

Helping Build Mississippi P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

March 19, 1981

NUCLEAR PRODUCTION DEPARTMENT

Office of Inspection & Enforcement U.S. Nuclear Regulatory Commission Region II 101 Marietta St., N.W., Suite 3100 Atlanta, Georgia 30303

Attention: Mr. J. P. O'Reilly, Director

Dear Mr. O'Reilly:



SUBJECT: Grand Gulf Nuclear Station

Units 1 and 2 Docket Nos. 50-416 and 50-417 File 0262/0472/L-860.0/L-401.0 Status of Evaluation Concerning IE Bulletin 80-25

AECM-81/114

Mississippi Power & Light Company has completed a portion of the review for Grand Gulf Nuclear Station required by IE Bulletin 80-25 and have the following partial response to the action items as stated below:

If your facility has not yet installed or changed or is 1. presently in the process of changing to the two-stage S/R valves, initiate appropriate quality control procedures to assure inspection of the solenoid actuators for excess Loc-tite prior to operation. If the solenoid accuator manufactured by Target Rock Corporation is already installed in your facility, confirm its operability either by its operational performance (i.e., it has functioned as designed following an aging period of about 3 months in the higher temperature environment of power operation conditions) or by functional testing at full pressure during the next refueling shutdown of the facility. Include in your report the results of all attempts to operate the two-stage S/R valve(s).

Response: Mississippi Power & Light Company has not yet installed the S/R valve assemblies into GGNS, however, appropriate quality control procedures will assure inspection of the solenoid actuators for excess Loc-tite prior to operation. Safety relief valve assemblies for Grand Gulf Nuclear Station include Dikkers G471-8X10 single-stage direct acting, spring loaded safety valves with viton seals, Seitz double solenoid valve actuators and pneumatic cylinder operators. The Dikkers SRV has two modes of operation, safety and power for lifting the disk from the nozzle seat that are separate and independent of each other.

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Dikkers Instruction Manual G-471-6/125.04:10, Section II, Revision 3, dated September 17, 1979, recommends the use of Loc-tite 640 in conjunction with locking wires to secure bolting on the exterior of the valve assembly only. Bolting in the internal portions of the valve assembly and the solenoid value actuators are secured by lock tabs. MP&L does not use Loc-tite in the internal assembly of the solenoid actuators.

A functional test of each safety relief valve (SRV) will be made as early in the startup program as practical. This will normally be the first time the plant reaches 250 psig. The test is then repeated at rated reactor pressure.

2. In the event that a S/R valve, regardless of make or model (e.g., both two or three stage), fails to function as designed, excepting for pressure setpoint requirements, and the cause of the malfunction is not clearly determined, understood, and therefore corrected, standard operating procedures shall require that the entire valve be removed from service, disassembled, inspected, adjusted, and pressure setpoint tested with steam for proper operation prior to returning the valve to service. These overhaul requirements shall be at least equivalent to those applicable to periodic surveillance rehabilitation requirements. Appropriate revisions of your operating procedures shall be made to include these requirements.

Response: Mississippi Power & Light Company requires an additional sixty days to complete the review of operations procedures and revise them where required to incorporate the provisions of this item.

A review of your S/R valve pneumatic supply systems shall be performed to determine the potential for and magnitude of an overpressure condition. The determined overpressure potential of the pneumatic supply shall be compared with the maximum operating pressure capabilities of the solenoid actuator valves serving the S/R valves, so as to determine whether supply press could result in valve malfunction. Protective devices (such as relief valves) shall be installed in the proximity of the S/R valves and set to protect against supply pressure in excess of the operating pressure capabilities of the selenoid actuator device. In addition, consideration should be given to modification or replacement to reduce the sensitivity of the solenoid actuator to pneumatic supply overpressure. Further, the failure, either high or low, of the pneumatic supply system shall be annunciated to the control room operator. The annunciated supply pressure should be measured at a location as close as practical to the S/R valves and downstream of any check valve connecting two or

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more pneumatic sources. Appropriate operating procedures shall be provided to guide operator response to such an occurrence of high or low supply pressure.

Response: GE SIL No. 196 Supplement 8 dated November 4, 1980, entitled "SRV Inadvertant Opening Caused by High Pneumatic Supply Pressure" recommends the installation of a high pressure alarm in the drywell pneumatic supply header. Pursuant to this SIL and the Bulletin, Mississippi Power & Light Company is working with Gk on the need for an annunciator for the control room indicating failure, either high or low, of the pneumatic supply system. The need for the annunciated supply pressure will be directed towards the measurement at a location as close as practical to the S/R valves and downstream of any check valves connecting two or more pneumatic sources. When this evaluation is complete, additional information will be provided in response to this item. This evaluation should be complete within 60 days.

4. The results of your review in response to each of the three items above shall be provided within 90 days of the date of this bulletin. The system upgrading identified in item 3 shall be completed within 6 months of the time that you conclude a replacement or modification should be made and to necessary parts are available. This upgrading shall be reported when completed.

Response: The results of our review to date are contained above with a more complete response to be provided within 60 days of the date of this letter. It is currently anticipated that Mississippi Power & Light Company will complete the system upgrading required by the results of item 3 prior to the fuel loading of GGNS Unit 1 as we define the need for design changes with GE. We will follow our response containing the complete results of our review to this Bulletin with another report upon completion of the required system upgrading.

Should you have any further questions regarding this matter, please advise.

Yours truly,

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L. F. Dale

Manager of Nuclear Services

MRW/SHH/JDR:lm

cc: (See Next Page)

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Mr. G. B. Taylor
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