UNITED STATES NUCLEAR REGULATORY COMMISSION

LOUISIANA POWER & LIGHT COMPANY

DOCKET NO. 50-382

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (NRC or the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-38 to the Louisiana Power & Light Company (LP&L or the licensee), for the Waterford Steam Electric Station, Unit 3, located in St. Charles Parish, Louisiana.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

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

The proposed action is in accordance with the licensee's application dated July 18, 1988; previous submittals dated June 24, August 4, September 2, 1986; and with license amendment No. 7 issued to the licensee by NRC letter dated October 16, 1986.

The Need for the Proposed Action:

The proposed changes are needed so that the licensee can use higher enrichment fuel and provides the flexibility of extending the fuel irradiation and permitting operation of longer fuel cycles.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed revisions to the Technical Specifications. The significant portions of the review were previously documented in the Safety Evaluation supporting license amendment No. 7 issued October 16, 1986. The proposed revision would permit use of fuel enriched with Uranium 235 in excess of 4 weight percent and up to 4.1 weight percent and the license would expect the fuel to be irradiated to levels above 30 gigwatt 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 and published in the Federal Register at 53 FR 30355 (August 11, 1988); 53 FR 32322 (August 24, 1988). As indicated therein, 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.

Alternative to the Proposed Action:

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives 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 related to the operation of the Waterford Steam Electric Station Unit 3," dated March 1973.

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 concluded that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated July 18, 1988 and June 25, 1986 and submittals dated August 4, 1986 and September 2, 1986, which are available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, DC 20555 and at the University of New Orleans Library, Louisiana Collection, Lakefront, New Orleans Louisiana 70122.

Dated at Rockville, Maryland, this 26th day of September, 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

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