# UNITED STATES NUCLEAR REGULATORY COMMISSION ALABAMA POWER COMPANY DOCKET NOS. 50-348 AND 50-364 NOTICE OF ISSUANCE OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The United States Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. NPF-2 and NPF-8, issued to Alabama Power Company, (the licensee) for operation of the Joseph M. Farley Nuclear Plant, Units 1 and 2, (Farley Units 1 and 2 or Farley Plant) located in Houston County, Alabama.

# ENVIRONMENTAL ASSESSMENT

# Identification of Proposed Action:

The amendments would consist of changes to the operating licenses to extend the expiration dates of the operating licenses from August 16, 2012 to June 25, 2017 for Farley Unit 1, and to March 31, 2021 for Farley Unit 2. The proposed license amendments are responsive to the licensee's application dated August 11, 1986, supplemented July 22, 1987. The Commission's staff has prepared an Environmental Assessment of the proposed action, "Environmental Assessment by the Office of Nuclear Reactor Regulation Relating to the Change in Expiration Dates of Facility Operating Licenses NPF-2 and NPF-8, Alabama Power Company, Joseph M. Farley Nuclear Plant, Units 1 and 2, Docket Numbers 50-348 and 50-364," dated May 12, 1989

# Summary of Environmental Assessment:

The Commission's staff has reviewed the potential environmental impact of the proposed changes in expiration dates of the operating licenses for the Joseph M. Farley Nuclear Plant, Units 1 and 2. This evaluation considered the previous environmental studies, including the "Final Environmental Statement Related to Construction of Joseph M. Farley Nuclear Plant, Unit 1 and Unit 2," June, 1972; the "Final Environmental Statement Related to Operation of Joseph M. Farley Nuclear Plant, Units 1 and 2," December 1974; NUREG-0727, Addendum, September 1980, and more recent NRC policy.

# Radiological Impacts:

The staff concludes that the Exclusion Area (owned and controlled by the licensee), the Low Population Zone (area within 2 miles of site), and the nearest population center distances will probably be unchanged from those described in the June 1972 and December 1974 Final Environmental Statements (FES). Based on the 1980 census, the population density within 10 miles of the plant remains essentially the same low density as was estimated to live within the 10-mile zone based upon the 1970 census. As shown in Table 5.4 of the 1974 FES, the total number of residents within the 10-mile zone should remain about 11,000. With the slow, small increases in the number of people living within the 10-mile zone and with the continuing rural nature of the area, the current and future estimated population around the plant should pose no problem to the proposed extension of the operating licenses.

The additional period of plant operation would not significantly affect the probability or consequences of any reactor accident. Station radiological effluents to unrestricted areas during normal operation have been well within Commission regulations regarding as-low-as-is-reasonably-achievable (ALARA) limits, and are indicative of future releases. The proposed additional years of reactor operation do not increase the annual public risk from reactor operation.

With regard to normal plant operation, the occupational exposures for Farley Units 1 and 2 have been less than the industry average for pressurized water reactors. The licensee is striving for further dose reductions in accordance with ALARA principles. We expect further dose reductions to be achieved by the use of advanced technologies and equipment that will likely become available.

Accordingly, annual radiological impacts on man, both offsite and onsite, are not more severe than previously estimated in the FES. Our previous cost-benefit conclusions remain valid.

The environmental impacts attributable to transportation of spent fuel and radioactive waste from the Farley Plant, with respect to normal conditions of transport and possible accidents in transport, would be bounded as set forth in Summary Table S-4 of 10 CFR 51.52. The values in Table S-4 would continue to represent the contribution of transportation to the environmental costs associated with plant operation.

### Non-Radiological Impacts:

The Commission has concluded that the proposed extensions will not cause a significant increase in the impacts to the environment and will not change any conclusions reached by the Commission in the FES.

### FINDING OF NO SIGNIFICANT IMPACT

The Commission has reviewed the proposed changes to the expiration dates of the Joseph M. Farley Nuclear Plant, Units 1 and 2, facility operating licenses relative to the requirements set forth in 10 CFR Part 51. Based upon the environmental assessment, the staff concludes that there are no significant radiological or non-radiological impacts associated with the proposed action and that the proposed license amendments will not have a significant effect on the quality of the human environment. Therefore, the Commission has determined, pursuant to 10 CFR 51.31, not to prepare an environmental impact statement for the proposed amendments.

For further details with respect to this action, see (1) the application for amendments dated August 11, 1986, as supplemented on July 22, 1987; (2) the Final Environmental Statement for the Joseph M. Farley Nuclear Plant, Unit 1 and Unit 2, issued June 1972; (3) the Final Environmental Statement Related to Operation of Joseph M. Farley Nuclear Plant; Unit 2, issued December 1974; (4) NUREG-0727 Addendum, issued September 1980, and (5) the Environmental Assessment dated May 12, 1989 . These documents are available for public inspection

at the Commission's Public Document Room, 2120 L Street, N.W., Washington, D.C., and at the Houston-Love Memorial Library, 212 W. Burdeshaw Street, P. O. Box 1369, Dothen, Alabama 36302.

Dated at Rockville, Maryland, this 12th day of May 1989 .

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By:

Elinor G. Adensam, Director Project Directorate II-1 Division of Reactor Projects I/II

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