

September 30, 1991

Docket No. 50-302

Mr. Percy M. Beard, Jr.  
Senior Vice President,  
Nuclear Operations  
Florida Power Corporation  
ATTN: Manager, Nuclear Operations  
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Dear Mr. Beard:

SUBJECT: CRYSTAL RIVER UNIT 3 - EXEMPTION FROM REQUIREMENTS OF  
10 CFR PART 50, APPENDIX J (TAC NO. 79883)

The Commission has issued the enclosed exemption from the requirements of 10 CFR Part 50, Appendix J, as requested by your letter dated January 31, 1991, as supplemented May 16, 1991. This exemption permits a one-time extension of the surveillance interval for Type B and C local leak rate tests for certain containment isolation valves and penetrations until prior to startup from Refuel 8. A Safety Evaluation supporting the exemption is also enclosed.

You also requested relief from the surveillance requirements in the 1983 Edition of the ASME Code, Section XI, Subsection IWV-3422. This relief is being forwarded to you under separate letter.

A copy of the exemption is being forwarded to the Office of the Federal Register for publication.

Sincerely,

(Original Signed By)  
Harley Silver, Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Exemption
2. Safety Evaluation

cc w/enclosures:

See next page

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Mr. Percy M. Beard, Jr.  
Florida Power Corporation

Crystal River Unit No. 3 Nuclear  
Generating Plant

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of  
FLORIDA POWER CORPORATION  
(Crystal River Unit 3 Nuclear  
Generating Plant)

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Docket No. 50-302

EXEMPTION

I.

The Florida Power Corporation, et al. (FPC, the licensee) is the holder of Facility Operating License No. DPR-72, which authorizes operation of Crystal River Unit 3 Nuclear Generating Plant (CR-3, the facility) at a steady state reactor power level not in excess of 2544 megawatts thermal. The license provides, among other things, that it is subject to all rules, regulations, and Orders of the Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

The facility is a pressurized water reactor (PWR) located at the licensee's site in Citrus County, Florida.

II.

10 CFR Part 50, Appendix J, Section III.D.2(a) states that "Type B tests, except tests for air locks, shall be performed during reactor shutdown for refueling .... but in no case at intervals greater than 2 years."

10 CFR Part 50, Appendix J, Section III.D.3 states that "Type C tests shall be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years."

For those containment penetrations and containment isolation valves which are the subject of this exemption, these tests would become due at CR-3 between March 1992 and May 1992. The tests necessary to meet the above-stated sections of Appendix J to 10 CFR Part 50 are also required by Technical Specification (TS) 4.6.1.2(d).

By letter dated January 31, 1991, as supplemented May 16, 1991, the licensee submitted a request for a one-time exemption from Sections III.D.2(a) and III.D.3 of Appendix J to 10 CFR Part 50 for CR-3 for 114 inboard and outboard containment isolation valves (CIVs) and their associated containment penetrations, and electrical penetrations. The licensee proposes to perform Type B and C local leak rate tests (LLRTs) at both the containment penetrations and the CIVs prior to startup from the eighth refueling outage (Refuel 8) for CR-3, currently scheduled to begin April 30, 1992. This would represent an extension of approximately 2 months beyond the 2-year requirement of Appendix J for this fuel cycle only. By separate correspondence dated June 20, 1991, the licensee also submitted a related TS change request which would revise TS 4.6.1.2(d) to be consistent with the requested exemption. The licensee also responded to the Commission's staff requests for additional information related to the exemption by letter dated May 16, 1991.

### III.

As discussed in the Safety Evaluation issued with this exemption, the Commission's staff has concluded, based on the short extension requested, the satisfactory previous leak rate test results, and the small likelihood of significant degradation of components involved during the extension period, that the proposed change presents no undue risk to public health and safety.

This case involves special circumstances as set forth in 10 CFR 50.12(a)(2)(ii). The underlying purpose of Appendix J, Section III.D.2(a) and III.D.3 is to assure leak-tight integrity of containment isolation valves and penetrations through verification of acceptable leakage by test and identification of the need for maintenance and repairs. The satisfactory history of such tests at CR-3, the short extension of the required test interval, and the small likelihood that significant degradation of components will occur during the short extension, indicate that strict conformance to the 2-year testing interval requirements of the above sections of Appendix J is not necessary to achieve the underlying purpose of these rules.

#### IV.

Based on the above, and on the review of the licensee's submittals as summarized in the Safety Evaluation issued with this exemption, the NRC staff concludes that the proposed exemption from certain requirements of 10 CFR Part 50, Appendix J, Section III.D.2(a) and III.D.3 presents no undue risk to public health and safety, and is acceptable.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the requested exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Further, the Commission finds that special circumstances, as described in 10 CFR 50.12(a)(2)(ii), are present in that application of the regulation in these circumstances is not necessary to achieve the underlying purpose of the rule.

Therefore, the Commission hereby approves the following exemption from the requirements of Sections III.D.2(a) and II.D.3 of Appendix J to 10 CFR Part 50:

A temporary exemption is granted from the Type B and C testing within 2-year intervals required by 10 CFR Part 50, Appendix J, Sections III.D.2(a) and III.D.3 for the applicable valves and penetrations on a one-time basis, provided that Type B and C tests are performed prior to startup from Refuel 8. This exemption shall expire prior to restart from Refuel 8, currently scheduled for June 25, 1992.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the environment ( 56 FR 4949).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Director  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Dated at Rockville,  
Maryland, this 30th day of September 1991.

A temporary exemption is granted from the Type B and C testing within 2-year intervals required by 10 CFR Part 50, Appendix J, Sections III.D.2(a) and III.D.3 for the applicable valves and penetrations on a one-time basis, provided that Type B and C tests are performed prior to startup from Refuel 8. This exemption shall expire prior to restart from Refuel 8, currently scheduled for June 25, 1992.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the environment (56 FR 49491).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

(Original Signed By)

Steven A. Varga, Director  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Dated at Rockville,  
Maryland, this 30th day of September 1991.

\*See Previous Concurrence

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

EXEMPTION FROM APPENDIX J, 10 CFR PART 50

FLORIDA POWER CORPORATION, ET AL.

CRYSTAL RIVER UNIT NO. 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

1.0 INTRODUCTION

By letter dated January 31, 1991, as supplemented on May 16, 1991, Florida Power Corporation (FPC, the licensee) requested a one-time exemption from Sections III.D.2(a) and III.D.3 of Appendix J to 10 CFR Part 50 for the Crystal River Unit 3 Nuclear Generating Station (CR-3). The proposed exemption would defer testing of 114 containment isolation valves (CIVs) and their associated containment penetrations, and electrical penetrations, until prior to startup from Refuel 8, currently scheduled to begin in April 1992 and end in June 1992. The local leak rate testing (LLRT) for these containment penetrations, and valves and Technical Specification (TS) 4.6.1.2.d would begin to become overdue in March 1992.

By letter dated June 20, 1991, the licensee also requested an amendment to Facility Operating License No. DPR-72 for the CR-3. The proposed amendment would extend the interval for Type B and C LLRT on a one-time basis for containment penetrations and containment isolation valves (CIVs) until the eighth refueling outage, currently scheduled to begin April 30, 1992.

2.0 DISCUSSION

Sections III.D.2(a) and III.D.3 of 10 CFR Part 50, Appendix J require that Type B and C tests be performed at intervals no greater than 24 months. Historically, FPC Type B and C LLRT leakage has not been a source of significant "as-found" leakage as verified by the staff's review of FPC's 1989/1990 leak rate test results of containment penetrations and CIVs.

The TS change and exemption to Appendix J are necessary to avoid an otherwise unnecessary extension of the midcycle shutdown and to allow for leak rate tests to be performed during the eighth refueling outage (Refuel 8), scheduled for April 30, 1992. At that time, the containment penetrations and CIVs would exceed the 2-year testing interval requirement by approximately 2 months. Therefore, FPC requests a footnote change to the TS and an exemption to allow for this extension for leak rate testing of containment penetrations and CIVs.

### 3.0 EVALUATION

TS 4.6.1.2(d) requires LLRTs (Type B and C) on primary CIVs and containment penetrations to be performed at intervals no greater than 24 months. The Commission's regulations (10 CFR Part 50, Appendix J, Section III.D.2(a) and III.D.3) require LLRTs (Type B and C tests) to be performed during each reactor shutdown for refueling, but in no case at intervals greater than 2 years. The licensee has requested that the 24-month testing interval for electrical penetrations and 114 CIVs and their associated containment penetrations identified in FPC letter dated May 16, 1991 be extended on a one-time basis until the eighth refueling outage, presently scheduled to begin April 30, 1992. These valves would otherwise become overdue for testing between March 1992 and May 1992.

The staff reviewed the 1989/1990 leak rate testing results of CIVs and their containment penetrations at CR-3, submitted with the licensee's letter of May 16, 1991. The results of this review indicate that the "as found" and "as left" leak rate condition of CIVs and containment penetrations were significantly below the leak rate limit acceptance criteria. The review of leak rate test results also indicated that FPC performed preventive maintenance to further reduce the leakage rate of CIVs and containment penetrations in the "as left" condition.

The 24-month interval requirement for Type B and C penetrations is intended to be often enough to prevent significant deterioration from occurring and long enough to permit LLRTs to be performed during plant outages. The requested one-time extension would add approximately 2 months to the testing interval for penetrations and CIVs. The condition of the components is not expected to change significantly during this short extension period. Testing prior to the refueling outage would require an additional outage for this purpose only, or significant extension of the mid-cycle maintenance outage.

### 4.0 CONCLUSION

Based on the short one-time extension requested, the previous satisfactory leak rate test results, and the small likelihood of significant degradation during the extension period, the NRC staff concludes that extending the surveillance testing interval for Type B and C tests until Refuel 8, as requested, provides reasonable assurance that the proposed exemption will present no undue risk to public health and safety, and is, therefore, acceptable.

Principal Contributors: F. Talbot  
H. Silver

Date: September 30, 1991