Donald A. Wells Manager-Quality Assurance (313) 237-9657



Detroit

August 27, 1982 EF2-59388

Mr. James G. Keppler, Regional Administrator Region III U.S. Nuclear Regulatory Commission 799 Roosevelt Road Glen Ellyn, Illinois 60137

Subject: Interim Report of 10CFR50.55(e) Item on 3/4" Carbon Steel Pipe Cracking (#64)

Dear Mr. Keppler:

This additional interim report on the cracking of 3/4" Carbon Steel pipe has been prepared to provide you with the current status of this problem.

The problem was originally reported to Mr. J. Konklin of NRC Region III by Project Quality Assurance's Mr. E.L. Thompson, Acting Supervisor-Construction Quality Assurance, on April 30, 1982.

This item deals with a length of 3/4" Carbon Steel pipe that cracked during a flushing operation even though the Certified Mill Test Report showed an acceptable hydrostatic test pressure of 2,500 psi. The manufacturer was contacted and responded that the flaw appeared to be due to an I.D. rib caused by a score or pit in the extrusion mandrel. When the redraw shell was extruded, this rib would crack in the subsequent cold drawing operation. The manufacturer stated that the crack would be very difficult to see in a visual inspection and, presumably due to human error, was missed on the hydrostatic test.

The manufacturer stated that a section taken through the flawed area indicated the metal to be uniform in structure. He felt that there was no foreign steel, such as tool steel, drawn into the tube wall. The manufacturer is in the process of performing a micro-hardness test and will forward the results to us upon completion.

The manufacturer also stated that an eddy current tester is being installed in the mill to aid the quality control system in detecting flaws that may elude detection on hydrostatic tests or visual inspection. The manufacturer hopes to have this tester in operation by mid-year.

As far as the Enrico Fermi 2 job site is concerned, the subject cracked pipe has been cut out and replaced with acceptable material. Detroit Edison Engineering has taken the position to use-as-is all other pipe provided by this manufacturer

8209090209 820827 PDR ADOCK 05000341 S PDR

7 1885 827 SEP

Mr. James G. Keppler, Regional Administrator Page Two August 27, 1982 EF2-59388

and installed in other locations due to the fact that it will be field hydrostatic tested. Any other test failures will be documented as required on separate Nonconformance Reports.

Another report on this item, either interim or final, is scheduled to be sent to you on or before December 23, 1982. If you have questions concerning this matter, please contact Mr. G.M. Trahey, Assistant Director-Project Quality Assurance.

Very truly yours,

Alwelle

DAW/DF/cp

cc: Mr. Richard DeYoung, Director Office of Inspection and Enforcement Division of Reactor Inspection Programs Washington, D.C. 20555

> Mr. Bruce Little, Resident Inspector U.S. Nuclear Regulatory Commission 6450 North Dixie Highway Newport, Michigan 48166

Mr. James G. Keppler, Regional Administrator Page Three August 27, 1982 EF2-59388

bcc: T.A. Alessi J.C. Ard, Jr. C.R. Bacon W.F. Colbert W.M. Everett W.J. Fahrner D. Ferencz E.P. Griffing C.M. Heidel W.H. Jens E. Lusis P.A. Marquardt/Docket File (2) E.H. Newton S.H. Noetzel J.W. Nunley J.D. Ryan L.E. Schuerman H. Tauber G.M. Trahey R.A. Vance/L.E. Eix A.E. Wegele Site Document Control NRC Follow-Up Book/NRC File Chron File