



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

Cook

August 6, 1979

Docket No. 50-329

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MEMORANDUM FOR: G. Fiorelli

FROM: D. W. Hayes

SUBJECT: ADDITIONAL INSPECTION EFFORT REQUIRED AT
MIDLAND UNITS 1 AND 2

Deficiencies resulting from inadequate control, placement and consolidation of plant fill material for the Midland facilities will require significant corrective action to assure safety related structures are adequately founded for both static and dynamic loads. To verify that this corrective action is properly implemented and completed under the quality program it will require additional inspection effort by Region III Civil Engineering inspectors. The purpose of this memo is to document our plans and to provide an estimate of the cost that will be accrued to provide this inspection effort.

The additional inspection effort will consist of the following:

1. Continue to review and evaluate the licensee's investigative program, i.e., soil borings, test pits, crack monitoring, etc.
2. Continue to review the preload settlement of the Diesel Generator Structure and the licensee's monitoring program relative to the settlement and eventual removal of the preload.
3. Continue to review the licensee's monitoring program for underground piping and other facilities.
4. Review and evaluate revisions to specifications, procedures and engineering and QC qualification and coverage for future plant fill material selection, placement and testing.
5. Review and evaluate specifications and procedures and inspect work in progress relative to the installation of underpinnings for Units 1 and 2 Auxiliary Building Electrical Penetration Areas and Feedwater Isolation Valve Pits including provisions for temporary support and dewatering.

- 6. Review and evaluate specifications and procedures and inspect work in progress relative to installation of Bearing Piles for the Service Water Pump Structure.
- 7. Review preload settlement of the Borated Water Storage Tanks and the associated monitoring program.
- 8. Review and evaluate specifications and procedures and inspect work in progress relative to the permanent plant Dewatering System. This inspection work will be required only if part or all of the dewatering system is considered to be safety related.
- 9. Provide Liaison and information to NRR as needed.

Cost of the additional inspection effort is estimated as follows:

1. All effort except for the Dewatering System

Planning -----	100 manhours
Inspection -----	144 manhours
Documentation -----	112 manhours
Travel ----- \$1400.00 plus -----	53 manhours
Liaison with NRR -----	16 manhours
 Total ----- \$1400.00 plus -----	 425 manhours

2. Dewatering System

Planning -----	48 manhours
Inspection -----	66 manhours
Documentation -----	48 manhours
Travel ----- \$450.00 plus -----	24 manhours
 Total ----- \$450.00 plus -----	 186 manhours

D. W. Hayes, Chief
Engineering Support Section 1

- cc: J. G. Keppler
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