



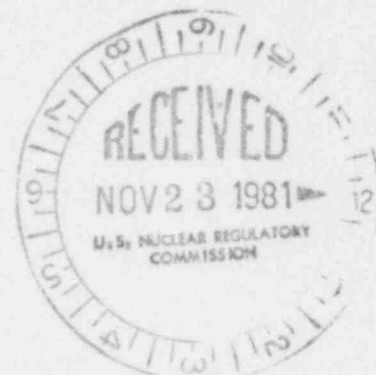
**Consumers  
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November 13, 1981

81-03, #8

Mr J G Keppler, Regional Director  
Office of Inspection and Enforcement  
US Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137



MIDLAND PROJECT  
SURCHARGE OF THE BORATED WATER STORAGE TANK FOUNDATION  
FILE 0485.16, 0.4.9.49 UFI 73\*10\*01, 71\*01,  
01100(E), 02362(S), 00234(S) SERIAL 14339  
REFERENCES: JWCOOK LETTERS TO JGKEPPLER

- (1) SERIAL 11201 DATED FEBRUARY 20, 1981
- (2) SERIAL 11528 DATED APRIL 3, 1981
- (3) SERIAL 12015 DATED JUNE 12, 1981
- (4) SERIAL 12799 DATED JUNE 26, 1981
- (5) SERIAL 13352 DATED JULY 21, 1981
- (6) SERIAL 13653 DATED AUGUST 28, 1981
- (7) SERIAL 14591 DATED OCTOBER 26, 1981

ENCLOSURE: MIDLAND PLANTS UNITS 1 AND 2 DESIGN REPORT FOR THE  
BORATED WATER STORAGE TANKS FOUNDATION ANALYSIS

This letter, as were the referenced letters, is an Interim 50.55(e) report concerning the existence of cracks in the borated water storage tank foundation. This report gives the final OL level design details for the foundation remedial work.

Enclosed are twenty-five (25) copies of a report which document the design and construction requirements for the BWST remedial action. The design and construction criteria contained in this report has been written to provide the NRC with information to review our plans to repair the BWST tank foundation. Included in this report are the following types of information: (1) drawings showing the details of the surcharge operation and the reinforced ring beam around the existing ring wall, (2) the design and acceptance criteria for reinforcing the ring wall, (3) loads and loading combinations, conservative preliminary seismic analysis and inservice inspection plan, (4) applicable codes and the scope of the QA/QC requirements. The summary of the calculated loads (Tables 1-6) and the BWST foundation maximum design loads and capacities of interface shear connections (Figures 20 and 21) have not been finalized.

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These tables and figures are currently being finalized and will be submitted to the staff during the week of November 23, 1981.

We believe the enclosed report provides sufficient information to permit the NRC to review and concur with the proposed remedial action on the BWST foundation. Your expeditious review and approval would be most appreciated to support the soils hearings and construction of the remedial work.

We are currently doing a finite element analysis of borated water storage tanks. This analysis will not affect our fix on the foundation because the tank design parameters are considered for the foundation remedial design.

The results of this analysis will be submitted as a 50.55(e) report which will be submitted on or before December 11, 1981.

*JW Cook for JW Cook*

JWC/WJC/dsb

CC Atomic Safety and Licensing Appeal Board, w/o  
 Director, Office of Inspection and Enforcement, Att: Mr Victor Stello, USNRC (15)  
 Director, Office of Management Information and Program Control, USNRC (1)  
 CBechhoefer, ASLB, w/o  
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 RJCook, Midland Resident Inspector (1)  
 FPCowan, ASLB, w/o  
 RSDecker, ASLB, w/o  
 HRDenton, USNRC ( 5)  
 JHarbour, ASLB, w/o  
 DSHood, USNRC, (2)  
 JDKane, USNRC, (1)  
 WOtto, US Army Corps of Engineers, w/a  
 WHMarshall, w/o  
 FRinaldi, USNRC, (1)  
 HSingh, US Army Corps of Engineers, (1)  
 MSinclair, w/o  
 BStamiris, w/o