

January 19, 1983

Docket Nos. 50-335
and 50-389

Mr. C. O. Woody
Group Vice President
Nuclear Energy
Florida Power & Light Company
P. O. Box 14000
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Dear Mr. Woody:

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SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. 65407 AND 65408)

The Commission has issued the enclosed Amendment Nos. 89 and 27 to Facility Operating License Nos. DPR-67 and NPF-16 for the St. Lucie Plant, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications in response to your applications dated May 13, 1987 (L-87-209 and L-87-210), as supplemented October 21, 1987.

These amendments change the limiting conditions for operation, action statements and surveillance requirements for the hydrogen analyzers such that the Technical Specifications are identical for each unit.

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

Sincerely,

/s/

E. G. Tourigny, Project Manager
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 89 to DPR-67
2. Amendment No. 27 to NPF-16
3. Safety Evaluation

cc w/enclosures:
See next page

LA:DDI-2 DPM:mer 11/16/87	PM:DDI-2 E Tourigny: bgu 11/30/87	for SPLB JCraig 12/7/87	OGC R Bachmann 12/15/87	D:PDII-2 HBerkow 12/18/87
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Mr. C. O. Woody
Florida Power & Light Company

St. Lucie Plant

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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. 89
License No. DPR-67

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power & Light Company, (the licensee), dated May 13, 1987 (L-87-209), as supplemented October 21, 1987, 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.

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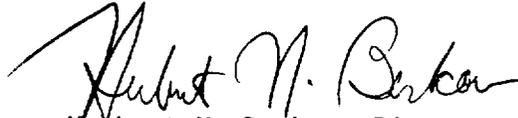
2. Accordingly, Facility Operating License No. DPR-67 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.(2) to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 89, 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



Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 19, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 89
TO 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.

Remove Pages

3/4 6-23

Insert Pages

3/4 6-23

CONTAINMENT SYSTEMS

3/4.6.4 COMBUSTIBLE GAS CONTROL

HYDROGEN ANALYZERS

LIMITING CONDITION FOR OPERATION

3.6.4.1 Two independent containment hydrogen analyzers shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or demonstrate within the next 24 hours that the grab sample system of the inoperable hydrogen analyzer has the capability to draw a sample of the containment atmosphere into the grab sample canister. Verify this capability of the grab sample system at least once per 30 days thereafter. Return the inoperable hydrogen analyzer to OPERABLE status within an additional 60 days. Otherwise, be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS:

4.6.4.1.1 Each hydrogen analyzer shall be demonstrated OPERABLE by the performance of a CHANNEL FUNCTIONAL TEST at least once per 31 days, and at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gases containing:

- a. Nominally one volume percent hydrogen, balance nitrogen and oxygen.
- b. Nominally four volume percent hydrogen, balance nitrogen, and oxygen.

CONTAINMENT SYSTEMS

ELECTRIC HYDROGEN RECOMBINERS - W

LIMITING CONDITION FOR OPERATION

3.6.4.2 Two independent containment hydrogen recombiner systems shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen recombiner system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.2 Each hydrogen recombiner system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying during a recombiner system functional test that the minimum heater sheath temperature increases to $\geq 700^{\circ}\text{F}$ within 90 minutes and is maintained for at least 2 hours.
- b. At least once per 18 months by:
 1. Performing a CHANNEL CALIBRATION of all recombiner instrumentation and control circuits.
 2. Verifying through a visual examination that there is no evidence of abnormal conditions within the recombiners (i.e., loose wiring or structural connections, deposits of foreign materials, etc.).



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

FLORIDA POWER & LIGHT COMPANY

ORLANDO UTILITIES COMMISSION OF

THE CITY OF ORLANDO, FLORIDA

AND

FLORIDA MUNICIPAL POWER AGENCY

DOCKET NO. 50-389

ST. LUCIE PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27
License No. NPF-16

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power & Light Company, et al. (the licensee), dated May 13, 1987 (L-87-210), as supplemented October 21, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

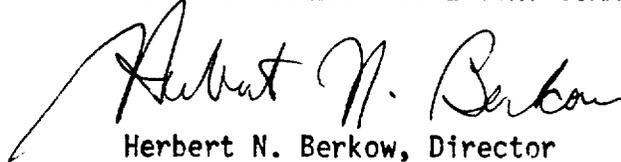
2. Accordingly, Facility Operating License No. NPF-16 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.2 to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 27, 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



Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 19, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 27
TO FACILITY OPERATING LICENSE NO. NPF-16
DOCKET NO. 50-389

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Remove Pages

3/4 6-24

Insert Pages

3/4 6-24

CONTAINMENT SYSTEMS

3/4.6.4 COMBUSTIBLE GAS CONTROL

HYDROGEN ANALYZERS

LIMITING CONDITION FOR OPERATION

3.6.4.1 Two independent containment hydrogen analyzers shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or demonstrate within the next 24 hours that the grab sample system of the inoperable hydrogen analyzer has the capability to draw a sample of the containment atmosphere into the grab sample canister. Verify this capability of the grab sample system at least once per 30 days thereafter. Return the inoperable hydrogen analyzer to OPERABLE status within an additional 60 days. Otherwise, be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.1 Each hydrogen analyzer shall be demonstrated OPERABLE by the performance of a CHANNEL FUNCTIONAL TEST at least once per 31 days, and at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gases containing:

- a. Nominally one volume percent hydrogen, balance nitrogen and oxygen.
- b. Nominally four volume percent hydrogen, balance nitrogen and oxygen.

TABLE 3.6-2 (Continued)
CONTAINMENT ISOLATION VALVES

<u>Valve Tag Number</u>	<u>Penetration Number</u>	<u>Function</u>	<u>Testable During Plant Operation</u>	<u>Maximum Isolation Time (Sec)</u>
B) Manual CR Remote Manual				
I-V-18-797	8	Station Air Supply (Manual)	Yes	NA
I-V-18-1270		Station Air Supply (Check)	No	NA
I-V-3463	41	Safety Injection Tank Test Line (Manual)	Yes	NA
I-V-07-206	46	Fuel Pool Cleanup (Inlet)	Yes	NA
I-V-07-189		(Manual)		
I-V-07-170	47	Fuel Pool Cleanup (Outlet)	Yes	NA
I-V-07-188		(Manual)		
I-FSE-27-8,9,10, 11,15,16	48	H ₂ Sampling (Remote Manual)	Yes	NA
I-FSE-27-12,13,14, 17,18	51	H ₂ Sampling (Remote Manual)	Yes	NA
I-V-00-140	52D	ILRT (Manual)	Yes	NA
I-V-00-143				
I-V-00-139	52E	ILRT (Manual)	Yes	NA
I-V-00-144				
I-V-00-101	54	ILRT (Manual)	Yes	NA



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 89 AND 27

TO FACILITY OPERATING LICENSE NOS. DPR-67 AND NPF-16

FLORIDA POWER & LIGHT COMPANY, ET AL.

ST. LUCIE PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-335 AND 50-389

INTRODUCTION

By letters dated May 13, 1987 (87-L-209 for Unit 1 and 87-L-210 for Unit 2), the Florida Power and Light Company (the licensee) requested hydrogen analyzer Technical Specification (TS) changes for both St. Lucie Units (TS 3/4.6.4.1). The proposed changes will make the TS identical for both units. These applications were noticed in the Federal Register on August 12, 1987 (52 FR 29916). The licensee provided additional information by letter dated October 21, 1987. The additional information did not, in any way, alter the staff's proposed no significant hazards consideration determination.

BACKGROUND

Each St. Lucie unit has two independent containment hydrogen analyzer systems. One analyzer system consists of a hydrogen analyzer, a pump, a grab sample cylinder or canister, various valves, and piping to and from the containment. The hydrogen analyzer is used to determine hydrogen concentration at various elevations inside the containment. Hydrogen concentration is read out locally in both the auxiliary building and in the control room. Power supplies for the equipment are safety-grade, and thus operate from emergency busses.

Each hydrogen analyzer system can be operated in two modes: on-line and grab sample. In the on-line mode, the pump is started and a sample from one of the locations inside containment is taken and sent to the analyzer for concentration determination. The analyzer determines the concentration and the sample is then routed back to the containment. In the grab sample mode, the pump is started and a sample from one of the locations inside containment is taken and sent to the grab sample cylinder or canister. The grab sample cylinder or canister is then physically taken to an on-site laboratory for concentration determination. The hydrogen analyzer and grab sample cylinder or canister both use the same pump, valves, and piping.

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EVALUATION

Presently, the Unit 2 limiting condition for operation (LCO) requires two independent containment hydrogen analyzers to be operable, and the Unit 1 LCO requires one containment hydrogen analyzer and grab sample system to be operable. The licensee proposes to change the Unit 1 LCO to be identical to the Unit 2 LCO. Presently, there are two independent hydrogen analyzer systems installed at Unit 1. The upgrading of the Unit 1 LCO to reflect currently installed plant equipment and making the LCO identical to Unit 2 is acceptable. The upgrading of the Unit 1 LCO actually represents an improvement because the ability to determine hydrogen concentration inside containment is enhanced.

Presently, the Unit 2 action statement requires that an inoperable analyzer be restored to operable status within 30 days or be in at least Hot Standby within the next 6 hours. The Unit 1 action statement currently requires that an inoperable analyzer or an inoperable grab sample system be restored to operable status within 30 days or be in at least Hot Standby within the next 6 hours. The licensee proposes one action statement to be applicable to both units. The licensee proposes to use the Unit 2 action statement and add the following words when one analyzer is inoperable: "...demonstrate within the next 24 hours that the grab sample system of the inoperable hydrogen analyzer has the capability to draw a sample of the containment atmosphere into the grab sample canister. Verify this capability of the grab sample system at least once per 30 days thereafter. Return the inoperable hydrogen analyzer to operable status within an additional 60 days." The proposed additional wording for Unit 2 will allow the licensee more time to repair an inoperable analyzer and also require a sampling analysis capability for that particular hydrogen analyzer system during this period of time. In addition, the other hydrogen analyzer system will still be operable. The net effect of this change, assuming a single action failure of the operable hydrogen analyzer system, would be a slightly longer time to determine hydrogen concentration in the containment if the inoperable hydrogen analyzer is under repair.

Presently, the Unit 1 action statement requires repair of the hydrogen analyzer system within 30 days. If the analyzer itself is inoperable, then the grab sample cylinder or canister would be used, if hydrogen concentration determination is required. If the grab sample cylinder or canister is inoperable, then the hydrogen analyzer would be used, if hydrogen concentration determination is required. Since the operability of the other hydrogen analyzer system is not a TS requirement, its use cannot be taken credit for, although from a practical standpoint, it would be used if operable. The licensee proposes the same action statement for Unit 1 with the additional wording as described for Unit 2 above. The net effect of the change, coupled with the Unit 1 LCO change represents a significant upgrading of the TS. The proposed action statement for both units is therefore acceptable.

The licensee also proposes various changes to the surveillance requirements. For Unit 2, the word "nominally" will be added to the one volume and four volume percent hydrogen for the sample gases. The word "nominally" would be added to account for the slight variations in vendor-supplied calibration samples. Therefore, the addition of the word "nominally" is acceptable because if the

percent hydrogen was not exactly one or four volume percent, the licensee would be in violation of the TS. This was not the intent of the staff, and some amount of leeway on sample gases is acceptable.

For Unit 1, the licensee proposes to use the same surveillance requirements approved for Unit 2, as modified by the addition of the word "nominally" for the sample gases. The net major effect of the changes for Unit 1 will be to add a channel functional test requirement once per 31 days, delete the requirement to check for hydrogen analyzer power alignment to an operable emergency bus and delete the grab sample system periodic operability check. The addition of the channel functional test requirements to once per 31 days will further ensure the operability of the equipment. This change is therefore acceptable. Deletion of verification of the hydrogen analyzer power alignment to an operable emergency bus is acceptable because in fact, each Unit 1 hydrogen analyzer is presently aligned to an operable emergency bus and such verification is not necessary. A change in this configuration would be governed by 10 CFR 50.59. This would not permit changes involving an unreviewed safety question (e.g. powering the analyzer from a non-safety grade bus). The same argument can be made for Unit 2. The deletion of the grab sample periodic surveillance is justified on the basis that two independent hydrogen analyzers are required to be operable. The grab sample part of the hydrogen analyzer system is now a truly backup system and will require surveillance only when it is being utilized as specified in the action statement.

ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or a change to a surveillance requirement. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

CONCLUSION

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

Date: January 19, 1988

Principal Contributor:

E. Tourigny
A. Gill