

**Florida
Power**
CORPORATION

October 12, 1982
#3F-i082-10
File: 3-0-26

Mr. John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
NUREG-0737, Item II.B.2
Design of Plant Shielding and Environmental Qualifications
of Equipment for Spaces/Systems Which May Be Used In
Postaccident Operations

Dear Mr. Stolz:

The subject item requires action be taken to limit dose rates to personnel under post accident conditions. In our letter to you dated September 14, 1982, Florida Power Corporation outlined our present schedule for installing these modifications at Crystal River Unit 3 (CR-3). We further stated that preliminary calculations had indicated that as a result of interim compensatory measures, we are able to meet the requirements of 10 CFR 50 Appendix K, while maintaining acceptable radiation exposures to personnel. This letter provides further information regarding the dose calculations which have been performed.

Assuming the Reactor Building contains the combined post-LOCA airborne source consisting of 100% core noble gases and 25% halogens, this would result in a dose rate of less than 2.3 rem/hr at a distance of six (6) feet from the containment. Therefore, if ten minutes were required to manually operate a valve in this radiation field, it would result in a dose to an individual of less than 400 mrem. The total dose to operate the seven (7) valves in the decay heat and make-up

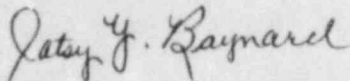
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systems valves evaluated by the study would be approximately 2.7 rem. This is well below the permissible level of 5 rem specified in NUREG-0737. It also provides ample margin to allow for the normal background level. Additionally, by dividing the task of positioning the valves among two (2) or three (3) operators, it is easily possible to complete the effort in the 50 minutes available before the low level alarm in the borated water storage tank is reached.

Very truly yours,



Ms. Patsy Y. Baynard
Assistant to Vice President
Nuclear Operations

AEF/myf

cc: Mr. J.P. O'Reilly
Regional Administrator
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
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