

April 23, 2002

Mr. Dale E. Young, Vice President
Crystal River Nuclear Plant (NA1B)
ATTN: Supervisor, Licensing and Regulatory Programs
15760 W. Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: CRYSTAL RIVER UNIT 3 — REQUEST FOR ADDITIONAL INFORMATION
RE: PROPOSED LICENSE AMENDMENT REQUEST NO. 263, REVISION 0,
RELOCATION OF REACTOR COOLANT SYSTEM PARAMETERS TO THE
CORE OPERATING LIMITS REPORT AND 20 PERCENT STEAM
GENERATOR TUBE PLUGGING (TAC NO. MB2499)

Dear Mr. Young:

By letter dated July 24, 2001 (3F0701-11), you submitted an amendment application to revise the Crystal River Unit 3 (CR-3) Improved Technical Specifications Tables 3.3.1-1, 3.4.1, and 5.6.2.18 to relocate the reactor coolant system parameters to the Core Operating Limits Report and to increase the steam generator tube plugging limit to 20 percent. The staff is currently reviewing your request, and the reviewers have determined that additional information is needed. The question, listed below, was previously discussed with the staff in a March 28, 2002, telephone call.

In Attachment F, Section D.4, "Secondary System Performance and Integrity," of your July 24, 2001, letter, Florida Power Corporation (FPC) concluded that the Flow Induced Vibration (FIV) of the tubes will not be significantly affected by a symmetric tube plugging distribution because the tube plugging would result in insignificant increase in dynamic pressure. For an asymmetric plugging distribution situation, FPC stated that the refinement of FIV analyses could allow for increased feedwater flow under limited power operations. However, the staff noted that it is not clear what effect would increased FIV have, under the asymmetric plugging distribution and full power, on steam generator tube integrity. The staff noted also that potential FIV of once-through steam generator tubes could be subjected to 2-phase flow, vortex shedding, fluid-elastic instability, and turbulence-induced vibration. Therefore, staff requests that FPC provide the results of FIV reassessment calculations or analyses to demonstrate the functional integrity of the steam generator tubes due to increase in steam generator tube plugging up to 20 percent under full power operations for symmetric and worst-case asymmetric plugging distributions. The staff expects that the results will include the fluid-elastic stability margin, input parameters used such as stability constant and viscous damping value, and the impact on wear due to turbulence-induced vibrations.

D. Young

-2-

For the staff to complete its review schedule, your response is appreciated within 30 days from your receipt of this letter. This date was mutually agreed upon in a telephone conversation with CR-3 personnel on March 28, 2002. If circumstances result in the need to revise the target date, please call me at the earliest opportunity at 301-415-1437.

Sincerely,

/RA/

John M. Goshen, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-302

cc: See next page

D. Young

-2-

For the staff to complete its review schedule, your response is appreciated within 30 days from your receipt of this letter. This date was mutually agreed upon in a telephone conversation with CR-3 personnel on March 28, 2002. If circumstances result in the need to revise the target date, please call me at the earliest opportunity at 301-415-1437.

Sincerely,

/RA/

John M. Goshen, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-302

cc: See next page

DISTRIBUTION:

PUBLIC

PDII-2 Reading

RidsNrrDlpmLpdii2 (TKoshy)

RidsNrrPmJGoshen

RidsAcrcAcnwMailCenter

P Chen (e-mail)

KManoly (email)

RidsRgn2MailCenter (RMusser, Acting))

BClayton (Hardcopy)

RidsOgcRp

DOCUMENT NAME: ML021130556 *see previous concurrence

OFFICE	PDII-2/PM	PDII-2/LA	EMEB/SC	PDII-2/Acting SC
NAME	JGoshen	BClayton	KManoly*	T Koshy
DATE	04/23/02	04/23/02	04/19/02	04/23/02

OFFICIAL RECORD COPY

Florida Power Corporation

**CRYSTAL RIVER UNIT NO. 3
GENERATING PLANT**

cc:

Mr. R. Alexander Glenn
Associate General Counsel (MAC-BT15A)
Florida Power Corporation
P.O. Box 14042
St. Petersburg, Florida 33733-4042

Chairman
Board of County Commissioners
Citrus County
110 North Apopka Avenue
Inverness, Florida 34450-4245

Mr. Daniel L. Roderick
Plant General Manager
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Ms. Sherry L. Bernhoft
Manager Regulatory Affairs
Crystal River Nuclear Plant (NA2H)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Mr. Michael A. Schoppman
Framatome ANP
1911 North Ft. Myer Drive, Suite 705
Rosslyn, Virginia 22209

Senior Resident Inspector
Crystal River Unit 3
U.S. Nuclear Regulatory Commission
6745 N. Tallahassee Road
Crystal River, Florida 34428

Mr. William A. Passetti, Chief
Department of Health
Bureau of Radiation Control
2020 Capital Circle, SE, Bin #C21
Tallahassee, Florida 32399-1741

Mr. Richard L. Warden
Manager Nuclear Assessment
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, Florida 32304

Mr. Joe Myers, Director
Division of Emergency Preparedness
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100