#### Docket No. 50-416

DEC 24 1987

Mr. Oliver D. Kingsley, Jr. Vice President, Nuclear Operations System Energy Resources, Inc. Post Office Box 23054 Jackson, Mississippi 39205

Dear Mr. Kingsley:

SUBJECT: ENVIRONMENTAL ASSESSMENT OF EXEMPTION REQUEST RELATED TO 10 CFR 50.55a FOR GRAND GULF NUCLEAR STATION, UNIT 1 (TAC NO. 66662)

Enclosed is a copy of "Notice of Environmental Assessment and Finding of No Significant Impact" for your information. This Notice is related to your request dated November 25, 1987, as revised December 10, 1987.

The request is for exemption from the requirement of 10 CFR Part 50.55a(c)(1)regarding the reactor coolant pressure boundary for a branch line in the reactor water cleanup system. The exemption would allow this section of as-built piping to remain as ASME Code, Class 2, piping, provided it meets ASME Code, Class 1, allowable stress values and is inspected in accordance with the ASME Code, Class 1, inservice inspection programs.

Sincerely,

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Lester L. Kintner, Project Manager Project Directorate II-1 Division of Reactor Projects-I/II

Enclosure: As stated

cc w/enclosure: See next page

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## UNITED STATES NUCLEAR REGULATORY COMMISSION

#### MISSISSIPPI POWER AND LIGHT COMPANY

#### SYSTEM ENERGY RESOURCES, INC.

## SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

#### DOCKET NO. 50-416

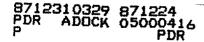
## NOTICE OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the requirements of 10 CFR Part 50.55a(c)(1) to Mississippi Power and Light Company, et al. (the licensee), for the Grand Gulf Nuclear Station, Unit No. 1, (the facility) located in Claiborne County, Mississippi.

#### ENVIRONMENTAL ASSESSMENT

#### Identification of Proposed Action:

The Commission's rules at 10 CFR 50.2 and 10 CFR 50.55a(c)(1) require that reactor coolant pressure boundary (RCPB) piping extend out to the outboard containment isolation valve and that RCPB piping meet the requirements for Class 1 components in Section III of the ASME Boiler and Pressure Vessel Code (ASME Code). By letter dated November 25, 1987, as revised December 10, 1987, the licensee requested an exemption from 10 CFR 50.55a(c)(1) to permit continued use of a section of RCPB piping in the reactor water cleanup (RWCU) system, although it is classified as ASME Code, Class 2, provided an ASME Code, Section III, Class 1, stress analysis is performed and provided this piping is included in the ASME Code, Section XI, Class 1, inservice inspection program.



## The Need for the Proposed Action:

In order to meet all ASME Code, Class 1, criteria required by the regulation, the affected section of piping would need to be replaced. The plant is currently in a refueling outage and the replacement of this piping is estimated by the licensee to add about 10 days to the outage with consequent significant fuel replacement costs, in addition to significant engineering and construction costs. The alternative proposed by the licensee is to demonstrate by a stress analysis that the piping meets ASME Code, Section III, Class 1, allowable stress criteria and to inspect the piping in accordance with ASME Code, Section XI, Class 1, inservice inspection criteria. The licensee contends that this proposal achieves the underlying purpose of Section 50.55a(c)(1) without imposing an undue delay in startup from the present refueling outage.

# Environmental Impacts of the Proposed Action:

The proposed exemption involves a change in the installation or use of the facility's components located entirely within the restricted area as defined in 10 CFR Part 20. Our evaluation of the proposed exemption from 10 CFR 50.55a(c)(1) indicated that the proposed exemption involves no significant increase in the amounts, and no significant change in the types of any radioactive effluents that may be released offsite because there is no change to the piping or operation. Our evaluation also indicated that there is no significant effect of the proposed exemption on the probability or consequences of an accident because this section of piping would be essentially equivalent to ASME Code, Class 1, piping. Therefore, this section of piping would have essentially the same margin to pipe failure. The pipe materials, valves and welding meet ASME Code, Class 1, criteria and the piping will be stress analyzed and inspected to ASME Code, Class 1, criteria. The piping cannot be re-stamped as ASME Code, Class 1, because it was procured to ASME Code, Class 2, requirements. The ASME Code, Class 1, inservice inspection would result in an increase in occupational radiation exposures because this inspection is more extensive than inspection to ASME Code, Class 2, criteria; however, personnel exposures would not be significantly increased because this section of RWCU piping is a small fraction of the reactor coolant pressure boundary that is inspected to ASME Code, Class 1, criteria. The proposed

exemption does not affect any other occupational radiation exposures because no change in system equipment or operation is involved. The exemption does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant environmental impacts associated with the proposed exemption.

## Alternative to the Proposed Action:

Since the staff has concluded there are no significant environmental impacts from the proposed action, any alternatives would have equal or greater environmental impacts.

The principal alternative would be to deny the requested exemption. Such an action would not reduce environmental impacts of plant operation.

#### Alternative Use of Resources:

This action involves no use of resources not previously considered in the Final Environmental Statement for the Grand Gulf Nuclear Station, Unit 1, dated September 1981.

#### Agencies and Persons Consulted:

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

#### FINDING OF NO SIGNIFICANT IMPACT

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

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

#### - 4 -

For further details with respect to this action, see the application for exemption dated November 25, 1987, as revised December 10, 1987, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Hinds Junior College, McLendon Library, Raymond, Mississippi 39154.

Dated at Bethesda, Maryland, this 23rd day of December 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Elinor Adensam, Director Project Directorate II-1 Division of Reactor Projects-I/II Office of Nuclear Reactor Regulation

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