Jersey Central Power & Light Company

MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N. J. 07960 • 201-539-6111

MEMBER OF THE General GPU ELECTRIC POWER COMPANIES SYSTEM Public Utilities Corporation

March 7, 1974

Mr. A. Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Giambusso:

Subject: Oyster Creek Station
Docket No. 50-219
Abnormal Occurrence Report No. 50-219/74/15

The purpose of this letter is to forward to you the attached Abnormal Occurrence Report in compliance with paragraph 6.6.2.a of the Technical Specifications.

Enclosed are forty copies of this submittal.

Very truly yours,

Donald A. Ross

Donald A. Ross
Manager, Nuclear Generating Stations

cs
Enclosures

cc: Mr. J. P. O'Reilly, Director
Directorate of Regulatory Operations, Region I

B/606

9604170443 960213
PDR FOIA
DEKOK95-258 PDR

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/15

Report Date

March 7, 1974

Occurrence Date

February 28, 1974

Identification of Occurrence

Failure of one torus to drywell vacuum breaker to demonstrate operability during weekly surveillance testing. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15D.

Conditions Prior to Occurrence

The plant was operating at steady-state power.

The major plant parameters at the time of the event were as follows:

Power:	Core, 1870 MWt
	Electric, 650 MWe
Flow:	Recirculation, 14.9×10^4 gpm
	Feedwater, 6.95×10^6 lb/hr
Stack Gas:	27,700 μCi/sec

Description of Occurrence

On Thursday, February 28, 1974, at approximately 0945, while performing weekly surveillance testing on the fourteen torus to drywell vacuum breakers, it was found that one vacuum breaker (V-26-9) failed to demonstrate operability. This surveillance testing was being performed to satisfy the requirements of AEC letter (D. J. Skovholt to R. H. Sims dated January 30, 1974). The operability testing basically consisted of:

1. Verifying that each valve was seated prior to testing.
2. Manually opening each valve to the fully open position and then allowing it to close without assistance.
3. Verifying that each valve was seated after testing.

8103030508 2pp.

V-26-9 was found to be seated prior to testing and opened freely; however, it did not close freely and manual assistance was required to seat the valve after testing.

Apparent Cause of Occurrence

Design is considered to be a major factor contributing to the cause of this occurrence. It is believed that this failure is attributed to excess friction in the valve hinge pins. Similar failures were reported as Abnormal Occurrence Report No. 50-219/74/11 dated February 25, 1974 and Abnormal Occurrence Report No. 50-219/74/14 dated March 1, 1974.

Analysis of Occurrence

The drywell-torus vacuum breaker system is required to prevent water oscillation in the downcomers due to low steam flow rates in the downcomers and to provide protection against negative pressure conditions in the containment vessel. The significance of this event is minimal in that the bases of the Technical Specifications state that this condition has no deliterious effect on negative pressure protection since only about 25% of the available vacuum relief capacity is required for this protection.

The drywell-torus vacuum breaker valves are required to be closed during pipe break accidents (particularly small breaks) to ensure proper steam condensation and prevent torus overpressuring. This valve would have performed this function, if required.

Corrective Action

Based on the recent history of failures of V-26-9, it was decided to lock this valve in the closed position pending implementation of a satisfactory long-term solution. This locking was in compliance with the requirements of paragraph B.4 of the AEC letter (D. J. Skovholt to R. H. Sims dated January 30, 1974). Other corrective action being taken is as discussed in a letter to Mr. Robert J. Schemel from Mr. D. A. Ross dated October 8, 1973. In that letter, it was noted that an apparent "growing" characteristic has been experienced with the teflon bushings at several facilities including Oyster Creek. The bushing difficulty has been discussed with Atwood & Morrill Company and a long-term solution is under investigation in conjunction with the General Electric Company.

Failure Data

Basic valve data are as follows:

Manufacturer - Atwood & Morrill Company
Type - Check Valve
Vent Area - 1.75 square feet per valve