

AUG 19 1983

Docket nos. 50-416/417

Mr. J. P. McGaughy
Vice President
Nuclear Production
Mississippi Power & Light Company
P. O. Box 1640
Jackson, Mississippi 39205

Dear Mr. McGaughy:

Certain potential design-related concerns have arisen since issuance of the low power operating license for Grand Gulf Station, Unit 1. These concerns stem from repetitive events which were called into the NRC Operations Center.

The Mark III containment does not require inerting and houses equipment that in earlier designs was located outside of primary containment. This arrangement necessitates system isolations that previously were not required. As a result, a potential problem arises with the isolation of the instrument air line to the auxiliary building and the containment building from a low reactor water level signal or a high drywell pressure signal. The instrument air supply line is the only active pneumatic supply to the scram valves, the automatic depressurization system (ADS), the MSIVs, and numerous other pneumatically operated components. Earlier BWR designs do not isolate the instrument air system from these signals and in most cases there are at least two other active pneumatic systems available to operate components within the containment structure.

With regard to the scram valves, a problem arises when a spurious rather than a true isolation signal occurs or when there is a momentary interruption of power from a single RPS bus. Isolation of a single valve in the instrument line will result in a loss of air to the scram valves and ultimately a reactor scram.

The loss of air to the ADS relief valves presents a significant problem because the events that cause an isolation of the instrument air system will be the events during which the ADS will be required to operate. In these instances the backup passive ADS air accumulators will be the only source of motive force to operate the relief valves, and at Grand Gulf there is no remote indication of accumulator pressure. This situation also holds true for the MSIVs. Here again, the only active pneumatic supply to these valves (MSIVs) is the instrument air line which may be unnecessarily isolated during an event.

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We request that you submit a response addressing the above concerns 3 weeks prior to your schedule for completing all low power testing. Any questions you may have regarding this request should be directed to Dean Houston, the Licensing Project Manager, at (301) 492-8358.

Sincerely,

"Original Signed By:

Thomas M. Novak

Thomas M. Novak, Assistant Director
for Licensing
Division of Licensing

cc: See next page

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Previous concurrence sheet concurred on by*:

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Grand Gulf

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