

September 16, 1986

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DOCKET NO(S). 50-302  
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  
SUBJECT: St. Petersburg, Florida 33733

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

The following documents concerning our review of the subject facility are transmitted for your information.

- Notice of Receipt of Application, dated \_\_\_\_\_.
- Draft/Final Environmental Statment, dated \_\_\_\_\_.
- Notice of Availability of Draft/Final Environmental Statement, dated \_\_\_\_\_.
- Safety Evaluation Report, or Supplement No. \_\_\_\_\_, dated \_\_\_\_\_.
- Notice of Hearing on Application for Construction Permit, dated \_\_\_\_\_.
- Notice of Consideration of Issuance of Facility Operating License, dated \_\_\_\_\_.
- Monthly Notice; Applications and Amendments to Operating Licenses Involving no Significant Hazards Considerations, dated \_\_\_\_\_.
- Application and Safety Analysis Report, Volume \_\_\_\_\_.
- Amendment No. \_\_\_\_\_ to Application/SAR dated \_\_\_\_\_.
- Construction Permit No. CPPR- \_\_\_\_\_, Amendment No. \_\_\_\_\_ dated \_\_\_\_\_.
- Facility Operating License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, dated \_\_\_\_\_.
- Order Extending Construction Completion Date, dated \_\_\_\_\_.

Other (Specify) **"Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing" concerning your TSCR 147 dated August 14, 1986, to extend the surveillance interval for reactor vessel internals vent valves and for HPI and LPI pumps and valves.**

Office of Nuclear Reactor Regulation  
Harley Silver, Project Manager  
PWR Project Directorate #6  
Division of PWR Licensing-B

Enclosures:  
As stated

cc: w/enclosures;  
See next page

OFFICE	PBD#6	PBD#6	PBD#6	PBD#6	PBD#6	PBD#6
SURNAME	RIngram	HSilver;cf	BMozaferi	RWeller	GEdison	JStolz
DATE	9/16/86	9/16/86	9/16/86	9/16/86	9/16/86	9/16/86

September 16, 1986

DISTRIBUTION:  
Docket File  
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DOCKET NO. 50-302

MEMORANDUM FOR: Rules and Procedures Branch  
Division of Rules and Records  
Office of Administration

FROM: Office of Nuclear Reactor Regulation

SUBJECT: CRYSTAL RIVER UNIT NO. 3

One signed original of the *Federal Register* Notice identified below is enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies ( 5 ) of the Notice are enclosed for your use.

- Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- Notice of Consideration of Issuance of Amendment to Facility Operating License.\*
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- Notice of Availability of NRC Draft/Final Environmental Statement.
- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
- Notice of Issuance of Facility Operating License(s) or Amendment(s).
- Order.
- Exemption.
- Notice of Granting Exemption.
- Environmental Assessment.
- Notice of Preparation of Environmental Assessment.
- Other: \*Please insert date on the 7th page 2nd paragraph of this notice for a 30-day intervention period, and call Caryn on extension 27288 to inform her of the date inserted. Referenced documents have been provided PDR.

Division of PWR Licensing-B  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

Contact:  
Phone:

NOTE: Expedited handling is requested. Publication in the FEDERAL REGISTER no later than 9/19/86, is required to provide a 30-day notice period as required by the Commission's regulations and to avoid adverse impact on plant operations.

OFFICE									
SURNAME									PBD#6 RIngram 9/16/86
DATE									

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

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

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

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

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  
Route #3, Box 717  
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

UNITED STATES NUCLEAR REGULATORY COMMISSIONFLORIDA POWER CORPORATION, ET AL.DOCKET NO. 50-302NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendment to Facility Operating License No. DPR-72, issued to Florida Power Corporation (the licensee), for operation of the Crystal River Unit No. 3 Nuclear Generating Plant, located in Citrus County, Florida.

In accordance with the licensee's application dated August 14, 1986, the proposed amendment would extend the surveillance interval from once per 18 months to once per fuel cycle, permanently for reactor vessel internals vent valves (RVVVs) and for Cycle 6 only for high pressure injection (HPI) and low pressure injection (LPI) pumps and valves.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant

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increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

#### Reactor Vessel Internals Vent Valves

The Crystal River Unit 3 (CR-3) reactor design includes eight RVVVs that would be used to relieve the pressure generated by steaming in the core following a loss of coolant accident. This assures that the reactor core will remain covered with water. However, if the valves are stuck in the open position during normal operation, a portion of the coolant will bypass the core. Therefore, the operability of the RVVVs must be assured. Existing Technical Specifications require testing of these valves once per 18 months during shutdown.

Due to the length of the last refueling and the recent forced reactor coolant pump (RCP) outage at CR-3, the surveillance for the RVVVs will be required to be performed prior to the end of the current fuel cycle. Surveillance was not performed on the RVVVs during this recent forced outage since the surveillance necessitates removal of the reactor vessel head, which was not done. The surveillance for the RVVVs is currently required to be completed by November 1986. However, the fuel cycle is not scheduled to end until October 1987.

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The change to the surveillance interval would eliminate the necessity for mid-cycle shutdowns to perform this surveillance. The change would also reduce the need for unnecessary removal of the reactor vessel head. This would result in the reduction of unnecessary personnel radiation exposure involved with this evolution as well as a reduction in the probability of a reactor vessel head drop.

The licensee reports that since 1978, the eight RVVVs at CR-3 have each been tested six times for a total of 48 functional tests without a single failure. This data parallels that of the other Babcock & Wilcox (B&W) operating reactors. Industry records (from 1973 through the present) indicate, in B&W operating reactors with an approximate total of 80 reactor years of operation, that not a single RVVV has ever failed to demonstrate satisfactory operability in over 420 functional tests, and no RVVV has ever stuck open.

The RVVVs are constructed of materials that have satisfactory corrosion resistance to the reactor coolant environment. Tight reactor coolant chemistry controls are also maintained to assure any corrosion that may occur is insignificant. As a result, it is not considered likely that operability of these valves will be affected by corrosion.

The history of these valves demonstrates they are very reliable. The only previous degradation of these valves, due to wear, did not affect their operability and has been corrected. Since then, no further wear indications on the RVVVs have been discovered at CR-3.

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Similar amendments have been issued to other B&W plants. Industry data and plant specific data on these valves indicate that the existing surveillance interval may be permanently changed to "at least once per fuel cycle" without impacting the operability of these valves.

Based on the above, the amendment will not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated because past operating experience of these valves in the industry and at CR-3 has shown they may be expected to remain operable for periods far greater than 18 months.
2. Create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed change introduces no new mode of plant operation nor does it require physical modification to the plant.
3. Involve a significant reduction in the margin of safety. Past testing and operating experience of these valves has shown that they are highly reliable. Additionally, existing reactor coolant system (RCS) chemistry controls and valve material will help to ensure that corrosion is insignificant and therefore help maintain the existing reliability of these valves.

#### HPI and LPI Pumps and Valves

Technical Specification 4.5.2.f, regarding the actuation of valves and startup of pumps in the HPI and LPI systems, requires this testing be accomplished during shutdown. This requirement conflicts with a commitment that HPI discharge valves are closed and "racked out" below 280°F in order to provide low temperature

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overpressurization protection. However, this commitment would not permit HPI actuation testing to be performed since the RCS temperature is always below 280°F in Modes 4, 5, and 6. In order to resolve the low temperature overpressurization concerns, the NRC issued Amendment Number 79 (dated July 23, 1985) to the CR-3 Technical Specifications. The amendment required the HPI pumps and valves to be tested only during Mode 6. This was acceptable since low temperature overpressurization protection is assured because the RCS cannot be overpressurized when the reactor vessel head is removed.

Due to the recent forced RCP outage at CR-3, the surveillance for the HPI and LPI pumps and valves will be required to be performed prior to the end of the current fuel cycle. This surveillance could not be satisfied during the recent outage since this necessitates removal of the reactor vessel head, and the reactor vessel head was not removed during the forced RCP outage. The surveillance for the HPI and LPI pumps and valves is currently required to be completed by October 1986. However, the fuel cycle is not scheduled to end until October 1987.

The change to this surveillance interval would eliminate the necessity for a mid-cycle shutdown to perform this surveillance during cycle 6. The change would also eliminate the need for an unnecessary removal of the reactor vessel head. This would result in the reduction of unnecessary personnel radiation exposure involved with this evolution as well as a reduction in the probability of a reactor vessel head drop.

The testing required by Technical Specification 4.5.2.f was successfully completed during the startup from the forced RCP outage in a manner which assured that low temperature overpressurization was not a concern. This



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testing could not be utilized to satisfy Technical Specification 4.5.2.f since it was not performed in Mode 6 as required. However, the testing has successfully demonstrated the actuation of valves and automatic startup of pumps in the HPI and LPI systems.

Based on the above, the amendment will not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated because the testing required by the surveillance has been satisfactorily performed during the specified interval.
2. Create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed change introduces no new mode of plant operation nor does it require physical modification.
3. Involve a significant reduction in the margin of safety because the testing required by the surveillance has been satisfactorily performed during the specified interval.

For the reasons discussed above, the Commission proposes to determine that this amendment request does not involve a significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination. The Commission will not normally make a final determination unless it receives a request for a hearing.

Written comments may be submitted to the Rules and Procedures Branch, Division of Rules and Records, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Copies of comments received may be examined at the NRC Public Document Room, 1717 H Street, N.W., Washington, D.C.

By October 20, 1986 , the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written petition for leave to intervene. Request for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR §2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter, and the bases for each contention set forth with reasonable specificity. Contentions shall be limited to matters within the scope of the amendment under consideration. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

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A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at (800) 325-6000 (in Missouri (800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to John F. Stolz: petitioner's name and telephone number; date petition was mailed; plant name; and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel-Bethesda, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to R. W. Neiser, Senior Vice President and General Counsel, Florida Power Corporation, P. O. Box 14042, St. Petersburg, Florida 33733, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board, that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

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For further details with respect to this action, see the application for amendment dated August 14, 1986, which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Crystal River Public Library, 668 N.W. First Avenue, Crystal River, Florida 32629.

Dated at Bethesda, Maryland, this 16th day of September 1986.

FOR THE NUCLEAR REGULATORY COMMISSION



Gordon Edison, Acting Director  
PWR Project Directorate #6  
Division of PWR Licensing-B