

August 22, 1989

Mr. W. S. Wilgus  
Vice President, Nuclear Operations  
Florida Power Corporation  
ATTN: Manager, Nuclear Operations  
Licensing  
P. O. Box 219-NA-2I  
Crystal River, Florida 32629

Dear Mr. Wilgus:

SUBJECT: CRYSTAL RIVER UNIT 3 - ENVIRONMENTAL ASSESSMENT FOR AMENDMENT REQUEST  
REGARDING FUEL ENRICHMENT (TAC NO. 71815)

Enclosed is a copy of an "Environmental Assessment and Finding of No Significant Impact" for your information. This notice relates to your letter dated December 23, 1988, as supplemented July 12, 1989, which requested an amendment to increase the allowable percentage of enrichment of fuel to be stored in the dry fuel storage racks and storage pool A to 4.5%.

This notice is being forwarded to the Office of Federal Register for publication.

Sincerely,

Original signed by

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

Enclosure:  
As stated

cc w/enclosure:  
See next page

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[EA FOR CR-3/FUEL ENRICHMENT]

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Mr. W. S. Wilgus  
Florida Power Corporation

Crystal River Unit No. 3 Nuclear  
Generating Plant

cc:

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State of Florida  
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Attorney General  
Department of Legal Affairs  
The Capitol  
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UNITED STATES NUCLEAR REGULATORY COMMISSIONFLORIDA POWER CORPORATIONDOCKET NO. 50-302ENVIRONMENTAL ASSESSMENT AND FINDINGOF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission is considering issuance of an amendment to Facility Operating License No. DPR-72 to the Florida Power Corporation (the licensee) for the Crystal River Unit 3 Nuclear Generating Plant located in Crystal River, Florida.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action

The proposed amendment would revise the provisions in the Technical Specifications (TS) relating to fuel enrichment.

The proposed action is in accordance with the licensee's application dated December 23, 1988, as supplemented July 12, 1989.

The Need for the Proposed Action

The proposed changes are needed so that the licensee can use higher enrichment fuel. In addition, the proposed changes provide the flexibility of extending the fuel irradiation, thus allowing longer fuel cycles.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed revisions to the TS. The proposed revisions would permit use of fuel enriched with Uranium 235 in excess of 4 weight percent and up to 4.5 weight percent. The licensee would expect the fuel to be irradiated to levels above 33 gigawatt days per metric ton (GWD/MT), but not to exceed 60 GWD/MT. The safety considerations

associated with reactor operation with higher enrichment and extended irradiation have been evaluated by the NRC staff. The staff has concluded that such changes would not adversely affect plant safety. The proposed changes have no adverse effect on the probability of any accident. The increased burnup may slightly change the mix of fission products that might be released in the event of a serious accident, but such small changes would not significantly affect the consequences of serious accidents. No changes are being made in the types or amounts of any radiological effluents that may be released offsite. There is no significant increase in the allowable individual or cumulative occupational radiation exposure.

With regard to potential nonradiological impacts of reactor operation with higher enrichment and extended irradiation, the proposed changes to the TS involve systems located within the restricted area as defined in 10 CFR Part 20. They do not affect nonradiological plant effluents and have no other environmental impact.

The environmental impacts of transportation resulting from the use of higher enrichment fuel and extended irradiation are discussed in the staff assessment entitled, "NRC Assessment of the Environmental Effects of Transportation Resulting from Extended Fuel Enrichment and Irradiation," dated July 7, 1988 (53 FR 30355). As indicated therein, the environmental cost contribution of the proposed increase in the fuel enrichment and irradiation limits are either unchanged or may in fact be reduced from those summarized in Table S-4 as set forth in 10 CFR 51.52(c).

Therefore, the Commission concludes that there are no significant radiological or nonradiological environmental impacts associated with the proposed amendment.

Alternatives to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternative with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Crystal River Unit 3 Generating Plant.

Agencies and Persons Consulted

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

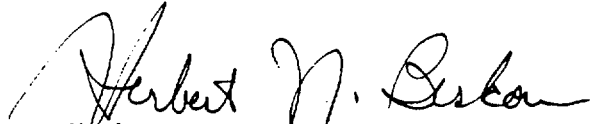
Based on the foregoing environmental assessment, we conclude that the proposed action will not have a significant impact on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated December 23, 1988, as supplemented July 12, 1989, which are

available for public inspection at the Commission's Public Document Room, 2120 L Street, NW, Washington, D.C. and at the Crystal River Public Library, 668 N.W. First Avenue, Crystal River, Florida 32629.

Dated at Rockville, Maryland, this 22nd day of August 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "Herbert N. Berkow".

Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation