



Metropolitan Edison Company
Post Office Box 480
Middletown, Pennsylvania 17057

Writer's Direct Dial Number

November 18, 1981
LL2-81-0264

Office of Inspection and Enforcement
Attn: Mr. Ronald C. Haynes, Director
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

DEC 23 1981

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Licensee Event Report 81-028/01L-0

Attached please find Licensee Event Report 81-028/01L-0 concerning inoperability of the Auxiliary Building Ventilation System determined on October 14, 1981.

This event constitutes a violation of Section 3.9.12 and is considered reportable under Section 6.9.1.8(b) of the Interim Recovery Technical Specifications.

Sincerely,


J. J. Barton
Acting Director, TMI-2

JJB:SDC:djb

Attachments

cc: L. H. Barrett, Deputy Program Director
Dr. B. J. Snyder, Program Director, TMI Program Office
V. Stello, Director I & E
c/o Document Management Branch
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

8112010604 011118
PDR ADOCK 05000320
S PDR

son Company is a Member of the General Public Utilities System

IE 22
S/11

LICENSEE EVENT REPORT
NARRATIVE REPORT
TMI-II
LER 81-028/01L-0
EVENT DATE - October 14, 1981

I. EXPLANATION OF OCCURRENCE

At 1630 hours on October 11, 1981, the Auxiliary Building Exhaust Flowrate decreased approximately 7000 cfm and the condition was not realized by the Control Room Operators (CRO's).

An engineer noting the decrease on October 13, 1981, informed Plant Engineering that apparently something had occurred to decrease the exhaust flowrate.

The engineer assumed the CRO's were aware of the flowrate and what it indicated since the flowrate is recorded once per shift by the CRO's. Measurement of the Auxiliary Building ventilation system flowrate was already scheduled by Plant Engineering for that night (October 13, 1981) so no further immediate action was taken. The flowrate as measured that night was 58,600 cfm. The Shift Foreman was informed of results at approximately 0730 hours on October 14, 1981 and it was decided the ventilation system was inoperable; therefore, movement of radioactive liquids and gasses within the Auxiliary Building was stopped as required by the action statement of Tech. Spec. 3.9.12.

In retrospect, it was determined the action statement should have been complied with as of 1630 hours, October 11, 1981; therefore, the event was considered prompt reportable under Section 6.8.1.8(b) as opposed to a thirty-day reportable event under Section 6.9.1.9(b) of the Interim Recovery Tech. Specs.

This LER is similar to LER's 81-26/03L-0/1, 81-21/03L-0, and 80-22/03L-0.

II. CAUSE OF THE OCCURRENCE

Investigation revealed that one of the two vortex dampers on each exhaust fan (AH-E-8A and AH-E-8B) had failed closed. The vortex damper on AH-E-8A was failed closed because a cotter pin had broken, allowing the controller to uncouple from the damper. The damper on AH-E-8B failed closed when the control linkage inside the damper housing separated. The linkage, a dual pitch threaded rod, apparently backed out of the threaded sockets. This failure is a repeat of the failure reported in LER 81-26.

III. CIRCUMSTANCES SURROUNDING THE OCCURRENCE

At the time of the occurrence, the Unit 2 facility was in a long-term cold shutdown state. The reactor decay heat was being removed via loss to ambient. Throughout the event there was no effect on the Reactor Coolant System or the core.

One of the factors influencing the CRO's not realizing the significance of the 7000 CFM drop in flowrate was their insensitivity to the indicated flowrate. This insensitivity was generated in part by a long standing history of flow rate indication problems and also uncertainty on the CRO's part as to what constituted an acceptable flow indication.

IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

All movement of radioactive liquids and gasses in the Auxiliary Building were secured when the ventilation system was declared inoperable. The vortex damper on exhaust fan AH-E-8A was repaired. The bias on the flowrate recorder was adjusted so that indicated and measured flowrate agree when both fans are running. The vortex damper on fan AH-E-8B could not be repaired at that time.

The ventilation system was restarted and flowrate was measured at 64,000 cfm, still less than Tech. Spec. requirement. On October 15, 1981, the NRC allowed a temporary reduction to a limit of 63,000± 10% cfm and the system was declared operable.

As of the date of this report the vortex damper on exhaust fan AH-E-8B has been repaired. To ensure the dual pitch threaded rod does not backout again, a positive method of retaining the rod was utilized.

To help ensure flowrates outside Tech. Spec. limits are recognized the CRO log has been annotated to indicate the Tech. Spec. limits associated with Auxiliary Building Ventilation System flow rates.

In addition, the engineer who observed the decreased flowrate was counseled with respect to calling such information to the attention of the CRO's unless he is aware of their cognizance.

V. COMPONENT FAILURE DATA

The failed vortex dampers are manufactured by Buffalo Forge Inc., for the 660-BLAD-840V-DWDI type fan.