

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20655

June 18, 1992

Docket No. 50-302

Mr. Percy M. Beard, Jr. Senior Vice President, Nuclear Operations Florida Power Corporation ATTN: Manager, Nuclear Operations Licensing P.O. Box 219-NA-21 Crystal River, Florida 32629

Dear Mr. Beard:

SUBJECT: CRYSTAL RIVER UNIT 3 - NRC BULLETIN 88-08 "THERMAL STRESS IN PIPING CONNECTED TO REACTOR COOLANT SYSTEMS" (TAC NO. M69621)

By letters dated August 30, 1988 and September 13, 1989, you responded to the subject Bulletin. Our letter of February 6, 1992 found these responses, as we understood them, not entirely satisfactory and requested additional information and justification. Your letter of May 26, 1992 clarified your earlier responses. As we understand your collective responses, you had reviewed reactor coolant system (RCS) interfaces in response to a similar event at Crystal River 3 (CR-3) in 1982 involving the thermal sleeves at the high pressure injection/makeup (HPI/MU) lines. You again reviewed RCS interfaces in response to Supplement 3 of the Bulletin and verified that the potential for adverse thermal effects is limited to the HPI/MU lines. This addresses Action Item 1 of the Bulletin.

In addressing the 1982 problem at the time, you had examined the HPI/MU nozzles using radiography, dye penetrant, and ultrasonic techniques and found no existing flaws. This was not repeated in response to the Bulletin. This addresses Action Item 2 of the Bulletin.

In response to the 1982 event, the HPI/MU nozzles were redesigned, i.e., the thermal sleeves were lengthened and rerolled, and the upstream check valves were relocated further upstream. An analysis was performed to qualify the revised configuration. The piping arrangement was instrumented, monitored and analyzed to verify the design. An augmented inservice inspection plan was established to confirm the integrity of the nozzle and thermal sleeve using radiography during selected refueling outages. This addresses Action Item 3 of the Bulletin. Your earlier actions appear to moot the schedular requirements of Action Item 4 of the Bulletin.

Based on a re-review of your three submittals in response to Bulletin 88-08, we have determined that your responses are consistent with the actions stated in the Bulletin. Documentation which formed the basis for your responses to the Bulletin should be maintained in suitable form for possible future NRC audit.

NRC FILE CENTER COP

9206250336 920618 PDR ADOCK 05000302 9 PDR

Mr. Percy M. Beard, Jr.

- 2 -

With regard to the enclosure to our February 6, 1992 letter, it should be noted that the "evaluation criteria" contained therein are, as stated in that letter, intended only to assist in preparation of acceptable responses. That enclosure does not consider differences in the design of individual plants or in the review, examination, or analyses performed by individual licensees to address the Bulletin and its supplements. It does not establish minimum criteria or preclude other means of satisfying the Bulletin.

This completes our efforts on TAC No. M69621.

Sincerely, (Original Signed By)

Harley Silver, Sr. Project Manager Project Directorate II-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

cc: See next page

DISTRIBUTION Docket File NRC & Local PDRs PD22 Rdg SVarga GLainas HBerkow DMiller HSilver BMozafari JNorberg ACRS (10) MSinkule, RII

OFFICE	LATRALI-2	PROPERTY.	PM: POLL2	D: PD22	BC: EMEB
NAME	DMATIEN	BMozafari	HSilver	HBerkow	JNorberg
DATE	6/10/92	6/17/92	6/1492	6 1/8/92	6 117/92

FILENAME: CR369621.LTR

Mr. Percy M. Beard Florida Power Corporation

5 . S. S.

cc: Mr. A. H. Stephens General Counsel Florida Power Corporation MAC-A5D P. O. Box 14042 St. Petersburg, Florida 33733

Mr. P. F. McKee, Director Nuclear Plant Operations Florida Power Corporation P. O. Box 219-NA-2C Crystal River, Florida 32629

Mr. Robert B. Borsum B&W Nuclear Technologies 1700 Rockville Pike, Suite 525 Rockville, Maryland 20852

Regional Administrator, Region II U. S. Nuclear Regulatory Commission 101 Marietta Street N.W., Suite 2900 Atlanta, Georgia 30323

Mr. Jacob Daniel Nash Office of Radiation Control Department of Health and Rehabilitative Services 1317 Winewood Blvd. Tallahassee, Florida 32399-0700

Administrator Department of Environmental Regulation Power Plant Siting Section State of Florida 2600 Blair Stone Road Tallahaseee, Florida 32301

Attorney General Department of Legal Affairs The Capitol Tallahassee, Florida 32304 Crystal River Unit No.3 Generating Plant

Mr. Robert G. Nave, Director Emergency Management Department of Community Affairs 2740 Centerview Drive Tallahassee, Florida 32399-2100

Chairman Board of County Commissioners Citrus County 110 North Apopka Avenue Inverses, Florida 32650

Mr. Folf C. Widell, Director Nuclear Operations Site Support Florica Power Corporation P. O. Yox 219-NA-21 Crystal River, Florida 32629

Senior Resident Inspector Crystal River Unit 3 U.S. Nuclear Regulator Commission 6745 N. Tallahassee Road Crystal River, Florida 32629

Mr. Gary Boldt Vice President - Nuclear Production Florida Power Corporation P.O. Box 219-SA-2C Crystal River, Florida 32629