ADVISORY COMMITTEE ON REACTOR SAFEGUARDS UNITED STATES ATOMIC ENERGY COMMISSION WASHINGTON, D.C. 20545

May 15, 1968

Howardble Glenn T. Seaborg Chairman U. S. Atomic Energy Commission Washington, D. C. 20545

Subject: REPORT ON CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

Dear Dr. Seaborg:

At the special ACRS meeting on April 27, 1968, the Advisory Committee on Reactor Safeguards reviewed the proposal of the Florida Power Corporation to construct the Crystal River Nuclear Generating Plant. This project had been previously considered at a Subcommittee meeting held on February 15, 1968, at the site. During its review, the Committee had the benefit of discussions with representatives and consultants of the Florida Power Corporation, the Babcock and Wilcox Company, Gilbert Associates, Inc., and the AEC Regulatory Staff. The Committee also had available the documents listed below.

The plant will be located on the Gulf of Mexico about 70 miles north of Tampa, Florida, and 7 1/2 miles northwest of the town of Crystal River. The population, including Crystal River, within a ten mile radius of the plant is 3300. The site comprises 4738 acres, on which the Florida Power Corporation operates a 387 MWe coal-fired Unit 1 and is building a coal-fired 510 MWe Unit 2. Unit 3 will use a pressurized water reactor, rated at 2452 MWt and 855 MWe.

The program for foundation grouting and the protection to be provided against flooding appear to be satisfactory as do other site-related factors.

The Committee believes that the proposed off-site power system should be modified to fulfill Criterion 39 so that no single failure will prevent the operation of minimum electrically-powered safety features necessary to protect the core.

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The proposed Unit 3 is similar to the Duke Power Company's Oconee Units (ACRS Report, July 11, 1967) and the Metropolitan Edison Company's Three Mile Island Unit (ACRS Report, January 17, 1968). The Committee continues to call attention to matters that warrant careful consideration for all large, water-cooled, power reactors. These matters, stated in the Three Mile Island and Oconee reports, apply similarly to the Crystal River Unit 3.

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The Advisory Committee on Reactor Safeguards believes that, if due consideration is given to the foregoing items, the proposed reactor can be constructed at the Crystal River site with reasonable assurance that it can be operated without undue risk to the health and safety of the public.

Mr. Harold Etherington did not participate in the Committee's review of this project.

Sincerely yours,

/s/ Carroll W. Zabel Chairman

References attached.

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References - Crystal River

- Letter from Florida Power Corporation, dated August 10, 1967; Application for License; Volumes 1, 2, 3 and 4 of Freliminary Safety Analysis Report, Crystal River Units 3 and 4 Nuclear Generating Flant
- Letter from Florida Power Corporation, dated January 15, 1968;
 Amendment No. 1 to License Application
- Letter from Florida Power Corporation, dated February 7, 1968;
 Amendment No. 2 to License Application; Supplement No. 1
- Letter from Florida Power Corporation, dated March 1, 1968;
 Amendment No. 3 to License Application; Supplement No. 2
- Letter from Florida Power Corporation, dated March 11, 1968;
 Amendment No. 4 to License Application; Supplement No. 3
- Letter from Florida Power Corporation, dated April 1, 1968;
 Amendment No. 5 to License Application

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