

NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

March 18, 1985

Docket No. 50-416

Mr. J. B. Richard Senior Vice President, Nuclear Mississippi Power & Light Company P.O. Box 23054 Jackson, Mississippi 39205

Dear Mr. Richard:

Subject: Grand Gulf Unit 1 - Reactor Pressure Vessel Water Level

Instrumentation

By letter dated December 6, 1984, Mississippi Power & Light Company responded to NRC Generic Letter 84-23, "Reactor Vessel Water Level Instrumentation in BWRs". Generic Letter 84-23 identified two categories of potential improvements in BWR water level instrumentation which would give increased assurance that the water level instrumentation will provide the inadequate core cooling instrumentation required by NUREG-0737, Item II.F.2 and thereby satisfy this requirement. These improvements are: (1) improvements that will reduce level indication errors caused by high drywell temperature; and (2) replacement of the mechanical level indication equipment with analog level transmitters unless operating experience confirms high reliability. Grand Gulf Unit 1 Operating License (NPF-29), Paragraph 2.C.(33)(e), requires licensee to implement staff's requirements resulting from its review of this matter.

The staff has reviewed the licensee's December 6, 1985, letter regarding Grand Gulf Unit 1 reactor vessel water level instrumentation. The December 6 letter states that each of the four reference legs for the water level instrumentation has a vertical drop of less than seven feet inside the drywell as measured from the condensing pot to the drywell penetration. The maximum level error which could result from depressurization and flashing is nine feet six inches. This error is acceptable for Grand Gulf because an indication in the normal water level range would still result in the core being covered with water and the indicated level would track increases or decreases in water level. The December 6 letter also states that the Grand Gulf design already incorporates the use of an analog trip unit system in lieu of a mechanical trip unit system.

Based on its review of information in licensee's response to Generic Letter 84-23, the staff concludes that the presently installed reactor vessel water level

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instrumentation satisfies the requirements of NUREG-0737, Item II.F.2, and is, therefore, acceptable. Grand Gulf Unit 1 License Condition 2.C.(33)(e) is satisfied because no modifications to level instrumentation are required as a result of staff's review.

Sincerely,

Thomas M. Novak, Assistant Director for Licensing

Division of Licensing

cc: See next page

certified by Jale M. M.

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