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Operated for U.S. Department of Energy



Rockwell
International

January 17, 1980

80ETEC-DRF-0123

Mr. A. J. Cappucci, Jr.
Mechanical Engineering Branch
Division of System Safety
Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Review of Response to 10 CFR 50.54 Request on
Plant Fill for Midland Plant, Units 1 and 2

Reference: NRC Letter: "Transmittal of Related Documents
for Midland Soils Deficiency," D. Hood (NRC) to
L. J. Auge, October 22, 1979

Dear Mr. Cappucci:

Per your request the Consumer Power Company response to questions 16-20 of the NRC 10 CFR 50.54(f) request regarding plant fill for the subject plant was reviewed. The review was based on the Revision 2 response dated July 9, 1979 contained in Document 38 of the Reference.

Review comments are enclosed. The comments were previously telefaxed to your office on January 14, 1980.

Sincerely yours,

J. O. Bates, Program Manager
Energy Programs Office
Energy Technology Engineering Center

Enclosure
As noted

8406070356 840517
PDR FOIA
RICEB4-96 PDR

CRG Deposition exhibit #2
(Chen) 1/21/81

TO A.J. Cappucci Jr. COMPANY M.E.B. D.S.S. NRC

DATE 4/4/80 NO. OF PAGES (EXCLUDING COVER SHEET) 3

FROM: ENERGY TECHNOLOGY ENGINEERING CENTER, CANOGA PARK, CA

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ENERGY TECHNOLOGY ENGINEERING CENTER

DOCUMENT REVIEW COMMENTS

TO: A.J. CAPPUCCI JR., M.E.B., D.S.S., NRC. (492-7538)
 FROM: W.P. CHEN, ETEC

REVIEW NO. _____
 FILE _____
 DATE _____

SUBJECT: DOCUMENT REVIEW CONSUMER POWER COMPANY HOWE 421-79 PAGE 1 OF 3
 REVIEW SUBJECT: RESPONSE TO QUESTIONS 16-20 OF CONSUMER POWER CO.'S
RESPONSE TO 10 CFR 50.54 REQUEST ON HAZY FILL (REV. 2
DATED JULY 9, 1979)

ITEM	LOCATION OR PARAGRAPH	COMMENT	ACTION
1	<u>GENERAL</u>	A REVIEW OF THE RESPONSE TO QUESTIONS 16-20 OF THE SUBJECT DOCUMENT INDICATES THAT THE APPLICANT PROPOSES TO IMPOSE THE 3.0 S _c CRITERION OF SUBPARAGRAPH NC-3652.3 (b) OF THE ASME B31.PVC, SECTION III AND THE 5% RADIAL DEFLECTION LIMIT OF THE AWWA. *ADDITIONAL CRITERIA WHICH ADDRESS BUCKLING OF THE PIPING SHOULD BE IMPOSED. SINCE NEITHER OF THE PROPOSED 2 CRITERIA ARE BASED ON THIS FAILURE MODE. ADDITIONALLY, CRITERIA COMPLIANCE ANALYSES SHOULD BE BASED ON MAXIMUM EXPECTED DIFFERENTIAL SETTLEMENT OVER THE LIFE OF THE PLANT.	
2.	RESPONSE TO QUESTION 16, PAGE 16-1	THE RESPONSE ADDRESSES STRESSES BASED ON REPRESENTATIVE PIPE PIPING PROFILED, I.E. ON CURRENT LOCAL SETTLEMENTS. THE RESPONSE SHOULD BE MODIFIED TO INCLUDE SETTLEMENTS OVER THE LIFE OF THE PLANT.	
3	RESPONSE TO QUESTION 17 PAGE 17-1 PARA 1	IF ALL SEISMIC CATEGORY 2 PIPING IS NOT TO BE PROFILED, CRITERIA FOR SELECTION OF PIPING TO BE PROFILED	

REVIEW SUBJECT _____

ITEM	LOCATION OR PARAGRAPH	COMMENT	ACTION
4 3.	RESPONSE TO QUESTION 17 PAGE 17-2 PARA. 2	SHOULD BE DOCUMENTED THE CALCULATION ASSUMES THAT THE CURVATURE IS CONSTANT OVER THE LENGTH OF PIPE. IN GENERAL, THIS CONDITION WILL NOT BE MET. CRITERIA FOR CHANGES IN CURVATURE SHOULD BE ADDRESSED.	
5 4.	RESPONSE TO QUESTION 17 PAGE 17-3 PARA. 2	IF THE SETTLEMENT STRESSES ARE BASED ON CURRENT PROFILES ONLY, THE ANALYSIS SHOULD BE EXTENDED TO INCLUDE SETTLEMENTS OVER THE LIFE OF THE PLANT AND EFFECTS OF CHANGES IN CURVATURE (SEE ITEM 3).	
5	RESPONSE TO QUESTION 17 TABLES 17-1 & 17-2.	TABLE 17-2 INDICATES THAT SERVICE WATER LINE 8" - 1 HBC - 82 WAS PROFILED. TABLE 17-1 INDICATES THAT THIS LINE WAS NOT. THE DISCREPANCY SHOULD BE CLARIFIED.	
6.	RESPONSE TO QUESTION 17	THE QUESTION REGARDING MEASURES TO BE TAKEN TO ALLEVIATE CONDITIONS IF SETTLEMENT STRESSES APPROACH CODE ALLOWABLES OR CANNOT BE DETERMINED HAS NOT BEEN ADDRESSED.	
7	RESPONSE TO QUESTION 18 PAGE 18-1 PARA. 2&3	IT IS NOT CLEAR THAT MOST OF THE ANTICIPATED DIFFERENTIAL SETTLEMENT WILL OCCUR BY THE TIME OF FINAL CLOSURE (PARA. 2). PROVISIONS FOR EFFECTS OF SETTLEMENTS OCCURRING AFTER FINAL CLOSURE SHOULD BE	

REVIEW SUBJECT _____

ITEM	LOCATION OR PARAGRAPH	COMMENT	ACTION
8	RESPONSE TO QUESTION 18 PAGE 18-2 PARA. 2 & 3	SPECIFIED. THE EVALUATIONS OF PARA. 3 ADDRESSES THIS ISSUE PARTIALLY. CRITERIA FOR ASSESSMENT OF THE FLEXIBILITY OF SMALL PIPING TO ACCOMMODATE MORE THAN THE EXPECTED DIFFERENTIAL SETTLEMENT SHOULD BE SPECIFIED.	
9	RESPONSE TO QUESTION 19 PAGES 19-1 TO 19-3	THE DISPOSITION OF THIS RESPONSE SHOULD BE WITHHELD PENDING RECEIPT AND REVIEW OF EVALUATIONS BASED ON THE PRELOAD PROGRAM (SEE LAST PARAGRAPH ON PAGE 19-3)	
10	RESPONSE TO QUESTION 19 PAGE 19-1 PARA. 1.	VALIDATION OF THE NOLD AQUADUCER PROFILE GAGE SHOULD BE DOCUMENTED.	
11	RESPONSE TO QUESTION 20	THE FIRST PARAGRAPH OF THE RESPONSE IS ACCEPTABLE. HOWEVER, THE REMAINDER OF THE RESPONSE DILUTES AND NEGATES WHAT WAS SAID IN THE FIRST PARAGRAPH. THIS DISCREPANCY SHOULD BE CLARIFIED.	

ETEC LETTER REVIEW RECORD

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<u>Cusimano, S</u>	<u>Miller, NJ</u>	
<u>Cygan, R</u>	<u>Naish, RK</u>	
<u>Darley, DK</u>	<u>Neely, HH</u>	
<u>Davis, KA</u>	<u>Nicholson, JO</u>	
<u>DeBear, WS</u>	<u>Olson, PS</u>	
<u>DeMuri, RJ</u>	<u>Parks, JC</u>	
<u>DeVita, V</u>	<u>Penman, RB</u>	
<u>DeWitt, HW</u>	<u>Peters, WL</u>	
<u>DeZoteli, ML</u>	<u>Pilling, BS</u>	
<u>Dewart, WG</u>	<u>Polino, DL</u>	
<u>Donohue, HF</u>	<u>Poucher, FW</u>	
<u>Douglas, RE</u>	<u>Roberts, JK</u>	
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<u>Ferguson, E</u>	<u>Skogstad, L</u>	
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<u>Glumace, RJ</u>	<u>Wagner, RK</u>	<u>Prog. Adm. (SS)</u>
<u>Goggin, DE</u>	<u>Weigand, MA</u>	<u>Purchasing (SS)</u>
<u>Gould, MI</u>	<u>Werth, RL</u>	<u>Safety (SS)</u>
<u>Graner, SG</u>	<u>Wiese, RW</u>	<u>x With enclosure</u>

Prepared by: W. P. Chen (J.O. Bates)

Typed by: RoseAnn

Addressee: Mr. A. J. Cappucci, NRC

TWX/Ltr No.: 80ETEC-DRF- 0123

Date: Jan. 17, 1980

DOE Lead Branch: _____

Completes action in: DRF-____-

Subject: Review of Response to 10CFR 50.54 Request On Plant Fill for Midland Plant, Units 1 and 2

Req. action: ETEC Other X None

Remarks: _____

Department/Unit	Rev./ Appr.	Signature
Vice President		
Mgr, Facil.Des.	X	<i>[Signature]</i>
Mgr., Stress	X	<i>[Signature]</i>
Mgr, Test Eng.		
Mgr, QA		
Mgr, Construct.		
Mgr, Tech.Serv.		
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