September 24, 1996

Mr. Percy M. Beard, Jr.
Senior Vice President, Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing (SA2A)
Crystal River Energy Complex
15760 W Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: CRYSTAL RIVER NUCLEAR GENERATING PLANT UNIT 3 - REQUEST FOR ADDITIONAL INFORMATION LICENSEE REQUEST FOR EXEMPTION FROM SECTIONS III.G and III.J OF APPENDIX R TO TITLE 10 CFR PART 50 (TAC NO. M95817)

Dear Mr. Beard:

By letter dated June 21, 1996, you submitted a request for exemption from certain technical requirements specified in Sections III.G.2.c and III.J of Appendix R to 10 CFR 50. In order to complete our review of your request, additional information is required. A request for additional information (RAI) is enclosed. Please provide your response within 60 calendar days from the date of this letter.

If you have any questions regarding this request, please write or call me at (301) 415-1471.

Sincerely,
ORIGINAL SIGNED BY:
L. Raghavan, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosure: As stated

cc: See next page

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Mr. Percy M. Beard, Jr.
Florida Power Corporation

CRYSTAL RIVER UNIT NO. 3
GENERATING PLANT

cc:
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Atlanta, Georgia 30323-0199

APPENDIX R SECTION III.G.2.c EXEMPTION REQUEST

1. General

(a) Please verify that both the automatic fire detection and automatic sprinkler systems provided in the fires areas that are the subject of this request are designed and installed in accordance with the applicable National Fire Protection Association (NFPA) codes and standards. Provide a technical justification for any significant deviations from the applicable NFPA codes and standards.

(b) For the fire endurance tests referenced in your request, which were sponsored by the Nuclear Energy Institute (NEI), and where the hose stream test method performance deviated from the staff guidance specified in Generic Letter 86-10 and Supplement 1 to Generic Letter 86-10, please provide a technical justification for this deviating condition that addresses the cooling, impact, and erosion effects on the fire barrier assembly resulting from the hose stream test, and the protection of cables and equipment by these barriers from falling debris and fire fighting activities.

(c) Please describe the types and locations of significant fire hazards and combustibles (e.g. cable trays, electrical panels, etc.) relative to the Thermo-Lag protected circuits and the redundant non-Thermo-Lag protected circuits in each fire area that is the subject of this exemption request.

2. Fire Area AB-95-3

(a) Please verify that Figure 1A depicts Fire Zone AB-95-3B.

(b) Please describe the fire protection features provided in the fire zones (AB-143-6X and AB-162-AD) which are adjacent to Fire Area AB-95-3, where rated fire barrier separation from Fire Area AB-95-3 is not provided.

(c) Please specify the positions of the redundant non-Thermo-Lag protected circuits relative to the Thermo-Lag protected circuits routed in conduits MUE1 and MUE7, and cable trays 100, 110, 500, 516, DPC7-T, DPC8-T, and DPC9-T.

(d) The request states on page 14 that the sprinkler heads located below the cable trays are capable of extinguishing fires resulting from transient combustibles. On page 15, the request states that the sprinkler heads located below the cable trays are capable of suppressing and containing, if not extinguishing fires. Automatic sprinkler systems designed and installed in accordance with the applicable NFPA standards are typically intended to control a fire, with extinguishment being accomplished by manual actions. Please clarify the apparent discrepancy, and provide a technical basis for the statement on page 14, if it is the position of

ENCLOSURE

Florida Power Corporation that the sprinkler heads located below the cable trays are intended to extinguish not merely control fires in this zone.

(e) The Thermo-Lag barriers in this zone are credited with having an equivalent fire endurance value of 23-48 minutes based, in part, on the NEI sponsored testing. Please provide the detailed engineering evaluation for the determination of the equivalent fire endurance value for the tee section of cable trays 100 and 500 in this fire area.

3. Fire Area AB-119-6

(a) Please specify the position of the redundant non-Thermo-Lag protected circuits relative to the Thermo-Lag protected circuits routed in conduits AHC972, AHC973, MUR84, RCR251, and RCR235, and cable trays 107, 108, 121, 148, 511, and 567.

(b) The Thermo-Lag barriers in this zone are credited with having an equivalent fire endurance value of 23-39 minutes based, in part, on the NEI sponsored testing. Please provide the detailed engineering evaluations for the determination of the equivalent fire endurance value for the tee section and horizontal radial bends in cable trays 148 and 567 in this fire area.

4. Fire Area IB-119-201

(a) Please specify the position of the redundant non-Thermo-Lag protected circuits relative to the Thermo-Lag protected circuits routed in conduits CDR44, MSS44, RCR251, SPS128, and SPS 160.

(b) The Thermo-Lag barriers in this zone are credited with having an equivalent fire endurance value of 22-36 minutes based, in part, on the NEI sponsored testing. Please provide the detailed engineering evaluations for the determination of the equivalent fire endurance value for conduit CDR44.

APPENDIX R SECTION III.J EXEMPTION REQUEST

1. General

(a) Provide information on the availability of the normal and essential AC-powered lighting immediately following a plant trip in the fire areas that are the subject of this request.

(b) For each fire area that is the subject of this request, with the exception of Fire Area AB-95-3, specify the number of additional battery powered lights that would be required to achieve compliance with Section III.J of Appendix R to 10 CFR 50.

(c) For each operator action, in each fire area that is the subject of the exemption request, specify the maximum allowable time to perform the operator action, and if the action is required to achieve hot standby or cold shutdown.

(d) For each fire area that is the subject of this request, discuss the potential for smoke obscuration of the AC-powered lighting that is being relied upon in lieu of battery operated lighting including the access routes to these areas.

2. Fire Area AB-95-3

(a) Specify the total number of valves in this fire area that require operator action following a fire.

(b) For each valve in this fire area that requires operator actions; specify the type of valve, the location of the valve relative to the floor level, and any special actions, such as climbing a ladder or the use of tools or equipment necessary to manipulate or repair the valve.

(c) The request states that operator actions are required in this fire area following a fire in this area. Provide a detailed discussion of the vulnerability of these valves to fire damage.

3. Fire Area AB-119-6

(a) Specify the total number of valves in this fire area that require alignment following a fire.

(b) For each valve in this fire area that requires operator actions; specify the type of valve, the location of the valve relative to the floor level, and any special actions, such as climbing a ladder or the use of tools or equipment necessary to manipulate the valve.

4. Fire Area CC-145-118B

(a) Specify the total number of switches in this fire area that require positioning following a fire.

5. Fire Area IB-95-200

(a) Verify that no exemption from Section III.J of Appendix R to 10 CFR 50 is being requested for this fire area.

6. Fire Area IB-119-201

(a) Specify the total number of valves in this fire area that require alignment following a fire.

(b) For each valve in this fire area that requires operator actions; specify the type of valve, the location of the valve relative to the floor level, and any special actions, such as climbing a ladder or the use of tools or equipment necessary to manipulate the valve.