



**Consumers  
Power  
Company**

**James W Cook**

*Vice President - Projects, Engineering  
and Construction*

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0453

March 31, 1981

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 -

DOCKET NOS 50-329, 50-330

UNIT NO 1 - REACTOR VESSEL BROKEN ANCHOR BOLT

FILE: 0.4.9.35 UFI: 73\*10\*01, 02111(S), 21114(E) SERIAL: 11524

References: (1) CPG letters to J G Keppler, Same Subject:

- (a) Howe-267-79, dated October 12, 1979
- (b) Howe-311-79, dated December 14, 1979
- (c) Howe-51-80, dated March 3, 1980
- (d) Howe-80-80, dated April 30, 1980
- (e) Serial 8971, dated May 16, 1980
- (f) Serial 8809, dated August 1, 1980
- (g) Serial 9787, dated December 10, 1980

(2) J G Keppler letter to S H Howell, Docket No 50-329 and 50-330, dated August 18, 1980

(3) R L Tedesco letter to J W Cook, Docket No 50-329 and 50-330, dated March 6, 1981

References (1) (a) through (g) were interim 50.55(e) reports, as is this letter, concerning the broken anchor bolts in the Unit No 1 reactor vessel support skirt. Enclosures 1 and 2 are Teledyne Engineering Services (TES) reports on the "Continued Investigation of the Failure of Midland Unit 1 R/V Anchor Studs". These enclosures represent the completion of an investigation into the "root cause" for the excessive hardness, which was described in previously submitted TES reports. These reports establish that the "root cause" for the excessive hardness was tempering of some of the studs at a temperature which was lower than the minimum specified by the applicable ASTM specification. This "root cause" does not affect the allowable preload and accident loadings recommended by TES in their (previously submitted) report #TR-3887-2, Rev 1. These allowable preload and accident loadings continue to form a portion of the basis for the modified reactor vessel support system. While it is possible

5  
8104070546

Serial 11524

that control of tempering temperature may have been inadequate for other bolting at the Midland Plant, it is anticipated that those conditions will be revealed in the work which is being performed under commitments relative to the 50.55(e) on low alloy, quenched and tempered bolts in safety-related systems, 1½" and larger in diameter (Bechtel MCAR #45B), CPCo 50.55(e) Report No 80-09.

Enclosure 3 provides the status of actions taken to resolve this condition.

Reference (2) specified a condition that there be a construction hold on the proposed upper lateral support modification until approval was obtained from NRR. Reference (3) gave NRR's approval to begin the proposed construction modifications. In a March 11, 1981 telephone conversation between J L Wood (CPCo) and D Boyd (USNRC Region III), it was determined that the construction hold could be lifted as allowed in Reference (3).

Another report, either interim or final, will be sent on or before July 24, 1981.

*James W. Cook*

WRB/lr

- Enclosures:
1. TES Report No TR-4599-1, "Continued Investigation of the Failure of Midland Unit 1 RPV Anchor Studs - Data Report," dated February 11, 1981
  2. TES Report No TR-4599-2, "Continued Investigation of the Failure of Midland Unit 1 RPV Anchor Studs - Analysis Report," dated February 11, 1981
  3. MCAR-37, Interim Report #5, March 6, 1981 - "Broken Reactor Vessel Anchor Stud in Unit 1"

CC: Director, Office of Inspection & Enforcement  
Att Mr Victor Stello, USNRC (38)

Director, Office of Management  
Information & Program Control, USNRC (1)

RJCook, USNRC Resident Inspector  
Midland Nuclear Plant (1)

CBechhoefer, ASLB  
GALinenberger, ASLB  
FPCowan, ASLB  
AS&L Appeal Panel  
MMCherry, Esq  
MSinclair  
CRStephens, USNRC  
WDPaton, Esq, USNRC

FJKelly, Esq, Attorney General  
SHFreeman, Esq, Asst Attorney General  
GTTaylor, Esq, Asst Attorney General  
WHMarshall  
GJMerritt, Esq, TNK&W