

May 29, 2003

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  
REGARDING TECHNICAL SPECIFICATION CHANGE REQUEST ON THE  
USE OF M5 ADVANCED ALLOY FUEL CLADDING (TAC NO. MB6590)

Dear Mr. Young:

By letter dated October 23, 2002, Florida Power Corporation (the licensee, also doing business as Progress Energy Florida, Inc.) requested an amendment to revise the Improved Technical Specifications (ITS) for Crystal River Unit 3. Specifically, the amendment would revise ITS 4.2.1, "Fuel Assemblies," and ITS 4.2.2, "Control Rods," to permit the use of Framatome ANP M5 advanced alloy for fuel rod cladding and fuel assembly structural components.

For the NRC staff to complete its review on schedule, your response to the enclosed request for additional information (RAI) is needed no later than July 30, 2003. If you need to revise the response schedule, please call me at the earliest opportunity at 301-415-2020.

Sincerely,

*/RA/*

Brenda L. Mozafari, Senior Project Manager, Section 2  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosure: As stated

cc w/encl: See next page

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| DATE   | 5/28/03   | 5/28/03     | 5/29/03   |

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REQUEST FOR ADDITIONAL INFORMATION  
FOR LICENSE AMENDMENT  
REGARDING THE USE OF M5 ADVANCED ALLOY FUEL CLADDING  
FOR CRYSTAL RIVER UNIT 3 (TAC NO. MB6590)

- 1) In section 4.0 of the licensee's submittal of October 23, 2002, the licensee indicates that:

The cycle-specific reload report associated with Cycle 14 will include a plant-specific LOCA [Loss-of-Coolant Accident] reanalysis prior to the use of M5 alloy fuel assemblies at CR-3. This LOCA analysis will be done in accordance with ITS 5.6.2.18, "Core Operating Limits Report (COLR)" and BAW-10179P-A.

The NRC staff requests that the licensee identify the specific LOCA methodology (including topical reports with revisions numbers and dates) that will be used to perform these analyses. The applicability of the methodology to CR-3 and Cycle 14 conditions, including mixed core penalties, must be justified.

- 2) In section 2.0 of the submittal of October 23, 2002, the licensee requests the removal of some fuel design features (maximum fuel enrichment, nominal active fuel length, weight of uranium for fuel rods, and details of Control Rod content) from the CR-3 Technical Specifications (TS) and substitutes alternative language.

The NRC staff requests that the licensee justify how the substituted language will ensure that only those fuel designs that have been analyzed with NRC-approved codes and methods applicable to CR-3 will be used in all future core reloads.

- 3) In a teleconference on January 16, 2003, the NRC staff questioned the basis of the licensee's request for changes to the TS pertaining to lead test assemblies (LTA) in the October 23 2002 submittal, since no LTA will be used in Cycle 14.

The NRC staff understands that the licensee will not use LTA in Cycle 14, and requests that this change request be withdrawn or the need for its inclusion be justified.

Mr. Dale E. Young  
Florida Power Corporation

Crystal River Nuclear Plant, Unit 3

cc:

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