	Bases for Limiting Conditions for Operation,	R2 5-1
D 0 C	Instrumentation Resea for Limiting Conditions for Operation	D0.0-1
B3.0	Chamical and Volume Control System	B3.6-1
B3 7	Bases for Limiting Conditions for Operation.	2010 1
Don	Electrical Systems	· B3.7-1
B3.8	Bases for Limiting Conditions for Operation,	
	Steam and Power Conversion Systems	B3.8-1
B3.9	Bases for Limiting Conditions for Operation,	
	Radioactive Materials Release	B3.9-1
B3.10	Bases for Limiting Conditions for Operation,	50.40.4
	Refueling	B3.10-1
B3.11	Bases for Limiting Conditions for Operation,	D9 11 1
	Miscellaneous Radioactive Material Sources	D3.11-1
B3.12	Bases for Limiting Conditions for Operation,	10_1
	Cask Handling	D3.12-1
B3.13	Bases for Limiting Conditions for Operation,	B3 13-1
TO 14	Snudders Pages for Fire Protection System	B3.14-1
D3.14 D2 15	Bases for Limiting Conditions of Operation.	2011 1 1
D3.10	Overpressure Mitigating System	B3.15-1
R3 17	Bases for Limiting Conditions for Operation.	B3.17-1
D0.11	Spent Fuel Storage	
B3.20	Bases for Limiting Conditions for Operation	4
20.20	Standby Feedwater System	B3.20-1
D4 1	Bases for Operational Safety Review	B4.1-1
D4.1 B/ 9	Bases for Reactor Coolant System In-Service Inspection	B4.2-1
B4.2	Bases for Reactor Coolant System Integrity	B4.3-1
B4.4	Bases for Containment Tests	B4.4-1
B4.5	Bases for Safety Injection Tests	B4.5-1
B4.6	Bases for Emergency Containment Cooling System Tests	B4.6-1
B4.7	Bases for Emergency Containment Filtering and	
	Post Accident Containment Venting Systems Tests	B4.7-1
B4.8	Bases for Emergency Power System Periodic Tests	B4.8-1
B4.9 >	Bases for Main Steam Isolation Valve Tests	B4.9-1
B4.10	Bases for Auxiliary Feedwater System Tests	B4.10-1
B4.11	Bases for Reactivity Anomalies	B4.11-1
B4.12	Bases for Environmental Radiation Survey	B4.12-1
B4.13	Bases for Fire Protection Systems	B4.13-1
B4.14	Bases for Snubbers	B4.14-1
B4.15	Bases for Surveillance Requirements, Overpressure	DATE 1
	Mitigating System	D4.10-1
B4.18	Bases for System Flow Path Verifications	D4.10-1
B4.19	Bases for Reactor Coolant Vent System	D4.13-1 D4.13-1
B4.20	Bases for Reactor Materials Surveillance Program	D4.40-1 R/ 01_1
B4.21	Bases for Standby reedwater System Surveillance	D4.41-1

5

1.30 PURGE – PURGING

PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.

1.31 VENTING

VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

1.32 SITE BOUNDARY

The SITE BOUNDARY shall be that line beyond which the land is neither owned, leased nor otherwise controlled by the licensee.

1.33 UNRESTRICTED AREA

An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation from radioactive materials, or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial, institutional and/or recreational purposes.

1.34 MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the licensee, its contractors, vendors or members of the Armed Forces using property located within the SITE BOUNDARY. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational or other purposes not associated with the plant.

1.35 HEAVY LOADS

Any load in excess of the nominal weight of a fuel and control rod assembly and associated handling tool. For the purpose of this specification, HEAVY LOADS will be defined as loads in excess of 2000 pounds.

1.36 OPERATIONAL MODE - MODE

An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level, and average reactor coolant temperature specified in Table 1.1.

1.37 STAGGERED TEST BASIS

A STAGGERED TEST BASIS shall consist of:

- a. A test schedule for (n) systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into (n) equal subintervals, and
- b. The testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.

Þ • × . a . ۰ ۲ · ·

• •

STANDBY FEEDWATER SYSTEM

3.20.1 Two standby feedwater pumps shall be available* and at least 60,000 gallons of water (available volume), shall be in the Demineralized Water Storage Tank.**

APPLICABILITY: MODES 1, 2, 3

ACTION:

- 1. With one standby feedwater pump unavailable, restore the unavailable pump to available status within 30 days or submit a SPECIAL REPORT per 6.9.3.j.
- 2. With both standby feedwater pumps unavailable:
- a) Within 24 hours, notify the NRC and provide cause for unavailability and plans to restore pump(s) to available status and,
- b) Submit a SPECIAL REPORT per 6.9.3.j.
- 3. With less than 60,000 gallons of water in the Demineralized Water Storage Tank restore the available volume to at least 60,000 gallons within 24 hours or submit a SPECIAL REPORT per 6.9.3.j.
 - 4. The provisions of Specifications 3.0.1 and 3.0.4 are not applicable.

^{*} These pumps are not safety related equipment and do not require plant safety related emergency power sources for availability.

^{**} The Demineralized Water Storage Tank is non-safety grade.

4.21 STANDBY FEEDWATER SYSTEM

•

APPLICABILITY: Applies to the periodic surveillance of the STANDBY FEEDWATER SYSTEM.

OBJECTIVE: To demonstrate availability of the STANDBY FEEDWATER SYSTEM*.

- *NOTE: The standby feedwater pumps are not safety related equipment and do not require plant safety related emergency power sources for availability.
- **SPECIFICATION:** 1. The Demineralized Water Storage tank water volume shall be determined to be within limits at least once per 24 hours.
 - 2. At least monthly verify the standby feedwater pumps are available by testing in recirculation on a STAGGERED TEST BASIS.
 - 3. During each refueling outage, verify availability of the respective standby feedwater pump by powering from the non-safety grade diesel generators and providing feedwater to the steam generators.

Amendment Nos. ¹¹⁸ and ¹¹²

- g. With untreated gaseous effluents exceeding the limits of 3.9.2.e pursuant to . Specification 3.9.2.e.3, submit a report which includes the following . information:
 - (1) Identification of the inoperable equipment or subsystems and the reason for inoperability,
 - (2) Action(s) taken to restore the inoperable equipment to OPERABLE status, and
 - (3) Summary description of action(s) taken to prevent a recurrence.
 - With the annual (calendar year) dose or dose commitment to any MEMBER. h. OF THE PUBLIC from all uranium fuel cycle sources exceeding the limits of Technical Specification 3.9.2.h, submit a report that defines the corrective action to be taken to reduce subsequent releases to prevent recurrence of exceeding the limits of Specification 3.9.2.h and includes the schedule for achieving conformance with those limits. This report, as defined in 10 CFR Part 20.405c, shall include an analysis that estimates the radiation exposure (dose) to a MEMBER OF THE PUBLIC from uranium fuel cycle sources, including all effluent pathways and direct radiation, for the calendar year that includes the release(s) covered by this report. It shall also describe levels of radiation and concentrations of radioactive material involved, and the cause of the exposure levels or concentrations. If the estimated dose(s) exceeds the limits of Specification 3.9.2.h and if the release condition resulting in violation of 40 CFR Part 190 has not already been corrected, the report shall include a request for a variance in accordance with the provisions of 40 CFR Part 190. Submittal of the report is considered a timely request, and a variance is granted until staff action on the request is complete.
 - i. With the measured levels of radioactivity in environmental samples as a result of plant effluents pursuant to Specification 4.12.1.b, submit a report that identifies the cause(s) for exceeding the limit(s) and defines the corrective actions to be taken to reduce radioactive effluents so that the potential dose to a MEMBER OF THE PUBLIC is less than the limits of Specifications 3.9.1.b, 3.9.2.b and 3.9.2.c.
 - j. If the Limits of Technical Specifications 3.20 are exceeded, submit a report describing the cause of the unavailability, action taken and a schedule for restoration within 30 days.

B3.20

BASES FOR LIMITING CONDITIONS FOR OPERATION

STANDBY FEEDWATER SYSTEM

The purpose of this specification and the supporting surveillance requirements is to provide for administrative controls which will assure availability and performance of the non-safety grade standby feedwater system. The term availability is used rather than operability so as to positively avoid any implication or connotation that the standby feedwater system is designed or documented to meet safety system requirements such as seismic loads, environmental qualification, safety grade emergency power supply, etc. The system does consist of commercial grade components designed and constructed to industry and FPL standards for this class of equipment located in the outdoor plant environment typical of FPL facilities system wide. The system is expected to perform with high reliability, i.e., comparable to that typically achieved with this class of equipment. FPL intends to maintain the system in good operating condition with regard to appearance, structures, supports, component maintenance, calibrations, etc., but would not document these activities to the degree required for safety grade systems.

The standby feedwater system can be used as a backup to the auxiliary feedwater (AFW) system in the event the AFW system does not function properly. The system would be manually started and controlled by the operator when needed. In the event of a loss of offsite power the pumps can be powered via the non-safety grade diesel generators connected to the non-vital 4160 volt bus.

A supply of 60,000 gallons from the Demineralized Water Storage Tank for the Standby Feedwater Pumps is sufficient water to remove decay heat from the reactor for six (6) hours for a single unit or two (2) hours for two units. This was the basis used for requiring 60,000 gallons of water in the non-safety grade Demineralized Water Storage Tank and is judged to provide sufficient time for restoring the AFW System or establishing make-up to the Demineralized Water Storage Tank.

The motor driven standby feedwater pumps are not designed to NRC requirements applicable to emergency feedwater systems and not required to meet design basis events. These pumps may be out of service for up to 24 hours before initiating formal notification because of the extremely low probability of such an event.

The guidelines for NRC notification in case of both pumps being out of service for longer than 24 hours are provided in applicable plant procedures, as a VOLUNTARY 4 hour notification.

BASES FOR SURVEILLANCE REQUIREMENTS

STANDBY FEEDWATER SYSTEM

Adequate demineralized water for the standby feedwater system will be verified once per 24 hours. The Demineralized Water Storage Tank provides a source of water to several systems and therefore, requires daily verification.

The standby feedwater pumps will be verified available monthly on a STAGGERED TEST BASIS by starting and operating them in the recirculation mode typically from their normal power supply. Also, during each unit's refueling outage, the respective standby feedwater pump will be powered from the unit's C bus utilizing Units 1 and 2 non-safety grade diesel generators and flow tested to the nuclear unit's steam generators. Prior to this test, the refueling unit's C bus will be de-energized and the necessary loads will be transferred to the other unit's C bus.

This surveillance regimen will thus demonstate availability of the entire flow path, backup non-safety grade power supply and pump associated with a unit at least each refueling outage. The pump, motor driver, and normal power supply availability would typically be demonstrated by operation of the pumps in the recirculation mode monthly on a staggered test basis.