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MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

JAMES P. MCGAUGHY, JR.
ASSISTANT VICE PRESIDENT

December 18, 1980

Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW
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. 50-416/417
File 0260/15525/15526
PRD-80/13, Final Report,
Rodent Damage to Cable
Insulation
AECM-80/313

References: 1) AECM-80/169, 7/29/80
2) AECM-80/91, 5/1/80
3) AECM-80/256, 10/16/80

On April 3, 1980, Mississippi Power & Light Company notified Mr. F. Cantrell of your office of Potentially Reportable Deficiency (PRD) at the Grand Gulf Nuclear Station (GGNS) construction site. The deficiency concerns rodent damage to cable insulation. The cables involved are associated with the Residual Heat Removal (RHR) System.

As previously reported, this deficiency has been determined to be reportable under 10CFR50.55(e). This condition is not reportable under 10CFR21 because the system has not been offered for acceptance. Our final report on this matter is attached.

Yours truly,

J. P. McGaughy, Jr.
for J. P. McGaughy, Jr.

EWC:lb
Attachment

cc: Mr. N. L. Stampley
Mr. R. B. McGehee
Mr. T. B. Conner

Mr. Victor Stello, Director
Division of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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FINAL REPORT ON PRD-80/13

I. Description of the Deficiency

This deficiency concerns the removal of cable insulation by rodents. The leads in question are associated with components in the Residual Heat Removal (RHR) System, namely RHR Loop B Jockey Pump, Q1E12C003B-B, and RHR Loop B test return valve, Q1E12F024B-B.

II. Safety Implications

Our evaluation confirmed that this condition is reportable under 10CFR50.55(e). The RHR Loop B Jockey Pump normally runs continuously when the system is in standby mode. If damage to motor leads caused the pump to be inoperative and this inoperation went undetected, system leakage could drain the water from the RHR Loop B discharge line. Subsequent startup of the RHR pump with an empty or partially filled line could result in waterhammer with the potential of significant damage to RHR system piping and/or supports. This resulting damage could impair the system's safety function and adversely affect the safe operation of the plant. This finding renders this deficiency a reportable condition under 10CFR50.55(e).

Furthermore, we have determined that a failure of the RHR Loop B test return valve due to this deficiency also would have affected safety at GGNS.

Specifically, this valve is normally closed and is opened remote-manually only for testing and suppression pool cooling. A failure of the valve to open in the testing mode would not affect safety of operations. However, an undetected failure of this valve to open for post-accident suppression pool cooling could adversely affect safe shutdown of the plant. Additionally, failure of the valve to close during a LOCA, assuming that the valve is open for testing or suppression pool cooling purposes, could interfere with proper operation of the ECCS systems necessary for safe shutdown of the plant. This finding also renders this deficiency a reportable condition under 10CFR50.55(e).

A similar safety analysis was performed for a deficiency we reported on the RHR Loop A test return valve, Q1E12F024A-A, in our letter to you, AECM-80/245, PRD-80/20, Final Report, Damage to Intermediate Metallic Conduit, dated October 6, 1980.

III. Corrective Actions

Action taken to correct the discrepancy and preclude recurrence is formulated as follows:

1. All damaged cable has been replaced.
2. The jobsite subcontract for rodent control has been stepped up. The maintenance inspection program has been expanded to include a visual inspection for rodent infestation. The maintenance inspection form has been modified to include this step. Sub-contracts have increased the scope of the extermination contract of bait inside Unit II equipment.

III. Corrective Actions (Continued)

3. The Natchez warehouse rodent control program is being handled by a contractor with twice a month visitations and inspections. It has been visually verified by the maintenance group that poison has been set out. Natchez warehouse currently has a controlled environment. In addition to this, when equipment is received onsite or in Natchez, it is inspected on a periodic basis per a change to the Work Plan/Procedure.
4. All construction equipment on site or in a site warehouse has been inspected for rodent damage, with the exception of the Constructor's startup equipment. Inspection of this startup equipment will be finalized by the end of 1980 and results will be documented per the nonconformance program.
5. Information Bulletin No. G-048, "Rodent Damage to Equipment", was issued August 18, 1980 to all Constructor's field personnel.

Other actions necessary to correct the discrepant condition are delineated in the Constructor's Management Corrective Action Report (MCAR) Number 69.