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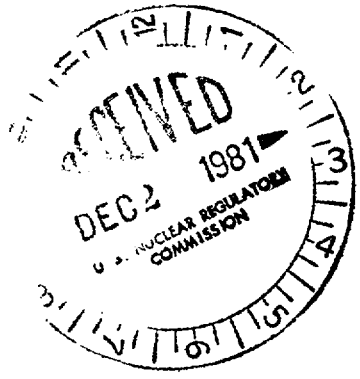

Mr. J. A. Hancock
Assistant Vice President - Nuclear Operations
Florida Power Corporation
P. O. Box 14042, M.A.C.H.2.
St. Petersburg, Florida 33733

Dear Mr. Hancock:

The Commission has issued the enclosed Amendment No. 45 to Facility Operating License No. DPR-72 for the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3). The amendment consists of changes to the Technical Specifications(TSs) in response to your applications dated November 17, 1981 (TS Change Requests Nos. 85 and 87).

This amendment deletes 4 hydraulic shock suppressors (snubbers) from Table 3.7-3 of the CR-3 TSs and adds a definition of "operable" for hydraulic snubbers in locations outside the reactor building during Cycle 4 operation.

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

Sincerely,

Original signed by

Peter B. Erickson, Project Manager
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. 45
2. Safety Evaluation
3. Notice

cc w/enclosures:
See next page

No legal objection to Amendment & F.R. notice only

OFFICE	ORB#4:DL	ORB#4:DL	C-ORB#4:DL	AD-OR:DL	OELD	ORAB	
SURNAME	RIngram	PErickson	JStolz	TNovak	S TREBY	H Shaw	
DATE	11/27/81	11/27/81:cb	11/27/81	11/27/81	11/27/81	11/27/81	

Crystal River Unit No. 3
Florida Power Corporation

50-302

cc w/enclosure(s):

Mr. S. A. Brandimore
Vice President and General Counsel
P. O. Box 14042
St. Petersburg, Florida 33733

Mr. Wilbur Langely, Chairman
Board of County Commissioners
Citrus County
Iverness, Florida 36250

Regional Radiation Representative
EPA Region IV
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Crystal River Public Library
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Crystal River, Florida 32629

Mr. Robert B. Borsum
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Nuclear Power Generation Division
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Mr. Tom Stetka, Resident Inspector
U.S. Nuclear Regulatory Commission
Route #3, Box 717
Crystal River, Florida 32629

Mr. Dan C. Poole
Nuclear Plant Manager
Florida Power Corporation
P. O. Box 219
Crystal River, Florida 32629

cc w/enclosure(s) & incoming dtd.:
11/17/81
Bureau of Intergovernmental Relations
660 Apalachee Parkway
Tallahassee, Florida 32304

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

Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, Florida 32304

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

FLORIDA POWER CORPORATION
CITY OF ALACHUA
CITY OF BUSHNELL
CITY OF GAINESVILLE
CITY OF KISSIMMEE
CITY OF LEESBURG
CITY OF NEW SMYRNA BEACH AND UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH
CITY OF OCALA
ORLANDO UTILITIES COMMISSION AND CITY OF ORLANDO
SEBRING UTILITIES COMMISSION
SEMINOLE ELECTRIC COOPERATIVE, INC.
CITY OF TALLAHASSEE

DOCKET NO. 50-302

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 45
License No. DPR-72

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

   A. The applications for amendment by Florida Power Corporation, et al (the licensees) dated November 17, 1981, 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, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 45, are hereby incorporated in the license. Florida Power Corporation 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

Peter B Erickson
for John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 27, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 45

FACILITY OPERATING LICENSE NO. DPR-72

DOCKET NO. 50-302

Replace the following pages of 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.

3/4 7-25

3/4 7-29

3/4.7.9 HYDRAULIC SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.9.1 All hydraulic snubbers listed in Table 3.7-3 shall be OPERABLE.*

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more hydraulic snubbers inoperable, replace or restore the inoperable snubber(s) to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.9.1 Hydraulic snubbers will be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Each hydraulic snubber with seal material fabricated from ethylene propylene or other materials demonstrated compatible with the operating environment and approved as such by the NRC, shall be determined OPERABLE at least once after not less than 4 months but within 6 months of initial criticality and in accordance with the inspection schedule of Table 4.7-4 thereafter, by a visual inspection of the snubber. Visual inspections of the snubbers shall include, but are not necessarily limited to, inspection of the hydraulic fluid reservoirs, fluid connections, and linkage connections to the piping and anchors. Initiation of the Table 4.7-4 inspection schedule shall be made assuming the unit was previously at the 6 month inspection interval.

b. Each hydraulic snubber with seal material not fabricated from ethylene propylene or other materials demonstrated compatible with the operating environment shall be determined OPERABLE at least once per 31 days by a visual inspection of the snubber. Visual inspection of the snubbers shall include, but are not necessarily limited to, inspection of the hydraulic fluid reservoirs, fluid connections, and linkage connections to the piping and anchors.

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* For the duration of Cycle four, hydraulic snubbers in locations outside the reactor building shall be considered OPERABLE if analysis has shown that unacceptable stresses will not result from snubber lock-up during operation.

HYDRAULIC SNUBBERS (Continued)

SURVEILLANCE REQUIREMENTS (Continued)

c. At least once per 18 months during shutdown a representative sample of at least 10 hydraulic snubbers or at least 10% of all snubbers listed in Table 3.7-3, whichever is less, shall be selected and functionally tested to verify correct piston movement, lock up and bleed. Snubbers greater than 50,000 lbs capacity may be excluded from functional testing requirements. Snubbers selected for functional testing shall be selected on a rotating basis. Snubbers identified in Table 3.7-3 as either "Especially Difficult to Remove" or in "High Radiation Zones" may be exempted from functional testing provided these snubbers were demonstrated OPERABLE during previous functional tests. Snubbers found inoperable during functional testing shall be restored to OPERABLE status prior to resuming operation. For each snubber found inoperable during these functional tests, an additional minimum of 10% of all snubbers or 10 snubbers, whichever is less, shall also be functionally tested until no more failures are found or all snubbers have been functionally tested.

TABLE 3.7-3

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION** AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE**** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
	Make-up and Purification System (Continued)			
MUH-35	110'-6"	I	Yes	No
MUH-36	109'-0"	A	No	Yes
MUH-37	109'-0"	A	No	No
MUH-38	123'-10"	I	Yes	Yes
MUH-39	112'-0"	I	Yes	No
MUH-40	112'-0"	I	Yes	No
MUH-41	129'-1"	I	Yes	No
MUH-42	119'-0"	I	Yes	No
MUH-43	114'-0"	I	Yes	No
MUH-44	114'-0"	A	No	No
MUH-45	114'-0"	A	No	No
MUH-46	114'-0"	I	Yes	No
MUH-47	114'-0"	A	No	Yes
MUH-48	114'-0"	A	No	Yes
MUH-49	108'-6"	A	No	Yes
MUH-50	129'-9"	I	Yes	Yes
MUH-51	117'-0"	I	Yes	Yes
MUH-52	110'-0"	A	No	No
MUH-53	110'-0"	A	No	No
MUH-80	108'-0"	I	Yes	Yes
MUH-81	108'-7"	A	No	No
MUH-82	108'-7"	A	No	No
MUH-83	108'-7"	A	No	No
MUH-84	108'-7"	A	No	No
MUH-85	104'-0"	A	No	No

TABLE 3.7-3

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION** AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE*** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
	Decay Heat Removal System			
DHH-35	152'-5"	I	Yes	No
DHH-36	152'-5"	I	Yes	No
DHH-37	159'-7"	I	Yes	Yes
DHH-38	160'-1"	I	Yes	Yes
DHH-39	165'-9"	I	Yes	No
DHH-661	86'-6"***	I	Yes	No
DHR-18	84'-7"***	I	Yes	No
DHR-21	103'-6"***	A	No	No
DHR-24U	129'-6"***	A	No	No
DHR-24L	129'-6"***	A	No	No
DHR-28	134'-4"***	A	No	No
DHR-31	84'-9"***	I	Yes	No
DHR-37	85'-6"***	I	Yes	No
DHR-49	85'-6"***	I	Yes	No

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 45 TO FACILITY OPERATING LICENSE NO. DPR-72

FLORIDA POWER CORPORATION, ET AL

CRYSTAL RIVER UNIT NO. 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

Introduction

By applications dated November 17, 1981, Florida Power Corporation (FPC or the licensee) requested changes to the Technical Specifications (TSs) of Facility Operating License No. DPR-72 for operation of the Crystal River Unit No. 3 Nuclear Generating Plant. These changes would delete four hydraulic shock suppressors (snubbers) from TS Table 3.7-3, "Safety Related Hydraulic Snubbers", and would add a definition of "operable" for hydraulic snubbers in locations outside the reactor building during Cycle 4 operation.

Discussion

FPC is completing a refueling and maintenance outage at CR-3. Part of the maintenance is visual inspection and functional testing of hydraulic snubbers. During the snubber inspection, FPC discovered cracks in many of the aluminum reducer bushings that connect the fluid line from a valve body to a snubber cylinder. Because of this, FPC has removed and rebuilt all hydraulic snubbers in the CR-3 reactor building except for four snubbers as discussed below. Except for these four snubbers, all of the aluminum bushings for snubbers in the reactor building have been replaced with stainless steel and the snubbers functionally tested before installation.

Snubbers outside the reactor building are also being rebuilt with aluminum bushings replaced and functional tests performed before installation. No cracked bushings have been discovered on the snubbers outside the reactor building to date, however, with a 100% visual inspection. The schedule for rebuilding these snubbers is evaluated below.

Evaluation

Deletion of Four Snubbers from Surveillance Requirements

FPC has removed and rebuilt all hydraulic snubbers in the CR-3 reactor building during the current refueling outage except for four snubbers located in the letdown cooler room where a strong radiation field exists. To maintain personnel radiation exposure as low as reasonably achievable, FPC decided to leave these four snubbers in place. For these four snubbers, FPC has made stress analyses that assume a fully locked-up or a totally loosened snubber for the thermal cycling or Design Basis Earthquake (DBE) loadings, respectively.

These analyses of the two limiting cases indicate that design limits will not be violated and functional integrity of the letdown cooler will be maintained during those loading events. Therefore, improper performance of these four hydraulic snubbers will not affect the operability of the letdown cooler. The deletion of these four snubbers, MUH-86, MUH-87, MUH-88, and MUH-89, from Table 3.7-3 of the CR-3 TSs is therefore acceptable.

Operability of Snubbers Outside Reactor Building

As discussed above, FPC has removed and rebuilt hydraulic snubbers inside the reactor building. Since the same generic degradation may also effect the snubbers outside the reactor building, FPC has decided to recondition all of these snubbers during the Cycle 4 operations period. To assure safe operation of CR-3 during this process, FPC has evaluated each snubber location outside the

reactor building to determine which snubbers could cause an unacceptable stress if they locked-up during thermal cycling of the plant. These snubbers will be rebuilt as required and determined to be operable prior to return of the reactor to power operations following this refueling. All of the remaining snubbers outside containment will be rebuilt as expeditiously as possible during Cycle 4 as parts become available. To allow this flexibility for rebuilding the snubbers outside the reactor building, FPC has proposed the following footnote to Paragraph 4.7.9.1 of the TSs:

> "For the duration of Cycle 4, hydraulic snubbers in locations outside the reactor building shall be considered OPERABLE if analysis has shown that unacceptable stresses will not result from snubber lock-up during operation."

The proposed change is acceptable because these snubbers will be determined operable only if they have been rebuilt or if satisfactory results are obtained from stress analysis.

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.

Dated: November 27, 1981

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-302

FLORIDA POWER CORPORATION, ET AL

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 45 to Facility Operating License No. DPR-72, issued to the Florida Power Corporation, City of Alachua, City of Bushnell, City of Gainesville, City of Kissimmee, City of Leesburg, City of New Smyrna Beach and Utilities Commission, City of New Smyrna Beach, City of Ocala, Orlando Utilities Commission and City of Orlando, Sebring Utilities Commission, Seminole Electric Cooperative, Inc., and the City of Tallahassee (the licensees) which revised the Technical Specifications (TSs) for operation of the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3) located in Citrus County, Florida.

The amendment deletes 4 hydraulic shock suppressors (snubbers) from Table 3.7-3 of the CR-3 TSs and adds a definition of "operable" for hydraulic snubbers in locations outside the reactor building during Cycle 4 operation.

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.

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

For further details with respect to this action, see (1) the applications for amendment dated November 17, 1981, (2) Amendment No. 45 to License No. DPR-72, 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, NW, Washington, D.C., and at the Crystal River Public Library, 668 N.W. First Avenue, Crystal River, 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 27th day of November 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Peter B. Erickson

Peter B. Erickson, Acting Chief
Operating Reactors Branch #4
Division of Licensing