MISSISSIPPI POWER & LIGHT COMPANY
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USNRC REGION II
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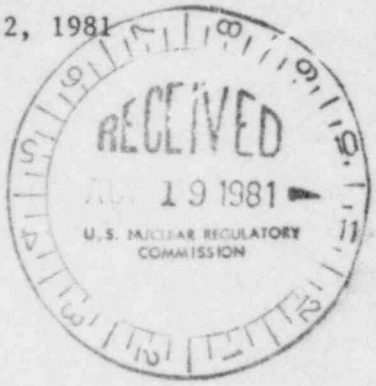
JAMES P. McGAUGHY, JR.
ASSISTANT VICE PRESIDENT

August 12, 1981



Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, 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. 50-416/417
File 0260/15525/15526
PRD-80/73, Interim Report #1,
Instrument Process Tubing
AECM-81/283

References 1) AECM-81/49, 1/29/81
2) AECM-81/144, 4/14/81

On December 30, 1980, Mississippi Power & Light Company notified Mr. J. Rausch, of your office, of a Potentially Reportable Deficiency (PRD) at the Grand Gulf Nuclear Station (GGNS) construction site. The deficiency concerns discrepant slopes in instrument process tubing.

Our evaluations have shown that this deficiency, had it remained uncorrected, could have affected the safety of operations of the nuclear power plant and is reportable under the provisions of 10CFR50.55(e). We are continuing our investigation into the reportability of this deficiency under 10CFR21 and expect to provide our final report by October 16, 1981. Our evaluation of safety implications and corrective actions are summarized in the attached interim report.

Yours truly,

For J. P. McGaughy, Jr.

KDS:dr
ATTACHMENT

cc: See page 2

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File

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INTERIM REPORT NO. 1 FOR PRD-80/73

I. Description of the Deficiency

A random sample of instrument process tubing has disclosed a number of installations that do not meet the minimum slope requirement of Specification 9645-J-702.0, Rev. 16. Several of the discrepant installations had been accepted by Field Engineering and Quality Control, rendering the quality of all installed safety related tubing indeterminate.

This condition affects the following systems: Nuclear Boiler (B21), Reactor Recirculation (B33), Control Rod Drive Hydraulic (C11), Feed Water Control (C34), Remote Shutdown (C61), Reactor Protection (C71), Heat Removal (E12), Low Pressure Core Spray (E21), High Pressure Core Spray (E22), Suppression Pool Makeup (E30), Leak Detection (E31), Feed Water (E38), Reactor Core Isolation Cooling (E51), Reactor Water Cleanup (G33), Fuel Pool Cooling and Cleanup (G41), Main and Reheat Steam System (N11), Standby Service Water (P41), and Standby Gas Treatment (T48). It applies to both Unit 1 and Unit 2.

The cause of the deficiency stems from design and layout of the tubing to the minimum requirements of the specification. The specifications for process tubing installation state that a support be established on a one inch per foot slope. If for any reason the support moves (e.g., when drilling a hole or the drill wanders), a nonconformance to the slope specification could result. Other interferences encountered during installation might also require an offset. Because the design and layout of the tubing installation is to the minimum requirements of the specification, there is no latitude for problems encountered during the installation of the instrument process tubing.

The potential exists for the deficiency, as noted, to produce an error in essential instumentation in excess of design limits. Potentially, inaccurate instrument readings/trips could adversely affect the safe operation of the plant. Since extensive evaluation would be required to establish the adequacy of the components to perform their intended safety function, this deficiency is reportable under the provisions of 10CFR50.55(e).

The evaluation has not been completed to determine the reportability of this deficiency under the provisions of 10CFR21.

II. Approach to Resolution of the Problem

The cause of the problem was that the design and layout of the tubing installation was to the minimum requirements of the specification. There is no latitude for problems encountered during the installation of the instrument process tubing. Acceptance of nonconforming conditions by engineering was caused by improper inspection methods. Quality Control and Field Engineering misinterpreted the latitudes allowed by the installation specification J-702.0. This affects all installed safety-related tubing.

Specifications J-701.0 (Non Safety-Related) and J-702.0 (Safety-Related) were both revised by our Architect/Engineer to clarify slope requirements. Out Constructor's Instrumentation Field Engineering and Quality Control personnel were given training in the interpretation of the new slope requirements and requirements for the installation and acceptance of tubing.

Changes were made by our Constructor's Quality Control to QCI-0721T to accept deviations from the isometric drawing as allowed per Specification J-702.0 and all Quality Control personnel have been indoctrinated to changes in QCI-0721T.

All previously accepted safety-related tubing installations were reinspected. Those that did not comply to the revised specification of J-702.0 were reviewed by our Constructor. They were either approved to use as is or were reworked.

Training and indoctrination of personnel, revisions to Specifications J-701.0 and J-702.0, and changes to QCI-0721T will serve to preclude recurrence of the problem.

III. Status of Proposed Resolution

All rework has been completed in the non-NSSS scope of supply. In the NSSS scope of supply, the tubing installations have been redesigned. Rework will be completed prior to fuel load.

IV. Reason Why a Final Report Will Be Delayed

Mississippi Power and Light has not completed the evaluation of the reportability of this deficiency under the provisions of 10CFR21.

V. Date When Final Report Will Be Submitted

We expect to submit our final report by October 16, 1981.