

**Florida
Power**
CORPORATION

June 1, 1988
3F0688-02

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Response to Generic Letter 88-05:
Boric Acid Corrosion of Carbon Steel
Reactor Coolant Pressure Boundary
Components in PWR Plants

Dear Sir:

Pursuant to the 10CFR50.54(f) request in Generic Letter 88-05, Florida Power Corporation (FPC) is submitting the following information.

FPC established a task force in April 1987 to evaluate the potential for boric acid leakage in the reactor coolant pressure boundary. The task force effort led to the development of a pilot program which was implemented during the last refueling outage in order to gather data on the extent and effects of boron corrosion on the primary system components. Preventative Maintenance Procedure PM-168, titled, "Visual Observation Check for Boron Corrosion on Threaded and Flanged Connections on the High Pressure Primary Side" was implemented as the first step in establishing a comprehensive boric acid corrosion inspection program. A representative sample of threaded and flanged connections in several locations were visually inspected for evidence of boron leakage or corrosion. No boric acid leakage was found which could potentially affect the reactor coolant pressure boundary. Components inspected were located on the reactor vessel, pressurizer, steam generators, reactor coolant pumps, and at various valves and instrument connections in the Reactor Coolant and support system piping. Fifty-five specific areas were visually inspected. Insulation was removed as required. PM-168 also included instructions to implement repair on any components that were determined to be in immediate need of corrective action. The information and experience gained from PM-168 is being used to formulate a comprehensive boric acid corrosion damage prevention program. This program will consider the programmatic elements

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identified in the generic letter. Florida Power Corporation will implement this program during Refuel VII which is presently scheduled for September 1989.

The goal of FPC's program will be to identify, inspect, evaluate, and repair as necessary any primary coolant leakage and/or resultant corrosion damage that has the potential of degrading the primary pressure boundary. In order to identify all the potential sources of reactor coolant leakage, an extensive review of the flow diagrams will be performed. Upon verification that all potential sources of leakage have been identified, the various piping drawings will be used to physically locate the potential leakage sources and leakage paths inside the Reactor Building. This information will be used to formulate an inspection plan. The plan will address personnel accessibility requirements such as scaffolding and insulation removal, and personnel safety requirements, including ALARA concerns.

The program requirements will ensure that any identified leakage paths will be thoroughly evaluated by Engineering for potential damage resulting from boron corrosion. This evaluation could involve repair or replacement of hardware if the material is found to be degraded. The list of potential leakage sources will be reviewed to determine the need for additional spare parts and materials to repair leaks when they are found.

Upon completion of the Refuel VII program, a complete review of the inspection results and corrective actions taken will be performed. The purpose of this review will be to formulate a long-term plan for boric acid corrosion damage prevention. Post Refuel VII inspection requirements, including priorities and inspection intervals, will be based upon the potential consequences of corrosion damage, past performance of components previously inspected, accessibility and personnel safety. Design changes or operating procedure changes will be considered to minimize the need for future inspections and maintenance activities.

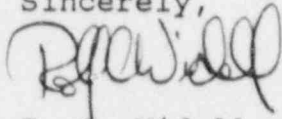
The following is a schedule for implementation of the program described above:

	<u>Milestone</u>	<u>Date</u>
1.	Complete preliminary draft of damage prevention program	5/31/89

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	<u>Milestone</u>	<u>Date</u>
2.	Issue final version of Boric Acid Corrosion Damage Prevention Program	7/31/89
3.	Implement Program	9/30/89 (Refuel VII)
4.	Formulate long-term plan for Boric Acid Corrosion Damage Prevention	12/30/90

Sincerely,



R. C. Widell, Director
Nuclear Operations Site Support

RCW/JWT/sdr

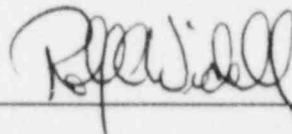
xc: Dr. J. Nelson Grace
Administrator, Region II

Mr. T.F. Stetka
Senior Resident Inspector

STATE OF FLORIDA

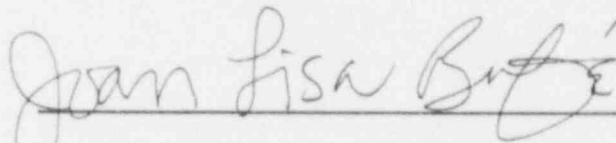
COUNTY OF CITRUS

R. C. Widell states that he is the Director, Nuclear Operations Site Support for Florida Power Corporation; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.



R. C. Widell, Director
Nuclear Operations Site Support

Subscribed to before me, a Notary Public in and for the State and County above named, this 1st day of June 1988.



Notary Public

Notary Public, State of Florida at Large

My Commission Expires: _____

NOTARY PUBLIC, STATE OF FLORIDA.
MY COMMISSION EXPIRES: JUNE 21, 1991.
BONDED THRU NOTARY PUBLIC UNDERWRITERS.