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Docket No. 50-335

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Dr. Robert E. Uhrig
Vice President
Advanced Systems & Technology
Florida Power & Light Company
P. O. Box 529100
Miami, Florida 33152

RECEIVED
JUN 04 1981
U.S. NUCLEAR REGULATORY COMMISSION

Dear Dr. Uhrig:

The Commission has issued the enclosed Amendment No. 40 to Facility Operating License No. DPR-67 for the St. Lucie Plant, Unit 1. This amendment consists of changes to the Technical Specifications in response to your applications dated June 20 and October 16, 1980.

The amendment changes the Technical Specifications to clarify the term "OPERABLE" as it applies to single failure criterion for safety systems and modifies the decay time of spent fuel, required for movement of the spent fuel cask, based on correction of a previous analysis error.

Certain modifications to your proposed changes were necessary to meet our criteria. These modifications have been discussed with and agreed to by your staff.

A copy of our Safety Evaluation and of the Notice of Issuance are also enclosed.

Sincerely,

Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Enclosures:
1. Amendment No. 40 to DPR-67
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
See next page

LGROTH
DSKOVHOLT
5/18/81

Amend. #7. R only
note typo in 3rd line of p2 of F.R. notice (C.F.R.)

8106110230

OFFICE	ORB#3:DL	ORB#3:DL	ORB#3:DL	AD:OR:DL	OELD		
SURNAME	PMKreutzer	CNelson/pn	RAClark	TMNovak	W.D. Paton		
DATE	5/13/81	5/14/81	5/14/81	5/18/81	5/26/81		

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

May 28, 1981

DISTRIBUTION:
Docket File
ORB#3 Rdg
PKreutzer

Docket No. 50-335

Docketing and Service Section
Office of the Secretary of the Commission

SUBJECT: ST. LUCIE PLANT, UNIT 1

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12) of the Notice are enclosed for your use.

☐ Notice of Receipt of Application for Construction Permit(s) and Operating License(s).

☐ Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.

☐ Notice of Availability of Applicant's Environmental Report.

☐ Notice of Proposed Issuance of Amendment to Facility Operating License.

☐ Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.

☐ Notice of Availability of NRC Draft/Final Environmental Statement.

☐ Notice of Limited Work Authorization.

☐ Notice of Availability of Safety Evaluation Report.

☐ Notice of Issuance of Construction Permit(s).

☐ Notice of Issuance of Facility Operating License(s) or Amendment(s).

XX Other: Amendment No. 40
Referenced documents have been provided to PDR.

Division of Licensing, ORB#3
Office of Nuclear Reactor Regulation

Enclosure:
As Stated

OFFICE →	ORB#3:DL					
SURNAME →	PKreutzer;cf					
DATE →	5/29/81					

NRC FORM 102 (1-76)

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

May 28, 1981

Docket No. 50-335

Dr. Robert E. Uhrig
Vice President
Advanced Systems & Technology
Florida Power & Light Company
P. O. Box 529100
Miami, Florida 33152

Dear Dr. Uhrig:

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The amendment changes the Technical Specifications to clarify the term "OPERABLE" as it applies to single failure criterion for safety systems and modifies the decay time of spent fuel, required for movement of the spent fuel cask, based on correction of a previous analysis error.

Certain modifications to your proposed changes were necessary to meet our criteria. These modifications have been discussed with and agreed to by your staff.

A copy of our Safety Evaluation and of the Notice of Issuance are also enclosed.

Sincerely,

Robert A. Clark

Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Enclosures:
1. Amendment No.40 to DPR-67
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
See next page

Florida Power & Light Company

cc:
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Lowenstein, Newman, Reis & Alexrad
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Washington, D. C. 20036

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Miami Florida 33131

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Power Plant Siting Section
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Mr. Weldon B. Lewis
County Administrator
St. Lucie County
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Director, Criteria and Standards Division
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U.S. Environmental Protection Agency
Washington, D. C. 20460

U.S. Environmental Protection Agency
Region IV Office
ATTN: EIS COORDINATOR
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Resident Inspector/St. Lucie
Nuclear Power Station
c/o U.S.N.R.C.
P. O. Box 400
Jensen Beach, Florida 33457

cc w/enclosure(s) and incoming
dated: 6/20/80, 10/16/80

Bureau of Intergovernmental
Relations
660 Apalachee Parkway
Tallahassee, Florida 32304

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

FLORIDA POWER & LIGHT COMPANY

DOCKET NO. 50-335

ST. LUCIE PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 40
License No. DPR-67

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications for amendment by Florida Power & Light Company (the licensee) dated June 20 and October 16, 1980, comply 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 applications, 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. DPR-67 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.

8106110027

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.40 , 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 28, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 40

FACILITY OPERATING LICENSE NO. DPR-67

DOCKET NO. 50-335

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. The corresponding overleaf pages are provided to maintain document completeness.

Pages

1-1
3/4 0-1
3/4 0-2
3/4 3-21
3/4 3-27
3/4 3-30
3/4 3-36
3/4 3-37
3/4 7-40
3/4 9-9
3/4 9-16
B3/4 0-1
B3/4 0-1a
B3/4 0-1b
B3/4 9-3

1.0 DEFINITIONS

DEFINED TERMS

1.1 The DEFINED TERMS of this section appear in capitalized type and are applicable throughout these Technical Specifications.

THERMAL POWER

1.2 THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

RATED THERMAL POWER

1.3 RATED THERMAL POWER shall be a total reactor core heat transfer rate to the reactor coolant of 2560 MWt.

OPERATIONAL MODE

1.4 an OPERATIONAL MODE shall correspond to any one inclusive combination of core reactivity condition, power level and average reactor coolant temperature specified in Table 1.1.

ACTION

1.5 ACTION shall be those additional requirements specified as corollary statements to each principal specification and shall be part of the specifications.

OPERABLE - OPERABILITY

1.6 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

REPORTABLE OCCURRENCE

1.7 A REPORTABLE OCCURRENCE shall be any of those conditions specified in Specifications 6.9.1.8 and 6.9.1.9.

CONTAINMENT VESSEL INTEGRITY

1.8 CONTAINMENT VESSEL INTEGRITY shall exist when:

1.8.1 All containment vessel penetrations required to be closed during accident conditions are either:

a. Capable of being closed by an OPERABLE containment automatic isolation valve system, or

b. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed position except as provided in Table 3.6-2 of Specification 3.6.3.1,

1.8.2 All containment vessel equipment hatches are closed and sealed,

1.8.3 Each containment vessel airlock is OPERABLE pursuant to Specification 3.6.1.3, and

1.8.4 The containment leakage rates are within the limits of Specification 3.6.1.2.

CHANNEL CALIBRATION

1.9 A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds with the necessary range and accuracy to known values of the parameter which the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is calibrated.

CHANNEL CHECK

1.10 A CHANNEL CHECK shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels measuring the same parameter.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

LIMITING CONDITION FOR OPERATION

3.0.1 Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for each specification.

3.0.2 Adherence to the requirements of the Limiting Condition for Operation and/or associated ACTION within the specified time interval shall constitute compliance with the specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 In the event a Limiting Condition for Operation and/or associated ACTION requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the facility shall be placed in at least HOT STANDBY within 6 hours, at least HOT SHUTDOWN within the following 6 hours and at least COLD SHUTDOWN within the subsequent 24 hours unless corrective measures are completed that permit operation under the permissible ACTION statements for the specified time interval as measured from initial discovery or until the reactor is placed in a MODE in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.

3.0.4 Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION statements unless otherwise excepted. This provision shall not prevent passage through OPERATIONAL MODES as required to comply with ACTION statements.

3.0.5 When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in at least HOT STANDBY within 6 hours, HOT SHUTDOWN within the following 6 hours, and at least COLD SHUTDOWN within the subsequent 24 hours.

This specification is not applicable in MODE 5 or 6.

SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with:

a. A maximum allowable extension not to exceed 25% of the test interval, and

b. A total maximum combined interval time for any 3 consecutive surveillance intervals not to exceed 3.25 times the specified surveillance interval.

4.0.3 Performance of a Surveillance Requirement within the specified time interval shall constitute compliance with OPERABILITY requirements for a Limiting Condition for Operation and associated ACTION statements unless otherwise required by the specification.

4.0.4 Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the stated surveillance interval or as otherwise specified.

The provisions of Specification 4.0.4 are not applicable to the performance of surveillance activities associated with fire protection technical specifications 4.3.3.7.1, 4.3.3.7.2, 4.7.11.1, 4.7.11.2 and 4.7.12 until the completion of the initial surveillance interval associated with each specification.

3/4.3.3 MONITORING INSTRUMENTATION

RADIATION MONITORING

LIMITING CONDITION FOR OPERATION

3.3.3.1 The radiation monitoring instrumentation channels shown in Table 3.3-6 shall be OPERABLE*with their alarm setpoints within the specified limits.

APPLICABILITY: As shown in Table 3.3-6.

ACTION:

a. With a radiation monitoring channel alarm setpoint exceeding the value shown in Table 3.3-6, adjust the setpoint to within the limit within 4 hours or declare the channel inoperable.

b. With one or more radiation monitoring channels inoperable, take the ACTION shown in Table 3.3-6.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.1 Each radiation monitoring instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations during the modes and at the frequencies shown in Table 4.3-3.

*The emergency power source may be inoperable in Modes 5 or 6.

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM SETPOINT	MEASUREMENT RANGE	ACTION
1. AREA MONITORS					
a. Fuel Storage Pool Area	1	*	$\leq$ 15 mR/hr	10^{-1} - 10^{4} mR/hr	13
b. Containment (CIS)	3	6	$\leq$ 90 mR/hr	1 - 10^{5} mR/hr	16
2. PROCESS MONITORS					
a. Containment					
i. Gaseous Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	10 - 10^{6} cpm	14
ii. Particulate Activity RCS Leakage Detection	1	1, 2, 3 & 4	Not Applicable	10 - 10^{6} cpm/hr	14

* With fuel in the storage pool or building

SEISMIC INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.3 The seismic monitoring instrumentation channels shown in Table 3.3-7 shall be OPERABLE*.

APPLICABILITY: At all times.

ACTION:

a. With the number of OPERABLE seismic monitoring channels less than required by Table 3.3-7, restore the inoperable channel(s) to OPERABLE status within 30 days.

b. With one or more seismic monitoring channels inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the system to OPERABLE status.

c. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.3.1 Each of the above seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations at the frequencies shown in Table 4.3-4.

4.3.3.3.2 Each of the above seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status and a CHANNEL CALIBRATION performed within 24 hours following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. A Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 10 days describing the magnitude, frequency spectrum and resultant effect upon facility features important to safety.

*The emergency power source may be inoperable in Modes 5 or 6.

TABLE 3.3-7

SEISMIC MONITORING INSTRUMENTATION

INSTRUMENT CHANNEL	SENSOR LOCATION	MEASUREMENT RANGE	MINIMUM CHANNELS OPERABLE
1. STRONG MOTION TRIAXIAL ACCELEROGRAPHS			
a. SMR-42-1	R.B. Elev. 23.0'	0-1 g	1
b. SMR-42-2	R.B. Elev. 62.0'	0-1 g	1
c. SMR-42-3	R.A.B. Elev. -0.5'	0-1 g	1
d. SMR-42-4	R.A.B. Elev. 43.0'	0-1 g	1
2. PEAK RECORDING ACCELEROGRAPHS			
a. SMR-42-6	R.B. Piping from S.I.T.1A2-c Elev. 46' 10 9/16"	0-2 g	1
b. SMR-42-7	R.B. Equipment on S.I.T.1A2	0-2 g	1
c. SMR-42-8	R.A.B.-Sh. Dn. Ht. XCHR Supports	0-2 g	1
3. PEAK SHOCK RECORDERS			
a. SMR-42-9	R.B. Elev. 23.0'	-	1
b. SMR-42-10	R.B. M.S. Pipe Restraints - S.G.1B1	-	1
4. EARTHQUAKE FORCE MONITOR			
a. SMI-42-11	Control Room	0-0.2 g	1
5. SEISMIC SWITCH			
a. SMS-42-12	R.B. Elev. 23.0'	-	1

TABLE 4.3-4

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT CHANNEL	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST
1. STRONG MOTION TRIAXIAL ACCELEROGRAPHS			
a. SMR-42-1	M	R	SA
b. SMR-42-2	M	R	SA
c. SMR-42-3	M	R	SA
d. SMR-42-4	M	R	SA
e. SMR-42-5	M	R	SA
2. PEAK RECORDING ACCELEROGRAPHS			
a. SMR-42-6	N.A.	R	N.A.
b. SMR-42-7	N.A.	R	N.A.
c. SMR-42-8	N.A.	R	N.A.
3. PEAK SHOCK RECORDERS			
a. SMR-42-9	N.A.	R	N.A.
b. SMR-42-10	N.A.	R	N.A.
4. EARTHQUAKE FORCE MONITOR			
a. SMI-42-11	M	R	SA
5. SEISMIC SWITCH			
a. SMS-42-12	N.A.	R	SA

METEOROLOGICAL INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.4 The meteorological monitoring instrumentation channels shown in Table 3.3-8 shall be OPERABLE*.

APPLICABILITY: At all times.

ACTION:

a. With the number of OPERABLE meteorological monitoring channels less than required by Table 3.3-8, suspend all release of gaseous radioactive material from the radwaste gas decay tanks until the inoperable channel(s) is restored to OPERABLE status.

b. With one or more required meteorological monitoring channels inoperable for more than 7 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.4 Each meteorological monitoring instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-5.

*The emergency power source may be inoperable in Modes 5 or 6.

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Reactor Trip Breaker Indication	M	N.A.
2. Pressurizer Pressure	M	R
3. Pressurizer Level	M	R
4. Steam Generator Level	M	R
5. Main Steam Pressure	M	R
6. Cold Leg Temperature	M	R

CHLORINE DETECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.3.3.6 Two separate and independent chlorine detection systems, with their alarm/trip setpoints adjusted to actuate at a chlorine concentration of $\leq$ 5 ppm, shall be OPERABLE*with each chlorine detection system having at least one chlorine detector in each control room outside air intake duct.

APPLICABILITY: ALL MODES

ACTION:

a. With one chlorine detector inoperable, within 2 hours either isolate the associated outside air intake or initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation until the inoperable chlorine detector is restored to OPERABLE status.

b. With no chlorine detection system OPERABLE, initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation until two chlorine detection systems are restored to OPERABLE status.

c. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.6 Each chlorine detection system shall be verified energized at least once per 12 hours and demonstrated OPERABLE by performance of a CHANNEL CALIBRATION at least once per 18 months.

*The emergency power source may be inoperable in Modes 5 or 6.

FIRE DETECTION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.7 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-10 shall be OPERABLE*.

APPLICABILITY: Whenever equipment in that fire detection zone is required to be OPERABLE.

ACTION:

With the number of OPERABLE fire detection instruments less than required by the minimum instruments OPERABLE requirement of Table 3.3-10:

a. Within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour (unless the detectors are located inside the annulus, zone 11, then inspect the zone at least once per 8 hours); or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5 if the inoperable instruments are located inside the containment (zone 13/14/15A & B).

b. Restore the inoperable instrument(s) to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.7.1 Each of the above required fire detection instruments which are accessible during operation shall be demonstrated OPERABLE at least once per 6 months by performance of a CHANNEL FUNCTIONAL TEST, except for thermal detectors which shall be demonstrated OPERABLE in accordance with Specification 4.3.3.7.2. Fire detection instruments which are not accessible during operation shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST during each COLD SHUTDOWN exceeding 24 hours except that such demonstration need not be performed more often than once per 6 months.

*The emergency power source may be inoperable in Modes 5 or 6.

SURVEILLANCE REQUIREMENTS (Continued)

4.3.3.7.2 The NFPA Code 72D Class A supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

TABLE 4.7-3

HYDRAULIC SNUBBER INSPECTION SCHEDULE

NUMBER OF SNUBBERS FOUND INOPERABLE DURING INSPECTION OR DURING INSPECTION INTERVAL*	NEXT REQUIRED INSPECTION INTERVAL**
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3 or 4	124 days ± 25%
5, 6, or 7	62 days ± 25%
≥8	31 days ± 25%

* Snubbers may be categorized into two groups, "accessible" and "inaccessible". This categorization shall be based upon the snubber's accessibility for inspection during reactor operation. These two groups may be inspected independently according to the above schedule.

** The required inspection interval shall not be lengthened more than one step at a time.

3/4.7.11 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.11.1 The fire suppression water system shall be OPERABLE* with:

a. Two high pressure pumps, each with a capacity of 2350 gpm, with their discharge aligned to the fire suppression header,

b. Separate water supplies, each with a minimum contained volume of 300,000 gallons, and

c. An OPERABLE flowpath capable of taking suction from city water storage tank 1A and city water storage tank 1B and transferring the water through distribution piping with OPERABLE sectionalizing control or isolation valves to the yard hydrants and the first valve ahead of each hose standpipe system riser required to be OPERABLE per Specification 3.7.11.2.

APPLICABILITY: At all times.

ACTION:

a. With one pump and/or one water supply inoperable, restore the inoperable equipment to OPERABLE status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

b. With the fire suppression water system otherwise inoperable:

1. Establish a backup fire suppression water system within 24 hours, and

2. Submit a Special Report in accordance with Specification 6.9.2;

a) By telephone within 24 hours,

b) Confirmed by telegraph, mailgram or facsimile transmission no later than the first working day following the event, and

*The emergency power source may be inoperable in Modes 5 or 6.

CONTAINMENT ISOLATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.9 The containment isolation system shall be OPERABLE*.

APPLICABILITY: MODE 6.

ACTION:

With the containment isolation system inoperable, close each of the penetrations providing direct access from the containment atmosphere to the outside atmosphere. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.9 The containment isolation system shall be demonstrated OPERABLE within 72 hours prior to the start of and at least once per 7 days during CORE ALTERATIONS by verifying that containment isolation occurs on manual initiation and on a high radiation signal from two of the containment radiation monitoring instrumentation channels.

*The emergency power source may be inoperable in Modes 5 or 6.

WATER LEVEL - REACTOR VESSEL

LIMITING CONDITION FOR OPERATION

3.9.10 At least 23 feet of water shall be maintained over the top of irradiated fuel assemblies seated within the reactor pressure vessel.

APPLICABILITY: During movement of fuel assemblies or CEAs within the reactor pressure vessel while in MODE 6.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving movement of fuel assemblies or CEAs within the pressure vessel.

SURVEILLANCE REQUIREMENTS

4.9.10 The water level shall be determined to be at least its minimum required depth within 2 hours prior to the start of and at least once per 24 hours thereafter during movement of fuel assemblies or CEAs.

SPENT FUEL CASK CRANE

LIMITING CONDITION FOR OPERATION

3.9.13 The maximum load which may be handled by the spent fuel cask crane shall not exceed 25 tons.

APPLICABILITY: Whenever irradiated fuel assemblies are in the storage pool.

ACTION:

With the requirements of the above specification not satisfied, place load in a safe condition. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.13 The loaded weight of a spent fuel assembly cask shall be verified to not exceed 25 tons prior to attaching it to the spent fuel cask crane.

3/4.9.14 DECAY TIME - STORAGE POOL

LIMITING CONDITION FOR OPERATION

3.9.14 The irradiated fuel assemblies in the fuel storage pool shall have decayed for at least 1180 hours, unless more than one-third core is placed into the pool, in which case the irradiated fuel assemblies shall have decayed for 1490 hours.

APPLICABILITY: Prior to movement of the spent fuel cask into the fuel cask compartment.

ACTION:

With irradiated fuel assemblies having a decay time of less than 1180 hours, or 1490 hours in the case of more than one-third core discharge, suspend all activities involving movement of the spent fuel cask into the fuel cask compartment. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.14. The irradiated fuel assemblies in the fuel storage pool shall have been determined to have decayed for at least 1180 hours, or 1490 hours in the case of more than one-third core discharge, by verification of the date and time from the most recent subcriticality prior to movement of the spent fuel cask into the fuel cask compartment.

The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for Operation and Surveillance Requirements within Section 3/4.

3.0.1 This specification states the applicability of each specification in terms of defined OPERATIONAL MODES or other specified conditions and is provided to delineate specifically when each specification is applicable.

3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for Operation and associated ACTION requirement.

3.0.3 This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of the specification. For example, Specification 3.5.1 calls for each Reactor Coolant System safety injection tank to be OPERABLE and provides explicit ACTION requirements when one safety injection tank is inoperable. Under the terms of Specification 3.0.3, if more than one safety injection tank is inoperable, the facility is required to be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

As a further example, Specification 3.6.2.1 requires two Containment Spray Systems to be OPERABLE and provides explicit ACTION requirements if one spray system is inoperable. Under the terms of Specification 3.0.3, if both of the required Containment Spray Systems are inoperable, the unit is required to be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN in the next 6 hours. It is assumed that the unit is brought to the required MODE within the required times by promptly initiating and carrying out the appropriate ACTION statement.

3.0.4 This specification provides that entry into an OPERATIONAL MODE or other specified applicability condition must be made with (a) the full complement of required systems, equipment or components OPERABLE and (b) all other parameters as specified in the Limiting Conditions for Operation being met without regard for allowable deviations and out of service provisions contained in the ACTION statements.

The intent of this provision is to insure that facility operation is not initiated with either required equipment or systems inoperable or other specified limits being exceeded.

Exceptions to this provision have been provided for a limited number of specifications when startup with inoperable equipment would not affect plant safety. These exceptions are stated in the ACTION statements of the appropriate specifications.

3.0.5 This specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the ACTION statements for power sources, when a normal or emergency power source is not OPERABLE. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component or device in another division is inoperable for another reason.

The provisions of this specification permit the ACTION statements associated with individual systems, subsystems, trains, components, or devices to be consistent with the ACTION statements of the associated electrical power source. It allows operation to be governed by the time limits of the ACTION statement associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual ACTION statements for each system, subsystem, train, component or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

For example, Specification 3.8.1.1 requires in part that two emergency diesel generators be OPERABLE. The ACTION statement provides for a 72 hour out-of-service time when one emergency diesel generator is not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components and devices supplied by the inoperable emergency power source would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable Limiting Conditions for Operation. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable emergency diesel generator instead, provided the other specified conditions are satisfied. In this case, this would mean that the corresponding normal power source must be OPERABLE, and all redundant systems, subsystems, trains, components, and devices must be OPERABLE, or otherwise satisfy Specification 3.0.5 (i.e., be capable of performing their design function and have at least one normal or one emergency power source OPERABLE). If they are not satisfied, shutdown is required in accordance with this specification.

As a further example, Specification 3.8.1.1 requires in part that two physically independent circuits between the off-site transmission network and the on-site Class IE distribution system be OPERABLE. The ACTION statement provides a 24 hour out-of-service time when both required off-site circuits are not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components and devices supplied by the inoperable normal power sources, both of the off-site circuits, would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable LCOs.

However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable normal power sources instead, provided the other specified conditions are satisfied. In this case, this would mean that for one division the emergency power source must be OPERABLE (as must be the components supplied by the emergency power source) and all redundant systems, subsystems, trains, components and devices in the other division must be OPERABLE, or likewise satisfy Specification 3.0.5 (i.e., be capable of performing their design functions and have an emergency power source OPERABLE). In other words, both emergency power sources must be OPERABLE and all redundant systems, subsystems, trains, components and devices in both divisions must also be OPERABLE. If these conditions are not satisfied, shutdown is required in accordance with this specification.

In modes 5 or 6 the ACTION statement for Specification 3.0.5 does not apply, and thus the individual ACTION statements for each applicable Limiting Condition for Operation in these MODES must be adhered to.

4.0.1 This specification provides that surveillance activities necessary to insure the Limiting Conditions for Operation are met and will be performed during the OPERATIONAL MODES or other conditions for which the Limiting Conditions for Operation are applicable. Provisions for additional surveillance activities to be performed without regard to the applicable OPERATIONAL MODES or other conditions are provided in the individual Surveillance Requirements.

4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations.

The tolerance values, taken either individually or consecutively over 3 test intervals, are sufficiently restrictive to ensure that the reliability associated with the surveillance activity is not significantly degraded beyond that obtained from the nominal specified interval.

4.0.3 The provisions of this specification set forth the criteria for determination of compliance with the OPERABILITY requirements of the Limiting Conditions for Operation. Under this criteria, equipment, systems or components are assumed to be OPERABLE if the associated surveillance activities have been satisfactorily performed within the specified time interval. Nothing in this provision is to be construed as defining equipment, systems or components OPERABLE, when such items are found or known to be inoperable although still meeting the Surveillance Requirements.

4.0.4 This specificatio[illegible] ures that the surveillance activities associated with a Limiting Co[illegible]ion for Operation have been performed within the specified time in[illegible]l prior to entry into an OPERATIONAL MODE or other applicable condition. The intent of this provision is to ensure that surveillance activities have been satisfactorily demonstrated on a current basis as required to meet the OPERABILITY requirement of the Limiting Condition for Operation.

Under the terms of this specification, for example, during initial plant startup or following extended plant outages, the applicable surve[illegible]nce activities must be performed within the stated surveillance inte[illegible]prior to placing or returning the system or equipment into OPE[illegible]tatus.

3/4.9.12 FUEL POOL VENTILATION SYSTEM-FUEL STORAGE

The limitations on the fuel handling building ventilation system ensures that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the accident analyses.

3/4.9/13 SPENT FUEL CASK CRANE

The maximum load which may be handled by the spent fuel cask crane is limited to a loaded single element cask which is equivalent to approximately 25 tons. This restriction is provided to ensure the structural integrity of the spent fuel pool in the event of a dropped cask accident. Structural damage caused by dropping a load in excess of a loaded single element cask could cause leakage from the spent fuel pool in excess of the maximum makeup capability.

3/4.9.14 DECAY TIME - STORAGE POOL

The minimum requirements for decay of the irradiated fuel assemblies in the entire spent fuel storage pool prior to movement of the spent fuel cask into the fuel cask compartment insure that sufficient time has elapsed to allow radioactive decay of the fission products. The decay time of 1180 hours is based upon one-third of a core placed in the spent fuel pool each year during refueling for ten years to fill the pool. The decay time of 1490 hours is based upon one-third of a core being placed in the spent fuel pool each year during refueling for seven years following which an entire core is placed in the pool to fill it. The cask drop analysis assumes that all of the irradiated fuel in the filled pool (3-1/3 cores) is ruptured and follows Regulatory Guide 1.25 methodology, except that a Radial Peaking Factor of 1.0 is applied to all irradiated assemblies.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 40 TO FACILITY OPERATING LICENSE NO. DPR-67

FLORIDA POWER & LIGHT COMPANY

ST. LUCIE PLANT, UNIT NO. 1

DOCKET NO. 50-335

Introduction

In early 1980, the staff became aware that there was some misunderstanding regarding the use of the term "OPERABLE" as it applies to single failure criterion for safety systems in power reactors technical specifications. In an effort to remove this misunderstanding and to clarify NRC requirements, the staff sent a letter (dated April 10, 1980) to All Power Reactor Licensees informing them of our requirements and requesting that they specify and clarify these requirements in their Technical Specifications (TS). Florida Power & Light Company (FPL or the licensee) responded to this request by letter dated June 20, 1980 for St. Lucie Unit 1.

In a separate action FPL, by letter dated October 6, 1980, proposed a change to the TS regarding spent fuel decay time. This change was proposed to correct an error resulting from incorrect assumptions in the previous cask drop analysis.

Evaluation

I. Clarification of Operable

The TS proposed by FPL satisfy the intent of the staff model specifications. Implementation of these specifications will accomplish the following:

1. Clarify the definition of Operable to include both the normal and emergency electric power supplies.

2. Clarify the action necessary when circumstances exceed those addressed in the specifications by noting, as acceptable, placing the reactor in a MODE in which the specification is not applicable.

3. Adding specification 3.0.5 which provides that actions, associated with equipment determined to be inoperable solely because either its normal or emergency power source is inoperable, are set by the specification regarding the power source.

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Changes to FPL's proposed specifications were made to bring them more closely in conformance with the model specifications. These changes have been discussed with and agreed to by the FPL staff.

Based on our review of FPL's proposed specifications we find them acceptable.

II. Spent Fuel Decay Time

FPL has submitted a proposed amendment to correct Technical Specification 3/4.9.14 and its bases due to an error in the original spent fuel pool cask drop analysis. In calculating the radius of fall of a spent fuel cask into the spent fuel pool, the licensee assumed a single pendulum drop radius of 133 inches instead of a drop radius of 248 inches that should have been assumed for the double pendulum methodology specified in the licensee's final safety analysis report (FSAR). As a result, specification 3/4.9.14 only imposes decay time requirements on a fraction of the total amount of spent fuel capable of being stored. The licensee has proposed that when the most recent spent fuel discharge does not exceed one-third of the core all irradiated fuel assemblies in the spent fuel pool would be decayed for at least 1180 hours prior to movement of the spent fuel cask into the spent fuel pool. The decay time would be increased to 1490 hours if more than one-third of the core is discharged.

The licensee has performed an analysis of the radiological consequences for both the specified spent fuel discharge cases and finds that the resultant offsite exposures are a small fraction of the regulatory guideline limits of 10 CFR Part 100. The licensee states that the analysis is based on Regulatory Guide 1.25 in all aspects except that the radial peaking factor (RPF) of 1.0 used in the analysis differs from the R.G. 1.25 specification of RPF of 1.65.

We have reviewed the applicant's use of the RPF of 1.0 and find it to be acceptable. We have also performed an independent assessment of the offsite radiological exposures. Our estimated offsite radiological dose (NUREG-0612) of about 30 rem to the thyroid at the exclusion radius is a small fraction of 10 CFR Part 100 dose guidelines.

Based on our evaluation of the licensee's submittal and on our independent assessment we find the licensee's proposed change to the Technical Specifications acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: May 28, 1981

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-335

FLORIDA POWER & LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 40 to Facility Operating License No. DPR-67, issued to Florida Power & Light Company (the licensee), which revised the Technical Specifications for operation of the St. Lucie Plant, Unit No. 1 (the facility), located in St. Lucie County, Florida. The amendment is effective as of its date of issuance.

The amendment changes the Technical Specifications to clarify the term "OPERABLE" as it applies to single failure criterion for safety systems and modifies the decay time of spent fuel required for movement of the spent fuel cask, based on correction of a previous analysis error.

The applications for the amendment comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

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The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the applications for amendment dated June 20 and October 16, 1980, (2) Amendment No. 40 to License No. DPR-67, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. and at the Indian River Junior College Library, 3209 Virginia Avenue, Ft. Pierce, Florida. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland this 28th day of May 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing