

PHILADELPHIA ELECTRIC COMPANY

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June 18, 1982

Mr. R. C. Haynes, Administrator
Region I
US Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

SUBJECT: Licensee Event Report Narrative Description

Dear Mr. Haynes:

The following occurrence was reported to Mr. C. Cowgill,
Region I, Office of Inspection and Enforcement on May 28, 1982.

Reference:	Docket No. 50-278
Report No.:	3-82-08/1T
Report Date.:	June 18, 1982
Occurrence Date:	May 27, 1982
Facility:	Peach Bottom Atomic Power Station RD 1, Delta, PA 17314

Technical Specification Reference:

Technical Specification 3.7.A.2 states that, "primary containment integrity shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212 degrees F and fuel is in the reactor vessel, except while performing "open vessel" physics tests at power levels not to exceed 5 MW(t)."

Description of Event:

On May 27, 1982, the technical staff initiated a program to identify containment leaks after reviewing nitrogen makeup requirements to the containment. This effort identified a manometer which was in service to the suppression pool air space. A leak rate test was performed on the manometer in the as-found condition. A leak rate of approximately 4 scfm was measured at 49.1 psig. Maximum permissible Tech. Spec. rate at 49.1 psig is approximately 4.19 scfm.

Containment makeup requirements led to a conservative decision to shutdown the reactor and initiate a search for the additional leakage paths. The investigation identified various leaks in the isolable portion of containment. These isolable leak paths should not be considered when determining containment integrity.

Probable Consequences of Occurrence:

The leakage path from the torus air space through the manometer at normal operating pressure (0.5 psig) was measured at approximately 12 SCFH and therefore considered minimal. With all other leak paths identified as isolable, the leakage path through the manometer and the total penetration leakage are the only leaks considered when determining containment integrity. The combination of the leakage through the manometer and the known penetration leakage resulted in a violation of the containment Technical Specifications. Since the leak rate at the normal operating pressure was minimal, the probability of significant consequences as a result of this event is considered minimal. With the reactor operating in the normal containment atmospheric conditions, no significant contamination or release of radioactive material occurred.

The subject manometer provided a false pressure input to differential pressure indicating switch 3503A. This switch operates the containment vacuum breaker system during low containment pressure transients. In the as-found condition, this switch was unable to sense low containment pressure and would have prevented operation of the 'A' vacuum breaker. The 'B' vacuum breaker was fully operable. The low pressure containment protection was, therefore, not affected by this event.

Cause of the Event:

Investigation as to the cause of this event has not determined precisely the reason why the manometer was left valved in service. The investigation has disclosed that the manometer was last used on September 29, 1981, during a test to measure bypass flow between the drywell and the suppression pool air space. Our documentation cannot determine that the manometer was left valved in service at the conclusion of this test. It was installed on the sensing line of differential pressure indicating switch 3503A which provides logic to the containment vacuum relief system. The manometer was installed to measure positive differential pressure between the torus air space and secondary containment in lieu of DPIS 3503A while performing a Surveillance Test.

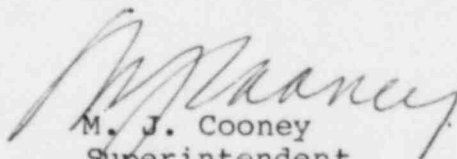
Corrective Action:

When the valved in manometer was identified on May 27, 1982, it was immediately valved out, eliminating the leak path and restoring containment integrity to within Tech. Spec. limits. The manometer has been physically removed from the compartment to preclude unauthorized usage in the future.

The reactor was conservatively placed in the cold shutdown condition and the identified leakage paths were quantified and repaired prior to reactor startup.

Prior to next use, Surveillance Test ST 12.6, Primary Containment to Torus Bypass Area Test will be revised to indicate proper valve lineup to preclude further occurrence.

Very truly yours,



M. J. Cooney
Superintendent
Generation Division - Nuclear

cc: Director, NRC - Office of Inspection & Enforcement
Mr. Norman H. Haller, NRC - Office of Management &
Program Analysis
C. J. Cowgill, Site Inspector