

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

March 5, 1984

Dr. Thomas E. Murley
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19046

SUBJECT: Peach Bottom Unit 2
Recirculation Piping - Moisture Monitoring System

REFERENCE: J. S. Kemper, Philadelphia Electric
Company, to Dr. T. E. Murley, USNRC, letter
dated September 15, 1983.

Dear Dr. Murley:

This letter is submitted in accordance with Philadelphia Electric Company's commitment to report moisture detection system problems as stated in letter, J. S. Kemper, PECO, to Dr. T. E. Murley, USNRC, dated September 15, 1983.

Four such occurrences in 1983 which were previously reported as Licensee Event Reports (LER's): 2-83-26/3L; 3-83-16/3L; 3-83-21/3L and 3-83-24/3L. As a result of the LER rule (10 CFR 50.73) which became effective January 1, 1984, we have re-evaluated the use of the LER system for reporting moisture monitoring system problems. Since these occurrences are not significant to plant safety nor pose a threat to public safety, we believe that it is inappropriate to continue to submit these occurrences as LER's. Furthermore, the information contained in this type of LER will not provide a data base to NRC suitable for trending or pattern analysis of operational occurrences across the industry.

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In accordance with this evaluation, Philadelphia Electric Company is submitting the following report regarding moisture monitoring system inoperability.

REFERENCE: Docket No. 50-277
EVENT DATE: January 25, 1984
REPORT DATE: March 1, 1984
FACILITY: Peach Bottom Atomic Power Station
RD #1, Box 208, Delta, PA 17314

This report is being submitted later than our 30 day commitment due to our evaluation of the applicability of submitting moisture monitoring system problems under the new LER rule.

Abstract

While Unit 2 was operating at power during routine surveillance testing a moisture sensor in the recirculation system moisture monitoring system was functioning improperly and the system was declared inoperable. Hourly monitoring of the drywell sump pump out rates was initiated to determine drywell leakage rates. Cause of the event was determined to be a failed sensor circuit card assembly. The sensor was replaced, successfully tested and returned to service.

Description of the Event:

On January 25, 1984, Peach Bottom Unit 2 was operating at 95% power. While conducting a routine surveillance test (ST 13.40 'Checkout of Moisture Monitoring System') to verify the operability of the moisture monitoring system, Point 7 appeared to be functioning improperly. Point 7 is installed on weld A-AM-4/AHG in the 'A' recirculation loop 22 inch manifold.

Instrument and control technicians investigated and successfully tested Point 7, however, the sensor failed shortly thereafter and the moisture monitoring system was declared inoperable at 6:00 p.m. on January 25, 1984.

Consequences of the Event:

After the system was declared inoperable, enhanced surveillance requirements (ST 13.41 'Hourly Drywell Leak Detection') were initiated and continued until January 28, 1984 when Unit 2 was removed from service. The purpose of ST 13.41 is to provide early warning of reactor coolant leakage via the drywell sump collection system when the moisture monitoring system is inoperable and reactor temperature is above 212 degrees. These surveillance requirements ensured that drywell leakage rates did not exceed the limits of Technical Specification 3.6.C.1 prior to unit shutdown. Therefore, the safety consequences of this event are considered minimal.

Cause of the Event:

The cause of the event was a failed Techmark Limited moisture sensor circuit card.

Corrective Actions:

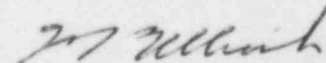
Hourly monitoring of the drywell sump collection system was performed until the unit was shutdown on January 28, 1984.

The inoperable sensor assembly was replaced, tested and returned to service at 4:00 p.m. on January 29, 1984.

Previous Similar Occurrences

LER 2-83-26/3L, 3-83-16/3L, 3-83-21/3L, 3-83-24/3L.

Very truly yours,



W. T. Ullrich
Superintendent
Nuclear Generation Division

RCB:lm

Attachment

cc: A. R. Blough, Site Inspector

J. F. Stolz, Operating Reactors Branch No. 4