

April 12, 2001

Mr. John K. Wood
Vice President - Nuclear, Perry
FirstEnergy Nuclear Operating Company
P.O. Box 97, A200
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT, UNIT 1 - TIA 2000-18 DESIGN-BASIS
ASSUMPTIONS FOR NON-SEISMIC PIPING FAILURES (TAC NO. MB1629)

Dear Mr. Wood:

Region III has recently requested Nuclear Reactor Regulation (NRR) assistance in resolving an issue related to design-basis assumptions for non-seismic piping failures at the Perry facility. The issue involves assumptions being used to determine the differential pressure across a motor-operated valve in the emergency closed cooling water system.

In evaluating a motor-operated valve for Generic Letter 89-10, calculation MOV-OP42-05 assumes a through-wall leakage crack in non-seismic piping. The calculation justifies this assumption by referencing Standard Review Plan, Branch Technical Position MEB 3-1, paragraph 2.c(2) which states, "Through-wall leakage cracks should be postulated in fluid system piping designed to non-seismic standards as necessary to satisfy B.3.d of BTP ASB 3-1." Region III has questioned whether the valve operability determination should assume through-wall leakage cracks or catastrophic failure for non-safety-related [non-seismic] piping, downstream of the valve.

Previously, we discussed BTP MEB 3-1 in a letter to you dated January 27, 1999. However, the letter focused on internal flooding as a result of a potential failure of non-seismic piping at Perry. Thus, the direct applicability of the information in that letter to this issue is not clear. Therefore, through Task Interface Agreement (TIA) 2000-18, Region III has requested that NRR respond to the following concerns:

- 1) When evaluating the differential pressure across a motor-operated valve, does NRR believe that non-seismically supported piping will only leak as specified in MEB 3-1, or should the evaluation assume a complete rupture of downstream non-seismic piping?
- 2) In general, for determining the operability of a structure, system or component, does NRR believe that it is technically adequate to assume that non-seismic piping, for which the licensing/design basis does not take credit in the mitigation of accidents, will only leak instead of completely breaking?

The purpose of this letter is to provide you with the opportunity to respond, in writing, to the issues identified in the TIA. Our internal procedures encourage the input of licensees or other external stakeholders in order to document the basis for responding to a TIA. While you are not required to respond to this letter, your staff has previously indicated a desire to provide input for our evaluation.

Mr. Wood

- 2 -

If you decide to respond to this letter, we request that your response be provided within 60 days of receipt of this letter. Please feel free to contact me at 301-415-1364 if you have any questions.

Sincerely,

/RA/

Douglas V. Pickett, Sr. Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-440

cc: See next page

Mr. Wood

- 2 -

If you decide to respond to this letter, we request that your response be provided within 60 days of receipt of this letter. Please feel free to contact me at 301-415-1364 if you have any questions.

Sincerely,

/RA/

Douglas V. Pickett, Sr. Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-440

cc: See next page

Distribution:

PUBLIC
OGC
DPickett

PDIII-2 r/f
ACRS
KManoly

AMendiola
GGrant, R3

GHubbard
DTerao

ACCESSION NO.: ML011020107

TO RECEIVE A COPY OF THIS DOCUMENT, INDICATE IN THE BOX: "C" = COPY WITHOUT ENCLOSURES "E" = COPY WITH ENCLOSURES "N"

OFFICE	PM:PDIII-2		LA:PDIII-2		SC:PDIII-2			
NAME	DPickett		THarris		AMendiola			
DATE	4/11/01		4/11/01		4/11/01			

OFFICIAL RECORD COPY

J. Wood
FirstEnergy Nuclear Operating Company

cc:

Mary E. O'Reilly
FirstEnergy Corporation
76 South Main St.
Akron, OH 44308

Resident Inspector's Office
U.S. Nuclear Regulatory Commission
P.O. Box 331
Perry, OH 44081-0331

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4531

Sue Hiatt
OCRE Interim Representative
8275 Munson
Mentor, OH 44060

Gregory A. Dunn
Manager - Regulatory Affairs
FirstEnergy Nuclear Operating Company
Perry Nuclear Power Plant
P.O. Box 97, A210
Perry, OH 44081

Robert W. Schrauder, Plant Manager
FirstEnergy Nuclear Operating Company
Perry Nuclear Power Plant
P.O. Box 97, SB306
Perry, OH 44081

Mayor, Village of North Perry
North Perry Village Hall
4778 Lockwood Road
North Perry Village, OH 44081

Donna Owens, Director
Ohio Department of Commerce
Division of Industrial Compliance
Bureau of Operations & Maintenance
6606 Tussing Road
P. O. Box 4009
Reynoldsburg, OH 43068-9009

Perry Nuclear Power Plant, Units 1 and 2

Carol O'Claire, Chief, Radiological Branch
Ohio Emergency Management Agency
2855 West Dublin Granville Road
Columbus, OH 43235-7150

Mayor, Village of Perry
P.O. Box 100
Perry, OH 44081-0100

Harvey B. Brugger, Supervisor
Radiological Assistance Section
Bureau of Radiation Protection
Ohio Department of Health
P.O. Box 118
Columbus, OH 43266-0118

Ohio Environmental Protection
Agency
DERR--Compliance Unit
ATTN: Mr. Zack A. Clayton
P.O. Box 1049
Columbus, OH 43266-0149

Chairman
Perry Township Board of Trustees
3750 Center Road, Box 65
Perry, OH 44081

State of Ohio
Public Utilities Commission
East Broad Street
Columbus, OH 43266-0573