



MISSISSIPPI POWER & LIGHT COMPANY

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P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

NUCLEAR PRODUCTION DEPARTMENT

July 31, 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-80/30, Status Report #3
Procedural Violation in Cutting Rebar
AECM-81/275

References: (1) AECM-80/146, 7/2/80
(2) AECM-80/286, 11/17/80

On June 2, 1980, Mississippi Power & Light Company notified Mr. M. Hunt, of your office of a Potentially Reportable Deficiency (PRD) at the Grand Gulf Nuclear Station (GGNS) construction site. The deficiency concerns the cutting of rebar in violation of procedures. This deficiency was noted during Mr. Hunt's site inspection 416-80/12 of May 27-30, 1980.

Our progress in the investigation into the extent and scope of the deficiency is provided in the attached status report.

We expect to submit a determination of reportability and final report on this deficiency by November 17, 1981.

Yours truly,

For J. P. McGaughy, Jr.

EWC:scb
ATTACHMENT
cc: See page 2

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Member Middle South Utilities System

Mr. J. P. O'Reilly
NRC

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PRD File
File

STATUS REPORT #3 FOR PRD-80/30

I. Description of the Deficiency

During an NRC inspection visit to the site on May 27-30, 1980, it was found that rebar was cut in the Diesel Generator Building without being documented in accordance with work plan/procedure WP/P-C-24. The rebar had been cut during the installation of concrete expansion anchors for support of electrical equipment. A Notice of Violation was issued to MP&L as a result. Potential Reportable Deficiency (PRD) 80/30 was issued as a tracking mechanism for this nonconformity.

II. Approach to Resolution of the Deficiency

A. Actions to Prevent Recurrence

As an immediate action in response to the deficiency, our Constructor issued a Stop Work. At that time, the procedures were judged adequate, and it appeared that the retraining of the crafts, supervision, and field engineers along with the establishment of a log in the electrical sector were sufficient actions to assure program compliance. The training was performed, and the Stop Work was lifted. Later, in addition to the training, the wording of the procedures was clarified to more precisely define the approval authorities required for rebar cutting. Sequential numbers on approval forms and a standardized form were other improvements added.

A detailed investigation compiled from the various disciplines (civil, electrical, instrumentation, and subcontractors) provided a record of the cut rebar logs in existence. However, in the case identified in the notice of violation, no record was being maintained and the cut rebar was logged only after the initiation of the investigation. The Constructor's Field Engineering organization has concluded that the electrical, instrumentation, and subcontractor disciplines may not have reported all cases of cut rebar.

B. Actions to Correct Existing Nonconformances

The following remedial action has been taken by our Architect/Engineer and is still in progress:

1. Four walls previously evaluated for cut rebar were analyzed to determine whether structural integrity had been maintained; these were found acceptable.
2. A statistical approach is being used to develop standard distribution curves for cut rebar in both the horizontal and vertical directions. The sample size has been increased in order to develop the curves.

3. Five walls determined to be highly stressed are being evaluated for cut rebar and structural adequacy. The results of this cut rebar evaluation will be combined with the previous evaluation of four walls in order to increase the sample size and develop the standard distribution curves.
4. The cut rebar evaluation will be considered complete if--
 - a) All nine walls evaluated prove to be structurally adequate, and
 - b) The developed curves establish an acceptable confidence level on the percentage of cut rebar.

If either of the above is unacceptable, then either/both of the following will be pursued.

- a) An additional five walls will be evaluated to increase the sample size in order to develop standard distribution curves with an acceptable confidence level.
- b) Curves will be developed which correlate the number of expansion bolts to the percentage of cut rebar for both directions. These curves will then be used to analytically evaluate other walls.

III. Status of Proposed Resolution

The cause of the deficiency was the failure of supervision and craftsmen to follow procedures requiring written permission from Field Engineering prior to cutting rebar. The effects on the safety cannot be determined until the safety analyses are completed. Similarly, the extent of the deficiency is not yet known. Corrective actions to prevent recurrence (addressed under II.A.) are complete.

IV. Reason Why a Final Report Will Be Delayed

The safety implications and extent of the deficiency are still being analyzed.

V. Date When A Final Report Will Be Submitted

Although our investigation of the extent of unreported cut rebar is not yet complete, full compliance for new work has been achieved. We expect to submit a determination on reportability and a final report on November 17, 1981.