

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
~~ATOMIC ENERGY COMMISSION~~  
DIRECTORATE OF REGULATORY OPERATIONS  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

TELEPHONE  
(312) 858-2660

January 31, 1975

H. D. Thornburg, Chief, Field Support and Enforcement Branch,  
Office of Inspection and Enforcement, Headquarters

COMMONWEALTH EDISON COMPANY (DRESDEN 2)  
DOCKET NO. 50-237  
CORE SPRAY NOZZLE CRACKS

The following information updates that provided in the Blue Sheet No. 143.

This information was telephoned to your office on January 30 and 31, 1975.

G. Fiorelli, Chief  
Operations Branch

Enclosure:  
Summary of Core Spray Cracks

cc: D. F. Knuth, IE:HQ  
J. G. Davis, IE:HQ  
B. H. Grier, IE:HQ  
K. V. Seyfrit, IE:HQ  
R. F. Warnick, IE:III Coordinator, IE:HQ  
J. G. Keppler, IE:III  
DR Central Files  
IE III Files  
PDR  
Local PDR

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*(1)*

SUMMARY OF CORE SPRAY INFORMATION

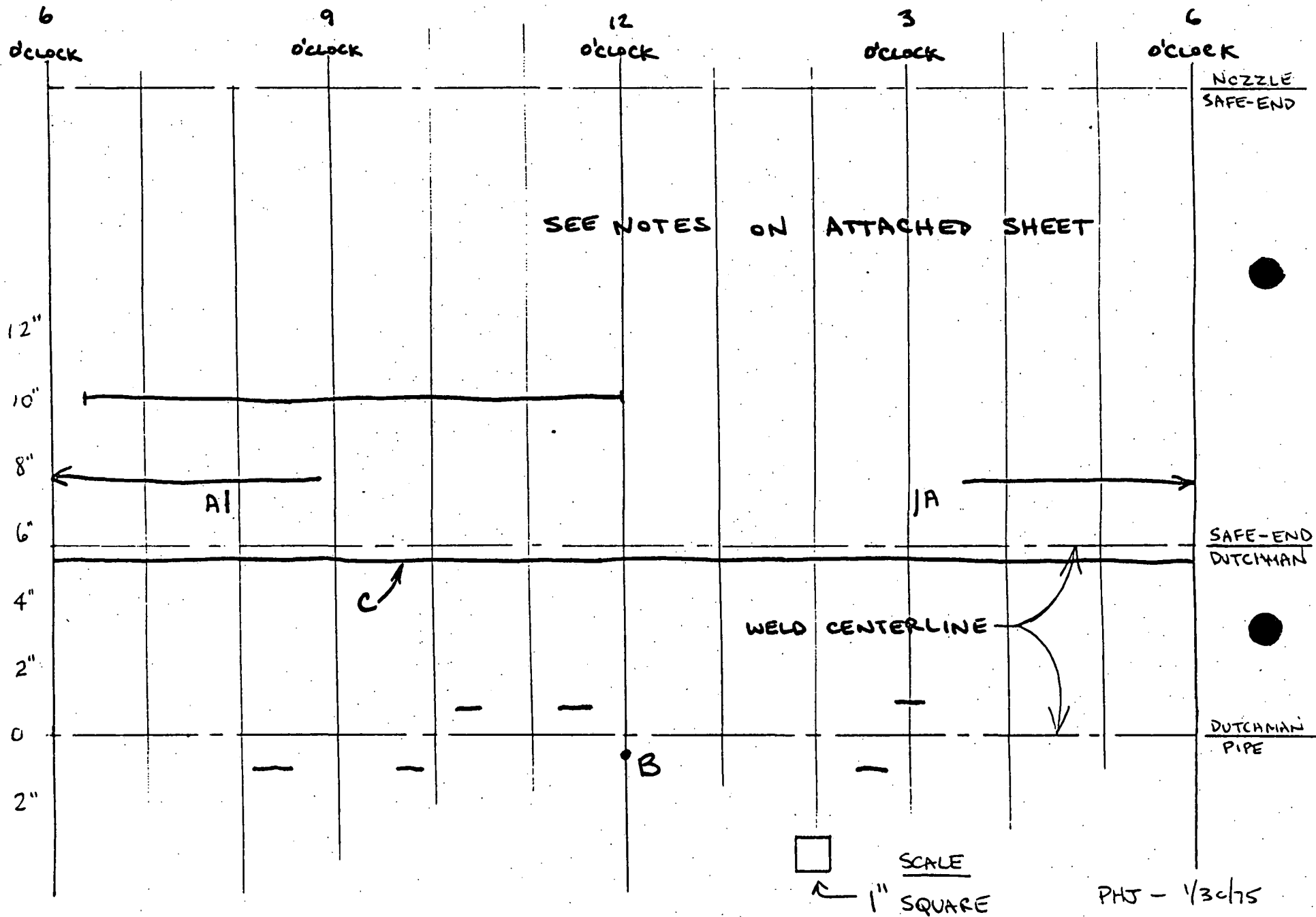
January 30, 1975

1. Cracks were verified by inspectors to be at the following locations:
  - a. A 1/2" axial crack safe-end side of dutchman to safe-end weld at 8 o'clock position on "A" loop.
  - b. A 3/4" axial crack safe-end side of dutchman to safe-end weld at 3 o'clock position on "A" loop.
  - c. Two circumferential cracks 1/8" in length on dutchman side of dutchman - pipe weld at the 10 and 11 o'clock positions on "B" loop.
  - d. A pit or 1/16" circumferential crack on the pipe side of the dutchman - pipe weld on "A" loop.
2.
  - a. Records indicate the safe-end and dutchman are both made of type 316 stainless steel made to A-376.
  - b. All four pieces are from heat number A 4250.
  - c. A boat sample indicates that the dutchman is sensitized as well as the safe-end.
  - d. UT examinations are in progress. UT examinations have been completed on "A" loop nozzle area. See attached sheet. Indications have not been confirmed.
3. Core spray pipe is A 312 type 304 stainless steel seamless pipe.
4. The thermal sleeve appears to neck in at the dutchman near the dutchman to pipe weld. Flared portion of thermal sleeve is A 376 stainless steel type 316. Remainder of thermal sleeve is A 312 type 304 stainless steel. Site is checking about holes.
5. Results of previous inservice inspection reveals only one significant indication near the taper point in safe-end in loop "A". Not near any present cracks.

## NOTES

1. EVALUATION OF UT RESULTS STILL IN PROGRESS. LICENSEE PLANS TO USE RADIOGRAPHY TO ASSIST IN CLASSIFICATION.
2. ALL INDICATIONS WERE  $>100\%$  DAC EXCEPT ONE AT  $80\%$ . END OF INDICATION AS SHOWN ON SKETCH REPRESENTS  $20\%$  DAC. (i.e., INDICATIONS OR PORTIONS  $<20\%$  DAC NOT SHOWN).
3. UT PERFORMED ON 1/29/75 BY MAGNAFLUX, INC.
- ★ 4. SAFE END-DUTCHMAN WELD WAS MACHINED AFTER WELDING, MAKING ITS PRECISE LOCATION DIFFICULT. IT WAS INITIALLY THOUGHT TO BE ABOUT 8" FROM DUTCHMAN-PIPE WELD (EASILY VISIBLE). FERRITE SCAN PERFORMED 1/30/75 SHOWED SAFE-END-DUTCHMAN WELD TO BE ONLY  $5\frac{5}{8}$ " FROM DUTCHMAN-PIPE WELD.
5. SPECIFIC INDICATIONS:
  - A. TWO LONGITUDINAL CRACKS PREVIOUSLY REPORTED, CONFIRMED BY UT. IN VIEW OF NOTE 4, THESE ARE LOCATED IN SAFE-END. UT SHOWED LENGTH OF CRACKS AT I.D. TO BE ABOUT THE SAME AS AT O.D.
  - B. PINHOLE PREVIOUSLY OBSERVED TO BE LEAKING. NOT SEEN ON UT.
  - C.  $360^\circ$  INDICATION, CONSISTENTLY "HEALTHY" SIGNAL. SHALLOW INDICATION, POSSIBLY DUE TO GEOMETRY.
  - D. OTHERS AS SHOWN - DEPTH INDICATED ON SOME. EVALUATION STILL NOT COMPLETED.

PRELIMINARY UT RESULTS - DRESDEN 2  
CORE SPRAY "A" LINE



PHJ - 1/30/75