

APR 12 1982

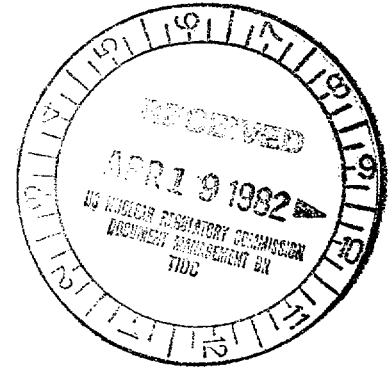
Docket No. 50-335

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



Dear Dr. Uhrig:

The Commission has issued the enclosed Amendment No. 49 to Facility Operating License No. DPR-67 for St. Lucie Unit 1. This amendment changes your Technical Specifications in response to your applications dated February 9, 1979 (as supplemented on January 19, 1981), and February 21, 1979. This amendment also deletes paragraph Q from Enclosure 1 to your license.

The amendment changes the Technical Specifications to correct an inconsistency regarding valve closure time of an instrument air containment isolation valve and by adding the requirement for periodic flow path verification of the NaOH containment spray additive system. License Condition Q, which required that such verification be proposed, has been deleted.

Changes to your proposal regarding NaOH flow path verification necessary to meet our requirements for specified flow rates and tolerances have been discussed with and agreed to by your staff.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original signed by:

Christian C. Nelson, Project Manager  
 Operating Reactors Branch #3  
 Division of Licensing

Enclosures:

1. Amendment No. 49 to DRP-67
2. Safety Evaluation
3. Notice of Issuance

cc: See next page

*No legal objection*

OFFICE	ORB#3:DL	ORB#3:DL	ORB#3:DL	AD:OR:DL	OELD		
SURNAME	PMKreutzer	CNelson/pn	RAClark	TMNovak	APH		
	3/21/82	3/31/82	3/31/82	3/31/82	4/18/82		

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 PDR ADDCK 05000335  
 PDR



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

DISTRIBUTION:  
Docket File  
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Docket No. 50-335

Docketing and Service Section  
Office of the Secretary of the Commission

SUBJECT: FLORIDA POWER AND LIGHT COMPANY  
St. Lucie Plant, Unit No. 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).

Other: Amendment No. 49  
Referenced documents have been provided PDR.

Division of Licensing  
Office of Nuclear Reactor Regulation

Enclosure:  
As Stated

OFFICE →	ORB#3:DL					
SURNAME →	PMKreutzer/pn					
DATE →	4/17/82					

Florida Power & Light Company

cc:

Harold F. Reis, Esquire  
Lowenstein, Newman, Reis & Alexrad  
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Washington, D. C. 20036

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McCarthy, Steel, Hector & Davis  
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Miami Florida 33131

Indian River Junior College Library  
3209 Virginia Avenue  
Fort Pierce, Florida 33450

Administrator  
Department of Environmental Regulation  
Power Plant Siting Section  
State of Florida  
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Tallahassee, Florida 32301

Mr. Weldon B. Lewis  
County Administrator  
St. Lucie County  
2300 Virginia Avenue, Room 104  
Fort Pierce, Florida 33450

U.S. Environmental Protection Agency  
Region IV Office  
ATTN: Regional Radiation  
Representative  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Mr. Charles B. Brinkman  
Manager - Washington Nuclear Operations  
C-E Power Systems  
Combustion Engineering, Inc.  
4853 Cordell Avenue, Suite A-1  
Bethesda, Maryland 20014

Regional Administrator  
Nuclear Regulatory Commission, Region II  
Office of Executive Director for Operations  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Mr. Jack Schreve  
Office of the Public Counsel  
Room 4, Holland Building  
Tallahassee, Florida 32304

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: 2/9/79, 1/19/81, 2/21/79

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. 49  
License No. DPR-67

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Florida Power and Light Company (the licensee) dated February 9, 1979 (as supplemented January 19, 1981) and February 21, 1979 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:

A. Revise 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. 49, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

B. Delete in its entirety Condition Q of Enclosure 1 appended to the license.

3. The license amendment is effective as of the date of its issuance.

FOR THE U. S. NUCLEAR REGULATORY COMMISSION



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

Attachement:  
Changes to the Technical  
Specifications

Date of Issuance: April 12, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 49

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 also provided to maintain document completeness.

Pages

3/4 3-16

3/4 3-17

3/4 6-16b

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

<u>FUNCTIONAL UNIT</u>	<u>TRIP VALUE</u>	<u>ALLOWABLE VALUES</u>
6. LOSS OF POWER		
4.16 kv Emergency Bus Undervoltage (Undervoltage relays)	$\geq$ 3307 volts	$\geq$ 3307 volts
7. AUXILIARY FEEDWATER	$\geq$ 30% level	$\geq$ 30% level

ST. LUCIE - UNIT 1

3/4 3-15

Amendment No. 37

TABLE 3.3-5

ENGINEERED SAFETY FEATURES RESPONSE TIMES

<u>INITIATING SIGNAL AND FUNCTION</u>	<u>RESPONSE TIME IN SECONDS</u>
1. <u>Manual</u>	
a. SIAS	
Safety Injection (ECCS)	Not Applicable
Containment Fan Coolers	Not Applicable
Feedwater Isolation	Not Applicable
Containment Isolation	Not Applicable
b. CSAS	
Containment Spray	Not Applicable
c. CIS	
Containment Isolation	Not Applicable
Shield Building Ventilation System	Not Applicable
d. RAS	
Containment Sump Recirculation	Not Applicable
e. MSIS	
Main Steam Isolation	Not Applicable
Feedwater Isolation	Not Applicable
2. <u>Pressurizer Pressure-Low</u>	
a. Safety Injection (ECCS)	≤ 30.0*/19.5**
b. Containment Isolation ***	≤ 30.5*/20.5**
c. Containment Fan Coolers	≤ 30.0*/17.0**
d. Feedwater Isolation	≤ 60.0



## CONTAINMENT SYSTEMS

### SPRAY ADDITIVE SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.6.2.2 The spray additive system shall be OPERABLE with:

- a. A spray additive tank containing a volume of between 4010 and 5000 gallons of between 30 and 32% by weight NaOH solution, and
- b. Two spray additive eductors each capable of adding NaOH solution from the chemical additive tank to a containment spray system pump flow.

APPLICABILITY: MODES 1, 2 and 3.\*

#### ACTION:

With the spray additive system inoperable, restore the system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the spray additive system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

4.6.2.2 The spray additive system shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. At least once per 6 months by:
  1. Verifying the contained solution volume in the tank, and
  2. Verifying the concentration of the NaOH solution by chemical analysis.
- c. At least once per 18 months, during shutdown, by verifying that each automatic valve in the flow path actuates to its correct position on a CSAS test signal.

\*Applicable when pressurizer pressure is  $\geq$  1750 psia.

CONTAINMENT SYSTEMS

SPRAY ADDITIVE SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

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- d. At least once per five years by verifying a sodium hydroxide (NaOH) flow rate of \_\_\_ + \_\_\_ gpm from the spray additive tank to a drain connection immediately downstream of the tank outlet valve, and a demineralized water flow rate of \_\_\_ + \_\_\_ gpm from that same drain connection to each containment spray pump. (Flow rates and tolerances for each of these two sources will be provided within six months following restart from the 1983 refueling outage.)

TABLE 3.3-5 (Continued)

ENGINEERED SAFETY FEATURES RESPONSE TIMES

<u>INITIATING SIGNAL AND FUNCTION</u>	<u>RESPONSE TIME IN SECONDS</u>
3. <u>Containment Pressure-High</u>	
a. Safety Injection (ECCS)	≤ 30.0*/19.5**
b. Containment Isolation***	≤ 30.5*/20.5**
c. Shield Building Ventilation System	≤ 30.0*/14.0**
d. Containment Fan Coolers	≤ 30.0*/17.0**
e. Feedwater Isolation	≤ 60.0
4. <u>Containment Pressure--High-High</u>	
a. Containment Spray	≤ 30.0*/18.5**
5. <u>Containment Radiation-High</u>	
a. Containment Isolation***	≤ 30.5*/20.5**
b. Shield Building Ventilation System	≤ 30.0*/14.0**
6. <u>Steam Generator Pressure-Low</u>	
a. Main Steam Isolation	≤ 6.9
b. Feedwater Isolation	≤ 60.0
7. <u>Refueling Water Storage Tank-Low</u>	
a. Containment Sump Recirculation	≤ 91.5
8. <u>Steam Generator Level</u>	
a. Auxiliary Feedwater	≥ 180, ≤ 600

TABLE NOTATION

- \* Diesel generator starting and sequence loading delays included.
- \*\* Diesel generator starting and sequence loading delays not included.  
Offsite power available.
- \*\*\*Not applicable to containment isolation valve I-MV-18-1.

TABLE 4.3-2

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. SAFETY INJECTION (SIAS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	N.A.
b. Containment Pressure - High	S	R	M	1, 2, 3
c. Pressurizer Pressure - Low	S	R	M	1, 2, 3
d. Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3
2. CONTAINMENT SPRAY (CSAS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	N.A.
b. Containment Pressure -- High - High	S	R	M	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3
3. CONTAINMENT ISOLATION (CIS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	N.A.
b. Containment Pressure - High	S	R	M	1, 2, 3
c. Containment Radiation - High	S	R	M	1, 2, 3, 4
d. Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3
e. SIAS	N.A.	N.A.	R	N.A.
4. MAIN STEAM LINE ISOLATION (MSIS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	N.A.
b. Steam Generator Pressure - Low	S	R	M	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3
5. CONTAINMENT SUMP RECIRCULATION (RAS)				
a. Manual RAS (Trip Buttons)	N.A.	N.A.	R	N.A.
b. Refueling Water Storage Tank - Low	S	R	M	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 49 TO FACILITY OPERATING LICENSE NO. DPR-67

FLORIDA POWER & LIGHT COMPANY

ST. LUCIE PLANT, UNIT NO. 1

DOCKET NO. 50-335

Introduction:

On May 23, 1978 we issued Amendment No. 26 to Facility Operating License No. DPR-67 for St. Lucie Unit 1. That amendment revised the Technical Specifications to reflect installation of a NaOH containment spray additive system. That amendment also added condition Q to the license which required that Florida Power and Light Company (FPL or the licensee) propose a Technical Specification change related to periodic flow path verification of that system. By letter dated February 9, 1979 (L-79-37) as supplemented on January 19, 1981 (L-81-20), FPL proposed such a change and satisfied the license condition. We have evaluated the proposed testing requirement.

For a different issue, FPL, by letter dated February 21, 1979 (L-79-44) proposed a Technical Specification change to correct an inconsistency with regard to instrument air system containment isolation valve closure time requirements. We have also evaluated that proposed change.

Evaluation:

A. NaOH Flow Path Verification

FPL's proposed addition of Technical Specification 4.6.2.2.d requires flow path verification tests on a once per five year basis using a two step method. The first step will verify flow from the NaOH tank to a test connection downstream of the tank outlet. The second step will, using demineralized water, check the flow path from the test connection to the containment spray pumps.

To ensure that flow path degradation can be determined from the results of this test, we require that flow rates (with tolerances) be specified. However, performance of the base-line (initial) test using the method described above is not scheduled until the 1983 refueling outage. Therefore, the flow rates and tolerances have not been provided as part of the proposed change.

Since these values will be used to evaluate testing done subsequent to the base-line test, it is not necessary that they be specified at this time. To ensure that they are added to the Technical Specifications, FPL has agreed to propose a change to this specification, which provides the appropriate values of flow rates and tolerances, within 6 months of restart from the 1983 refueling outage.

The proposed change to the St. Lucie Unit 1 Technical Specifications provides additional assurance that the NaOH spray additive system will function properly and is acceptable. FPL's proposed change also satisfies the requirements of license condition Q which may be deleted.

#### B. Instrument Air System Valve Closure Times

By letter dated February 21, 1979, FPL requested a change to the Technical Specifications. The purpose of the request is to correct an inconsistency between the requirements of Technical Specifications 3.3.2.1 and 3.6.3.1. Both specifications deal with the valve closure time of a containment isolation valve (I-MV-18-1) provided for the instrument air penetration.

Specification 3.3.2.1 establishes the Engineered Safety Feature Actuation System (ESFAS) instrumentation channel response times required for the ESFAS to be declared operable. For the containment isolation function, per Table 3.3.5, the required response time is < 20.5 seconds. Table 3.6.2 of Specification 3.6.3.1, containment isolation valve OPERABILITY requirements, lists an isolation time of 28 seconds for the above cited valve. The licensee proposed that a footnote be added to Table 3.3.5 to exclude valve I-MV-18-1 from this requirement. This would have the effect of specifying one response time for this valve; 28 seconds.

Valve I-MV-18-1, a normally closed valve located outside the containment, is listed on Table 6.2-16 of the FSAR as one of three valves providing containment isolation of the instrument air system. The other two containment isolation valves are check valves (I-V-18-857), with one located inside and the other outside of containment. Since valve I-MV-18-1 provides an additional level of redundant isolation for this penetration, we conclude that the response time of 28 seconds, consistent with the valves OPERABILITY requirement, is the value which should be required by Technical Specifications. We, therefore, conclude that the proposed change to modify table 3.3-5 of Specification 3.3.2.1, to delete valve I-MV-18-1 from the response time requirement, is 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 this 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 decrease in a safety margin, the amendment 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: April 12, 1982.

Principal Contributors:

Chris Nelson  
Dave Shum

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-335

FLORIDA POWER AND LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY

OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 49 to Facility Operating License No. DPR-67, issued to Florida Power and Light Company, which deleted a license condition and revised 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 correct an inconsistency regarding valve closure time of an instrument air containment isolation valve and by adding the requirement of periodic flow path verification of the NaOH containment spray additive system. License Condition Q, which required that such verification be proposed, has been deleted.

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.



- 2 -

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §1.5(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) applications for amendment dated February 9, 1979 (as supplemented January 19, 1981) and February 21, 1979, (2) Amendment No. 49 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 12th day of April, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION



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