

September 18, 1985

DMB-016

Docket No. 50-302

DISTRIBUTION

Docket File

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NRC PDR  
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Dear Mr. Wilgus:

The Commission has issued the enclosed Amendment No. 81 to Facility Operating License No. DPR-72 for the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3). This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated August 30, 1984.

This amendment permits the triaxial peak accelograph on top of the reactor vessel head to be inoperable during Modes 5 and 6.

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

Sincerely,

Original signed by

Harley Silver, Project Manager  
Operating Reactors Branch #4  
Division of Licensing

Enclosures:

- 1. Amendment No. 81 to DPR-72
- 2. Safety Evaluation

cc w/enclosures:

See next page

ORB#4:DL  
RIngram  
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*M. KARMAH*  
9/13/85

*G*  
AD:OR:DL  
GKainas  
9/17/85

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Mr. W. S. Wilgus  
Florida Power Corporation

Crystal River Unit No. 3 Nuclear  
Generating Plant

cc:

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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. 81  
License No. DPR-72

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power Corporation, et al. (the licensees) dated August 30, 1984, 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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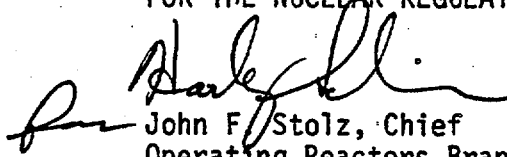
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 81, 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 its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Chief  
Operating Reactors Branch #4  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: September 18, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 81

FACILITY OPERATING LICENSE NO. DPR-72

DOCKET NO. 50-302

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

Pages

3/4 3-28

3/4 3-29

INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

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4.3.3.2 The incore detector system shall be demonstrated OPERABLE:

- a. By performance of a CHANNEL CHECK within 7 days prior to its use for measurement of the AXIAL POWER IMBALANCE or the QUADRANT POWER TILT.
- b. At least once per 18 months by performance of a CHANNEL CALIBRATION which does not include the neutron detectors.

## INSTRUMENTATION

### SEISMIC INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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

APPLICABILITY: As shown in Table 3.3-7.

ACTION:

- a. With one or more seismic monitoring instruments inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to **OPERABLE** status.
- b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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

4.3.3.3.2 Each of the above seismic monitoring instruments actuated during a seismic event shall be restored to **OPERABLE** status within 24 hours and a **CHANNEL CALIBRATION** performed within 5 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. A Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 10 days describing the magnitude, frequency spectrum and resultant effect upon facility features important to safety.

TABLE 3.3-7

SEISMIC MONITORING INSTRUMENTATION

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>MEASUREMENT RANGE</u>	<u>MINIMUM INSTRUMENT OPERABLE</u>	<u>APPLICABLE MODES</u>
1. Triaxial Time-History Accelerographs			
a. 95'0" Containment vessel foundation	± 1.0 G	1	ALL
b. 267'6" Outside containment on top of ring girder	± 1.0 G	1	ALL
c. 145'0" Control room floor	± 1.0 G	1	ALL
2. Triaxial Peak Accelerographs			
a. 140'0" At top of reactor	± 2.0 G	1	1, 2, 3, and 4
b. 175'6" Piping at top of one S.G.	± 2.0 G	1	ALL
c. 166'8" Top of Borated Water Storage Tank	± 2.0 G	1	ALL
3. Triaxial Seismic Switches			
a. 95'0" Containment vessel foundation	.005 to .05 G	1*	ALL

NOTE: Starts all three magnetic time history accelerographs whenever the acceleration exceeds .01 G.

\* With reactor control room indication



TABLE 4.3-4

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENTS AND SENSOR LOCATIONS</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
1. Triaxial Time-History Accelerographs			
a. 95'0" Containment vessel foundation	M*	R	SA
b. 267'6" Outside Containment on top of ring girder	M*	R	SA
c. 145'0" Control room floor	M*	R	SA
2. Triaxial Peak Accelerographs			
a. 140'0" At top of reactor	R	NA	NA
b. 175'6" Piping at top of one S.G.	R	NA	NA
c. 166'8" Top of Borated Water Storage Tank	R	NA	NA
3. Triaxial Seismic Switches			
a. 95'0" Containment vessel foundation	M**	R	SA

\* Except seismic trigger

\*\* With reactor control room indication



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 81 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 letter dated August 30, 1984, Florida Power Corporation (FPC, the licensee) requested an amendment to the Crystal River Unit 3 (CR-3) Technical Specifications (TSs) to permit the reactor vessel head seismic instrumentation to be inoperable during operating Modes 5 and 6. The existing TSs require all seismic instrumentation, including the triaxial peak accelograph mounted on the reactor vessel head, to be operable at all times.

Evaluation

The operability of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event so that the response of those features important to safety may be evaluated. This capability is required to permit comparison of the measured response to that used in the design basis for the facility.

In addition to the vessel head accelograph, two other triaxial peak accelographs and three triaxial time-history accelographs are installed at various locations in the plant and are required to be operable at all times. These instruments will provide the necessary seismic information. In Mode 6, the vessel head is either removed from the vessel or not securely bolted to the vessel and the accelograph is removed from the head. In Mode 5, in many cases the accelograph is of necessity not in place on the vessel head. This accelograph would provide no useful information in either case and would be returned to service prior to entering Mode 4. Therefore, the requirement that this instrument be operable in Modes 5 and 6 is neither necessary nor feasible, and deleting this equipment would have no adverse effect on plant safety.

Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that the amendment involves 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 issued a proposed finding that this amendment involves no

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significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets 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 this amendment.

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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 18, 1985

Principal contributor: J. L. Mathis