

December 9, 1986

Docket No. 50-302

PC &
016

Mr. Walter S. Wilgus
Vice President, Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing
& Fuel Management
P.O. Box 14042; M.A.C. H-3
St. Petersburg, FL 33733

Dear Mr. Wilgus:

SUBJECT: EXEMPTION FROM REQUIREMENT OF 10 CFR 50, APPENDIX J, III.D.2(b)(ii)

The Commission has issued an Exemption for Crystal River Unit 3 regarding a requirement in Appendix J, III.D.2(b)(ii) of 10 CFR Part 50 in response to your letter dated December 1, 1986. The Exemption will relieve Florida Power Corporation from the requirements of conducting a full pressure airlock leakage test whenever airlocks are opened during periods when containment integrity is not required, and no maintenance is performed which could affect seal capabilities.

The special circumstances that justified consideration of the Exemption conformed to paragraphs 50.12(a)(2)(ii) and 50.12(a)(2)(iii) of 10 CFR 50.12a. The bases for this action are included in the enclosed Exemption.

It is our understanding that you will shortly propose appropriate changes to the Technical Specifications to cover matters encompassed by this Exemption.

The Exemption is being forwarded to the Office of the Federal Register for publication.

Sincerely,

/S/

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CF

Harley Silver, Project Manager
PWR Project Directorate #6
Division of PWR Licensing-B

Enclosure:
Exemption

cc w/enclosure:
See next page

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Mr. W. S. Wilgus
Florida Power Corporation

Crystal River Unit No. 3 Nuclear
Generating Plant

cc:

Mr. R. W. Neiser
Senior Vice President
and General Counsel
Florida Power Corporation
P. O. Box 14042
St. Petersburg, Florida 33733

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

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 220, 7910 Woodmont Avenue
Bethesda, Maryland 20814

Resident Inspector
U.S. Nuclear Regulatory Commission
15760 West Powerline Street
Crystal River, Florida 32629

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Mr. Allan Schubert, Manager
Public Health Physicist
Department of Health and
Rehabilitative Services
1323 Winewood Blvd.
Tallahassee, Florida 32301

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

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

Mr. F. Alex Griffin, Chairman
Board of County Commissioners
Citrus County
110 North Apopka Avenue
Inverness, Florida 36250

UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of)
FLORIDA POWER CORPORATION, ET AL.) Docket No. 50-302
Crystal River Unit 3 Nuclear Generating)
Plant)

EXEMPTION

I.

Florida Power Corporation (FPC, the licensee) and eleven other co-owners are the holders of Facility Operating License No. DPR-72, which authorizes operation of the Crystal River Unit 3 Nuclear Generating Plant (the facility or CR-3) at power levels not in excess of 2544 megawatts thermal. The license provides, among other things, that the facility 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 located at the licensee's site in Citrus County, Florida.

II.

Paragraph III.D.2(b)(ii) of Appendix J of 10 CFR Part 50 requires, in part, that a full pressure airlock leakage test be performed whenever airlocks are opened.

III.

By letter dated December 1, 1986, the licensee requested an Exemption from the requirement of 10 CFR 50, Appendix J, III.D.2(b)(ii) identified in Section II above. Instead, the licensee would conduct an airlock seal leakage

test (Paragraph III.D.2(b)(iii) of Appendix J, 10 CFR Part 50) for the full pressure airlock test otherwise required by Paragraph III.D.2(b)(ii) when the airlock is opened while the reactor is in cold shutdown (Mode 5) or refueling (Mode 6), if no maintenance has been performed on the airlock that affects airlock sealing capabilities.

If an airlock is opened during Modes 5 and 6, Paragraph III.D.2(b)(ii) of Appendix J requires that an overall airlock leakage test at not less than the calculated peak containment pressure from a design-basis loss of coolant accident (Pa) be conducted before plant heatup and startup (i.e., before entering Mode 4). The existing airlock doors are designed such that a full-pressure test of an entire airlock can only be performed after strongbacks (structural bracing) have been installed on the inner door. Strongbacks are needed because the pressure exerted on the inner door during the test is in a direction opposite to that of the accident pressure direction. Installing strongbacks, performing the test, and removing strongbacks requires at least 28 man-hours of effort per airlock and could occur several times during an outage and ultimately delay mode change and startup.

If the periodic six-month test of Paragraph III.D.2(b)(i) of Appendix J and the test required by Paragraph III.D.2(b)(iii) of Appendix J are current and no maintenance has been performed on the airlock, there should be no reason to expect the airlock to leak excessively just because it has been opened in Mode 5 or Mode 6. If maintenance has been performed which could affect airlock sealing capability, then a full-pressure airlock test will be performed following such maintenance.

The licensee's letter dated December 1, 1986, submitted information to identify the special circumstances for granting this exemption to CR-3 pursuant to the Final Rule amending 10 CFR 50.12 (50 FR 50764) published on December 12, 1985. The purpose of Appendix J to 10 CFR 50 is to assure that containment leak-tight integrity can be verified periodically throughout service lifetime so as to maintain containment leakage within the limits specified in the facility Technical Specifications. The proposed alternative test method, along with the six-month test requirement of Paragraph III.D.2(b)(i) of Appendix J and the testing requirements when maintenance is performed on the airlock that affects sealing capability, is sufficient to achieve this underlying purpose in that it provides adequate assurance of continued leak-tight integrity of the airlock. In addition, at the time this section of Appendix J was revised in 1980, the Commission's staff did not contemplate the undue hardship and cost through reduced operational flexibility and possible startup delay which would result from the requirement to perform a time-consuming full-pressure test before starting up from any cold shutdown during which the airlock had been used for containment entry. Because of this, the Commission's staff has already granted this same exemption to other plants, and intends to revise Appendix J to alleviate the need for further similar exemptions.

Based on the above discussion, the licensee's proposed substitution of an airlock seal leakage test described in III.D.2(b)(iii) for a full-pressure test as discussed above is acceptable.

IV.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, this exemption is authorized by law, and will not present an undue risk to the public health and safety, and is consistent with the common defense and security. The Commission further determines that special circumstances described by 10 CFR 50.12(a)(2)(ii) and (iii) exist in that application of the regulation in the particular circumstances is not necessary to achieve the underlying purpose of the rule since FPC has proposed an acceptable alternative method that accomplishes the intent of the regulation. Compliance would result in undue hardship that is significantly in excess of that contemplated when the regulation was adopted and that is significantly in excess of those incurred by others similarly situated in that operational flexibility is reduced and plant startup could be delayed.

Accordingly, the Commission hereby grants the exemption as described in Section III above from the requirements of 10 CFR 50, Appendix J, III.D.2(b)(ii).

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this Exemption will have no significant impact on the environment (51 FR 44394).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Frank Schroeder
Frank Schroeder, Acting Director
Division of PWR Licensing-B

Dated at Bethesda, Maryland
this 9th Day of December, 1986.