

January 11, 1993

Docket No. 50-346

Mr. Donald C. Shelton, Vice President  
Nuclear - Davis-Besse  
Centerior Service Company  
c/o Toledo Edison Company  
300 Madison Avenue  
Toledo, Ohio 43652

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Dear Mr. Shelton:

SUBJECT: HIGH ENERGY LINE BREAK ANALYSES MODELING ERRORS  
(TAC NO. M84152)

On April 27, 1992, Toledo Edison Company (TE) internally documented that some calculations of temperature profiles following postulated high energy line breaks (HELB) contained modeling errors. Specifically, the analyses associated with lines containing superheated steam outside containment used nonconservative techniques regarding heat transfer coefficients. You submitted information to the NRC on this issue by letters dated May 8, June 18, and July 28, 1992.

As an interim measure, TE has taken credit for fire protection sprinklers to mitigate the effects of an HELB in Room 124 and has established additional administrative controls to ensure the operability of the fire protection system. For a long term solution, TE plans to replace some containment pressure transmitters with transmitters that are qualified for the new temperature profile and TE plans to remove and modify pipe supports as necessary to eliminate postulated critical cracks in selected areas. TE plans to complete the long term actions by the end of the eighth refueling outage scheduled to commence March 1, 1993.

The NRC staff has reviewed your action plan and finds it to be acceptable. The details of your analyses should be kept on-site as the NRC staff may audit them. Contact me if you have any questions.

Sincerely,

**ORIGINAL SIGNED BY:**

Jon B. Hopkins, Sr. Project Manager  
Project Directorate III-3  
Division of Reactor Projects - III/IV/V  
Office of Nuclear Reactor Regulation

cc: See next page

|        |           |                   |          |            |          |
|--------|-----------|-------------------|----------|------------|----------|
| OFFICE | PD3-3:LA  | PD3-3:PM JBH      | BC:EMEB  | BC:SPLB    | PD3-3:PD |
| NAME   | PKreutzer | JBHopkins/jbh/baj | JNorberg | CMcCracken | JHannon  |
| DATE   | 1/6/93    | 1/6/93            | 1/7/93   | 1/11/93    | 1/11/93  |

OFFICIAL RECORD

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cc:

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