

July 27, 1987

Docket Nos. 50-335
and 50-389

Mr. C. O. Woody
Group Vice President
Nuclear Energy
Florida Power & Light Company
P. O. Box 14000
Juno Beach, Florida 33408

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|--------------------|-----------------|
| <u>Docket File</u> | T. Barnhart (8) |
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Dear Mr. Woody:

The Commission has issued the enclosed Amendment Nos. and 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 April 1, 1987 (L-87-146 for Unit 1 and L-87-147 for Unit 2).

These amendments delete the tables which identify safety-related hydraulic and mechanical snubbers and the first inservice inspection requirement which has already been fulfilled. The amendment for Unit No. 1 also deletes a footnote concerning the waiving of mechanical snubber functional test requirements until startup following the fifth refueling outage, which has already occurred, and also corrects a reference.

A copy of the related Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

/s/

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

Enclosures:

1. Amendment No. 83 to DPR-67
2. Amendment No. 22 to NPF-16
3. Safety Evaluation

cc w/enclosures:
See next page

LA:PRZ
DME:ler
6/11/87

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PM:PD22
ETourigny:hc
6/12/87

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MEB
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7/9/87

[Signature]
OGC
to SE
7/20/87

[Signature]
LRubenstein
8/2/87

Mr. C. O. Woody
Florida Power & Light Company

St. Lucie Plant

cc:

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

Resident Inspector
c/o U.S. NRC
7585 S. Hwy A1A
Jensen Beach, Florida 33457

State Planning & Development
Clearinghouse
Office of Planning & Budget
Executive Office of the Governor
The Capitol Building
Tallahassee, Florida 32301

Harold F. Reis, Esq.
Newman & Holtzinger
1615 L Street, N.W.
Washington, DC 20036

Norman A. Coll, Esq.
McCarthy, Steel, Hector and Davis
14th Floor, First National Bank Building
Miami, Florida 33131

Administrator
Department of Environmental Regulation
Power Plant Siting Section
State of Florida
2600 Blair Stone Road
Tallahassee, Florida 32301

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

Mr. Charles B. Brinkman, Manager
Washington - Nuclear Operations
Combustion Engineering, Inc.
7910 Woodmont Avenue
Bethesda, Maryland 20814

Jacob Daniel Nash
Office of Radiation Control
Department of Health and
Rehabilitative Services
1317 Winewood Blvd.
Tallahassee, Florida 32399-0700

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
Executive Director for Operations
101 Marietta Street N.W., Suite 2900
Atlanta, Georgia 30323



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. 83
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 April 1, 1987 (L-87-146), 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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P PDR

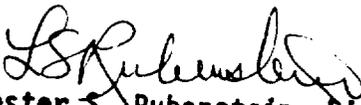
2. Accordingly, Facility Operating License No. DPR-67 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.(2) to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 83, 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


Lester S. Rubenstein, Director
Project Directorate II-2
Division of Reactor Projects-I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 27, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 83
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 7-29
3/4 7-30
3/4 7-31
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3/4 7-35
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Insert Pages

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PLANT SYSTEMS

3/4 7.10 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.10 All safety related snubbers shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4. (MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES).

ACTION:

With one or more safety related snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.10 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program.

a. Visual Inspections

Visual inspections shall be performed in accordance with the following schedule:

| <u>No. Inoperable Snubbers per Inspection Period</u> | <u>Subsequent Visual Inspection Period *#</u> |
|--|---|
| 0 | 18 months + 25% |
| 1 | 12 months + 25% |
| 2 | 6 months + 25% |
| 3,4 | 123 days + 25% |
| 5, 6, 7 | 62 days + 25% |
| 8 or more | 31 days + 25% |

The snubbers may be categorized into two groups: Those accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with the above schedule.

*The inspection interval shall not be lengthened more than one step at a time unless a generic problem has been identified and corrected; in that event the inspection may be lengthened one step the first time and two steps thereafter if no inoperable snubbers are found.

#The provisions of Specification 4.0.2 are not applicable.

SURVEILLANCE REQUIREMENTS (Continued)b. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY and (2) attachments to the foundation or supporting structure are secure. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; and/or (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specifications 4.7.10.d or 4.7.10.e, as applicable.

c. Functional Tests

At least once per 18 months during shutdown, a representative sample (10% of the safety related snubbers) shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria of Specification 4.7.10.d or 4.7.10.e, an additional 10% of that type of snubber shall be functionally tested. Functional test shall continue until no additional snubbers are found inoperable or all safety related snubbers have been tested.

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity of snubbers.

Snubbers identified as "Especially Difficult to Remove" or in "High Exposure Zones During Shutdown" shall also be included in the representative sample.* Safety related hydraulic snubber listings and safety related mechanical snubber listings may be used jointly or separately as the basis for the sampling plan.

In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period. If a spare snubber has been installed in place of a failed snubber, then both the failed snubber (if it is repaired and installed in another position) and the spare snubber shall be retested. Test results of these snubbers shall not result in additional functional testing due to failure.

*Permanent or other exemptions from the functional testing for individual snubbers in these categories may be granted by the Commission only if justifiable basis for exemption is presented and/or snubber life destructive testing was performed to qualify snubber operability for all design conditions at either the completion of their fabrication or at a subsequent date.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

If any snubber selected for functional testing either fails to lockup or fails to move, i.e., frozen in place, the cause will be evaluated and if caused by manufacturer or design deficiency, all snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.

d. Hydraulic Snubbers Functional Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension.

e. Mechanical Snubbers Functional Test Acceptance Criteria

The mechanical snubber functional test shall verify that:

1. The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force.
2. Activation (restraining action) is achieved in both tension and compression.

f. Snubber Service Life Monitoring

A record of the service life of each snubber, the date at which the designated service life commences and the installation and maintenance records on which the designed service life is based shall be maintained as required by Specification 6.10.2.1.

Concurrent with the first inservice visual inspection and at least once per 18 months thereafter, the installation and maintenance records for each safety related snubber shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded by more than 10% prior to the next scheduled snubber service life review. If the indicated service life will be exceeded by more than 10% prior to the next scheduled snubber service life review, the snubber service life shall be reevaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next scheduled service life review. The results of the reevaluation may be used to justify a change to the service life of the snubber. This reevaluation, replacement or reconditioning shall be indicated in the records.

TABLE 3.7-2a

DELETED

TABLE 3.7-2a (CONTINUED)

DELETED

ST. LUCIE - UNIT 1

3/4 7-33

Amendment No. 27, 37, 44, 83

TABLE 3.7-2a (CONTINUED)

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ST. LUCIE - UNIT 1

3/4 7-34

Amendment No. 21, 31, 44, 83

TABLE 3.7-2a (CONTINUED)

DELETED

ST. LUCIE - UNIT 1

3/4 7-35

Amendment No. 27, 37, 44, 83

TABLE 3.7-2b

DELETED

TABLE 3.7-2b (CONTINUED)

DELETED

TABLE 3.7-2b (CONTINUED)

DELETED

ST. LUCIE - UNIT 1

3/4 7-38

Amendment No. 44, 83

TABLE 3.7-2b (CONTINUED)

DELETED

ST. LUCIE - UNIT 1

3/4 7-39

Amendment No. #4, 83

TABLE 3.7-2b (CONTINUED)

DELETED

PLANT SYSTEMS

BASES

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM (Continued)

for operations personnel during and following all credible accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rem or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criteria 10 of Appendix "A", 10 CFR 50.

3/4.7.8 ECCS AREA VENTILATION SYSTEM

The OPERABILITY of the ECCS area ventilation system ensures that radioactive materials leaking from the ECCS equipment following a LOCA are filtered prior to reaching the environment. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the accident analyses.

3/4.7.9 SEALED SOURCE CONTAMINATION

The limitations on sealed source removable contamination ensure that the total body or individual organ irradiation does not exceed allowable limits in the event of ingestion or inhalation of the probable leakage from the source material. The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. Quantities of interest to this specification which are exempt from the leakage testing are consistent with the criteria of 10 CFR Parts 30.11-20 and 70.19. Leakage from sources excluded from the requirements of this specification is not likely to represent more than one maximum permissible body burden for total body irradiation if the source material is inhaled or ingested.

3/4.7.10 SNUBBERS

All safety related snubbers are required to be OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an inspection. Inspections performed

PLANT SYSTEMS

BASES

before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubber that may be generically susceptible and verified by inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration.

When a snubber is found inoperable, an evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at 18 month intervals. Observed failures of these sample snubbers shall require functional testing of additional units.

In cases where the cause of failure has been identified, additional snubbers having a high probability for the same type failure or that are being used in the same application that caused the failure shall be tested. This requirement increases the probability of locating inoperable snubbers without testing 100% of the snubbers.

Hydraulic snubbers and mechanical snubbers may each be treated as a different entity for the above surveillance programs.

The service life of a snubber is evaluated via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc. ...). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

ADMINISTRATIVE CONTROLS

- g. Records of training and qualification for current members of the unit staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the FRG and the CNRB.
- l. Records of the service lives of all safety related snubbers including the date at which the service life commences and associated installation and maintenance records.
- m. Records of secondary water sampling and water quality.
- n. Annual Radiological Environmental Operating Reports and records of analyses transmitted to the licensee which are used to prepare the Annual Radiological Environmental Monitoring Report.
- o. Meteorological data, summarized and reported in a format consistent with the recommendation of Regulatory Guides 1.21 and 1.23.
- p. Records of audits performed under the requirements of Specifications 6.5.2.8 and 6.8.4.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

ADMINISTRATIVE CONTROLS

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR Part 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP)*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the RWP.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose greater than 1000 mrem shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Foreman on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose in excess of 1000 mrem** that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, then that area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device. In lieu of the stay time specification of the RWP, direct or remote (such as use of closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities within the area.

* Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

**Measurement made at 18 inches from source of radioactivity.



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. 22
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 April 1, 1987 (L-87-147), 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.

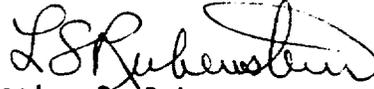
2. Accordingly, Facility Operating License No. NPF-16 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and by amending paragraph 2.C.2 to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 22, 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



Lester S. Rubenstein, Director
Project Directorate II-2
Division of Reactor Projects-I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 27, 1987

ATTACHMENT TO LICENSE AMENDMENT NO.22
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 7-21
3/4 7-22
3/4 7-24
3/4 7-26
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Insert Pages

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PLANT SYSTEMS

3/4.7.9 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.9 All safety-related snubbers shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4. MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES.

ACTION:

With one or more safety related snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.9g. on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.9 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program.

a. Inspection Types

As used in this specification, type of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

b. Visual Inspections

Visual inspections shall be performed in accordance with the following schedule:

| <u>No. Inoperable Snubbers of Each Type per Inspection Period</u> | <u>Subsequent Visual Inspection Period*#</u> |
|---|--|
| 0 | 18 months + 25% |
| 1 | 12 months + 25% |
| 2 | 6 months + 25% |
| 3,4 | 124 days + 25% |
| 5, 6, 7 | 62 days + 25% |
| 8 or more | 31 days + 25% |

*The inspection interval for each type of snubber shall not be lengthened more than one step at a time unless a generic problem has been identified and corrected; in that event the inspection interval may be lengthened one step the first time and two steps thereafter if no inoperable snubbers of that type are found.

#The provisions of Specification 4.0.2 are not applicable.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

c. Refueling Outage Inspections

At least once per 18 months an inspection shall be performed of all safety related snubbers attached to sections of safety systems piping that have experienced unexpected, potentially damaging transients as determined from a review of operational data and a visual inspection of the systems. In addition to satisfying the visual inspection acceptance criteria, freedom of motion of mechanical snubbers shall be verified using one of the following: (1) manually induced snubber movement; (2) evaluation of in-place snubber piston setting; (3) stroking the mechanical snubber through its full range of travel.

d. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, provided that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers, irrespective of type, that may be generically susceptible; and (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specification 4.7.9f. When a fluid port of a hydraulic snubber is found to be uncovered the snubber shall be declared inoperable and cannot be determined OPERABLE via functional testing unless the test is started with the piston in the as found setting, extending the piston rod in the tension mode direction. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be determined to be OPERABLE by visually verifying the required level of oil for operation for each affected snubber; otherwise declare the snubbers inoperable.

e. Functional Tests

During the first refueling shutdown and at last once per 18 months thereafter during shutdown, a representative sample of either: (1) At least 10% of the total of each type of safety related snubber in use in the plant shall be functionally tested either in place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.7.9f, an additional 10% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested or (2) A representative sample of each type of snubber shall be functionally tested in accordance with Figure 4.7-1. "C" is the total number of snubbers of a type found not meeting the acceptance requirements of Specification 4.7.9f. The cumulative number of snubbers of a type tested is denoted by "N." At the end of each day's testing, the new values of "N" and "C" (previous day's total plus current day's increments) shall be plotted on Figure 4.7-1. If at any time the point plotted falls in the "Reject" region, all

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

Functional Tests (Continued)

snubbers of that type design shall be functionally tested. If at any time the point plotted falls in the "Accept" region, testing of that type of snubber shall be terminated. When the point plotted lies in the "Continue Testing" region, additional snubbers of that type shall be tested until the point falls in the "Accept" region or the "Reject" region, or all the snubbers of that type have been tested.

The representative sample selected for functional testing shall include the various configurations, operating environments, and the range of size and capacity of snubbers of each type. The representative sample should be weighted to include more snubbers from severe service areas such as near heavy equipment. Snubbers placed in the same location as snubbers which failed the previous functional test shall be included in the next test lot if the failure analysis shows that failure was due to location.

f. Functional Test Acceptance Criteria

The snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range in both tension and compression.
2. Snubber bleed, or release rate where required, is present in both tension and compression, within the specified range.
3. Where required, the force required to initiate or maintain motion of the snubber is within the specified range in both directions of travel.
4. For snubbers specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement.
5. Fasteners for attachment of the snubber to the component and to the snubber anchorage are secure.

Testing methods may be used to measure parameters indirectly or parameters other than those specified if those results can be correlated to the specified parameters through established methods.

g. Functional Test Failure Analysis

An engineering evaluation shall be made of each failure to meet the functional test acceptance criteria to determine the cause of the failure. The results of this evaluation shall be used, if applicable, in selecting snubbers to be tested in an effort to determine the OPERABILITY of other snubbers irrespective of type which may be subject to the same failure mode.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

Functional Test Failure Analysis (Continued)

For the snubbers found inoperable, an engineering evaluation shall be performed on the components to which the inoperable snubbers are attached. The purpose of this engineering evaluation shall be to determine if the components were adversely affected by the inoperability of the snubbers in order to ensure that the component remains capable of meeting the designed service.

If any snubber selected for functional testing either fails to lockup or fails to move, i.e., frozen in place, the cause will be evaluated and if caused by manufacturer or design deficiency all snubbers of the same type subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated in Specification 4.7.9.e for snubbers not meeting the functional test acceptance criteria.

h. Functional Testing of Repaired and Replaced Snubbers

Snubbers which fail the visual inspection or the functional test acceptance criteria shall be repaired or replaced. Replacement snubbers and snubbers which have repairs which might affect the functional test result shall be tested to meet the functional test criteria before installation in the unit. These snubbers shall have met the acceptance criteria subsequent to their most recent service, and the functional test must have been performed within 12 months before being installed in the unit.

i. Snubber Seal Replacement Program

The seal service life of hydraulic snubbers shall be monitored to ensure that the seals do not fail between surveillance inspections. The maximum expected service life for the various seals, seal materials, and applications shall be estimated based on engineering information and the seals shall be replaced so that the maximum expected service life does not expire during a period when the snubber is required to be OPERABLE. The seal replacements shall be documented and the documentation shall be retained in accordance with Specification 6.10.2.

j. Exemption From Visual Inspection or Functional Tests

Permanent or other exemptions from the surveillance program for individual snubbers may be granted by the Commission if a justifiable basis for exemption is presented and, if applicable, snubber life destructive testing was performed to qualify the snubber for the applicable design conditions at either the completion of their fabrication or at a subsequent date.

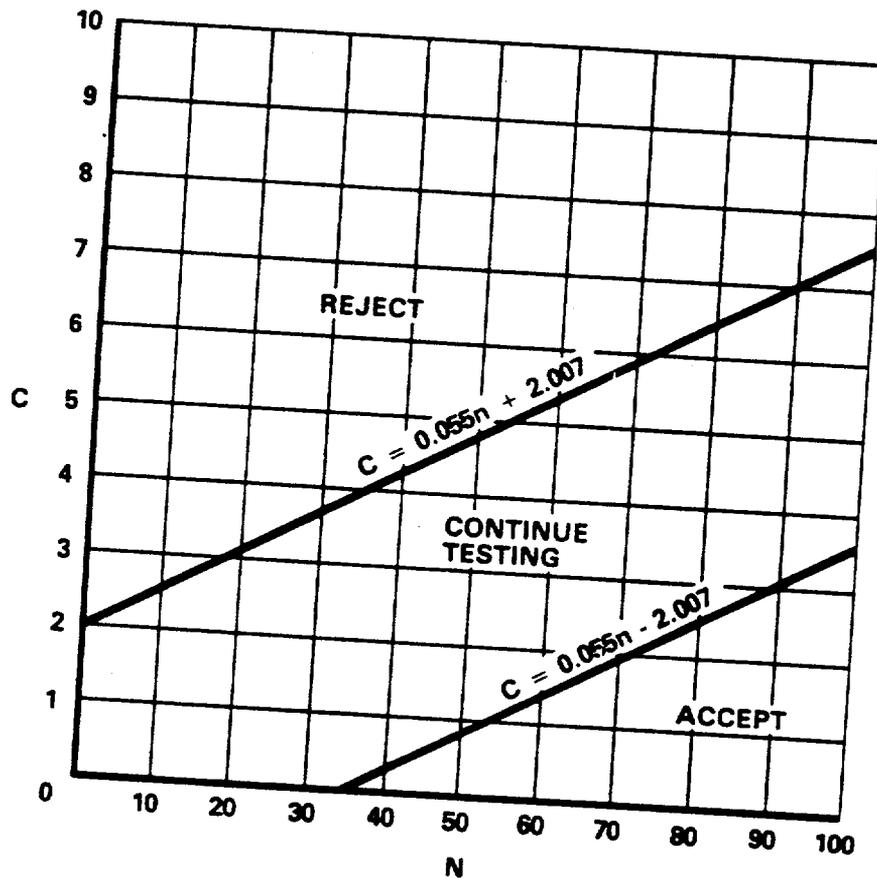


FIGURE 4.7-1 SAMPLING PLAN FOR SNUBBER FUNCTIONAL TEST

ST. LUCIE - UNIT 2

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TABLE 3.7-3a

DELETED

TABLE 3.7-3b

DELETED

ST. LUCIE - UNIT 2

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Amendment No. 22

PLANT SYSTEMS

3/4.7.10 SEALED SOURCE CONTAMINATION

LIMITING CONDITION FOR OPERATION

3.7.10 Each sealed source containing radioactive material either in excess of 100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material shall be free of greater than or equal to 0.005 microcuries of removable contamination.

APPLICABILITY: At all times.

ACTION:

- a. With a sealed source having removable contamination in excess of the above limit, immediately withdraw the sealed source from use and either:
 1. Decontaminate and repair the sealed source, or
 2. Dispose of the sealed source in accordance with Commission Regulations.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.10.1 Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

- a. The licensee, or
- b. Other persons specifically authorized by the Commission or an Agreement State.

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

4.7.10.2 Test Frequencies - Each category of sealed sources (excluding startup sources and fission detectors previously subjected to core flux) shall be tested at the frequencies described below.

- a. Sources in use - At least once per 6 months for all sealed sources containing radioactive material:
 1. With a half-life greater than 30 days (excluding Hydrogen 3), and
 2. In any form other than gas.

PLANT SYSTEMS

BASES

3/4.7.5 ULTIMATE HEAT SINK

The limitations on the ultimate heat sink level ensure that sufficient cooling capacity is available to either (1) provide normal cooldown of the facility, or (2) to mitigate the effects of accident conditions within acceptable limits.

The limitations on minimum water level is based on providing an adequate cooling water supply to safety-related equipment until cooling water can be supplied from Big Mud Creek.

Cooling capacity calculations are based on an ultimate heat sink temperature of 95°F. It has been demonstrated by a temperature survey conducted from March 1976 to May 1981 that the Atlantic Ocean has never risen higher than 86°F. Based on this conservatism, no ultimate heat sink temperature limitation is specified.

3/4.7.6 FLOOD PROTECTION

The limitation on flood protection ensures that facility protective actions will be taken in the event of flood conditions. The installation of the stoplogs ensures adequate protection for wave run-up effects where no permanent adjacent structures exist and provides protection to safety-related equipment. The maximum wave runup from the probable maximum flood (PMF) has been calculated to be elevation 18.0 feet Mean Low Water (MLW).

3/4.7.7 CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM

The OPERABILITY of the Control Room Emergency Air Cleanup System ensures that (1) the ambient air temperature does not exceed the allowable temperature for continuous duty rating for the equipment and instrumentation cooled by this system and (2) the control room will remain habitable for operations personnel during and following all credible accident conditions. The OPERABILITY of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to 5 rems or less whole body, or its equivalent. This limitation is consistent with the requirements of General Design Criterion 19 of Appendix A, 10 CFR Part 50.

3/4.7.8 ECCS AREA VENTILATION SYSTEM

The OPERABILITY of the ECCS Area Ventilation System ensures that cooling air is provided for ECCS equipment.

PLANT SYSTEMS

BASES

3/4.7.9 SNUBBERS

All safety related snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety related system.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2 kip, 10 kip and 100 kip capacity manufactured by company "A" are of the same type. The same design mechanical snubber manufactured by company "B", for purposes of this Specification, would be of a different type, as would hydraulic snubbers from either manufacturer.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

To provide assurance of snubber functional reliability, one of two sampling and acceptance criteria methods are used:

1. Functionally test 10% of a type of snubber with an additional 10% tested for each functional testing failure or
2. Functionally test a sample size and determine sample acceptance or rejection using Figure 4.7-1.

Figure 4.7-1 was developed using "Wald's Sequential Probability Ratio Plan" as described in "Quality Control and Industrial Statistics" by Acheson J. Duncan.

ADMINISTRATIVE CONTROLS

RECORD RETENTION (Continued)

- f. Records of radioactive shipments.
- g. Records of sealed source and fission detector leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the unit Operating License:

- a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories.
- c. Records of reactor tests and experiments.
- d. Records of radiation exposure for all individuals entering radiation control areas.
- e. Records of gaseous and liquid radioactive material released to the environs.
- f. Records of transient or operational cycles for those unit components identified in Table 5.7-1.
- g. Records of training and qualification for current members of the unit staff.
- h. Records of inservice inspections performed pursuant to these Technical Specifications.
- i. Records of quality assurance activities required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the FRG and the CNRB.
- l. Records of the service lives of all snubbers including the date at which the service life commences and associated installation and maintenance records.
- m. Records of secondary water sampling and water quality.
- n. Annual Radiological Environmental Operating Reports; and records of analyses transmitted to the licensee which are used to prepare the Annual Radiological Environmental Monitoring Report.
- o. Meteorological data, summarized and reported in a format consistent with the recommendations of Regulatory Guides 1.21 and 1.23.
- p. Records of audits performed under the requirements of Specifications 6.5.2.8 and 6.8.4.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

ADMINISTRATIVE CONTROLS

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR Part 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP)*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the RWP.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose greater than 1000 mrem shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Foreman on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose in excess of 1000 mrem** that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, then that area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device. In lieu of the stay time specification of the RWP, direct or remote (such as use of closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities within the area.

*Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

**Measurement made at 18 inches from source of radioactivity.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 83 AND 22

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 applications dated April 1, 1987 (L-87-146 for Unit 1 and L-87-147 for Unit 2), the Florida Power and Light Company (the licensee) requested amendments to the technical specifications (TS) for the St. Lucie Plant, Unit Nos. 1 and 2, regarding snubbers. The applications are in response to the staff's generic letter on this subject (Generic Letter 84-13), and also contain proposed changes other than those described in the generic letter.

Generic Letter 84-13 entitled "Technical Specifications for Snubbers" was issued on May 3, 1984. The Generic Letter stated that the staff reassessed the exclusion of snubber listings within the technical specifications and concluded that such listings are not necessary provided the snubber technical specification is modified to specify which snubbers are required to be operable. The staff also stated in the generic letter that the recordkeeping requirements are not altered and any changes in snubber quantities, types, or locations would be a change to the facility subject to the provisions of 10 CFR Part 50.59.

EVALUATION

The licensee proposes to delete the snubber listing tables (Tables 3.7-2a and 3.7-2b for Unit 1; Tables 3.7-3a and 3.7-3b for Unit 2) and all references to the tables. The licensee states that this change closely follows NRC guidance (GL-84-13) and the snubber listings, when deleted from the technical specifications, will be maintained per controlled documents subject to the provisions of 10 CFR Part 50.59. The licensee also proposes to incorporate the words "safety-related" in various locations of the technical specifications (prior to the word "snubber") in order to make it clear that the technical specifications are addressing safety-related snubbers. The licensee notes that this wording change does not exactly follow the guidance of the generic letter; however, the current bases statements in the technical specifications already define which snubbers can be excluded from the program. Thus, in the case of the generic letter, the Limiting Condition for Operation (LCO) states all snubbers shall be operable and specifically defines which snubbers can be excluded, whereas, in the licensee's proposal, the LCO would state in various locations that safety-related snubbers shall be operable and the bases defines

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the exceptions to the snubber surveillance program in terms of the safety versus nonsafety-related function of the snubber. The above described proposed changes are acceptable because the snubber listings will be kept in a controlled document subject to the provisions of 10 CFR 50.59, and it will be clear which snubbers are required to be operable. In addition, records of the service lives of snubbers will continue to be kept per TS 6.10.2.1. The staff will not recommend the definition of excluded snubbers be placed in the LCO since the same definition is already in the bases statements.

For each unit, the licensee proposes to delete the requirement that the first inservice visual inspection of all listed snubbers be performed after four months but within ten months of commencing power operation. The licensee states that the first inservice visual inspection of snubbers at St. Lucie, Units 1 and 2, has been performed and reference to this inspection is not required since this one-time surveillance requirement has been completed. We agree with the proposed deletion on the basis of the licensee's statement that the requirement has been completed.

In regard to Unit No. 1 only, the licensee proposes to delete a footnote and correct a reference. The footnote is associated with functional testing (TS 4.7.10.c) and reads "The requirements of this section for functionally testing mechanical snubbers may be waived until startup following the fifth refueling outage for Unit 1." As the basis for deleting the footnote, the licensee states that the fifth refueling outage has been completed and therefore the footnote is no longer necessary. The staff therefore agrees that the footnote can be deleted, for functional testing of mechanical snubbers is currently being performed. In connection with the licensee's proposal to correct an error in a reference contained in the snubber service life monitoring specification (TS 4.7.10.f), we agree with the licensee that the correct reference is 6.10.2.1.

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 in 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: July 27, 1987

Principal Contributor:

E. Tourigny