



Public Service Electric and Gas Company P.O. Box E Hancocks Bridge, New Jersey 08038

Salem Generating Station

September 3, 1982

Mr. R. C. Haynes
Regional Administrator
USNRC
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Haynes:

LICENSE NO. DPR-75
DOCKET NO. 50-311
REPORTABLE OCCURRENCE 82-089/01T

Pursuant to the requirements of Salem Generating Station
Unit No. 2, Technical Specifications, Section 6.9.1.8.c,
we are submitting Licensee Event Report for Reportable
Occurrence 82-089/01T. This report is required within
fourteen (14) days of the occurrence.

Sincerely yours,

H. J. Midura
General Manager -
Salem Operations

RH:ks *7/82*

CC: Distribution

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PDR ADOCK 05000311
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The Energy People

IEV

95-2189 (20M) 11-81

Report Number: 82-089/01T

Report Date: 09-03-82

Occurrence Date: 08-30-82

Facility: Salem Generating Station, Unit 2
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Containment Service Water Leak - No. 23 Containment Fan Coil Unit.

This report was initiated by Incident Report 82-239.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 69% - Unit Load 700 MWe.

DESCRIPTION OF OCCURRENCE:

At 1100 hours, August 30, 1982, during surveillance of the containment, the operator discovered a service water leak of less than .1 GPM from No. 23 Containment Fan Coil Unit (CFCU). The CFCU was declared inoperable and isolated. Due to the fact that No. 24 CFCU was already inoperable, Limiting Condition for Operation Action Statement 3.6.2.3h was entered at 1100 hours. In accordance with NRC IE Bulletin 80-24, the NRC was notified by telephone with written confirmation transmitted on August 31, 1982. Both containment spray systems were operable throughout the occurrence.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

The leak was determined to be a failure of a Belzona repair previously made to the coil.

ANALYSIS OF OCCURRENCE:

Primary containment is a design feature which ensures that the release of radioactive materials in the event of accident conditions will be restricted such that site boundary radiation doses will be within the limits of 10CFR100. NRC IE Bulletin 80-24 requires that any service water leak inside the containment be considered as a degradation of the containment boundary. If containment pressure increased to the design pressure of 47 psig during an accident, there is a possibility of the release of radioactivity through the service water discharge. The occurrence, therefore, constituted an abnormal degradation of the primary containment and is reportable in accordance with Technical Specification 6.9.1.8.c.

ANALYSIS OF OCCURRENCE: (continued)

The RCS leakage limits are based on ensuring the ability of detecting leakage from the Reactor Coolant Pressure boundary. The boundary is one of the several design features which prevent the release of radioactive fission products to the environment (the others are the fuel cladding and primary containment). Action Statement 3.4.6.2.b requires: with any pressure boundary leakage, be in at least hot standby within 6 hours and in cold shutdown within the following 30 hours; with any RCS leakage greater than any one of the Technical Specification limits, excluding pressure boundary leakage, reduce the leakage rate to within limits within 4 hours, or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

The CFCU's operate in conjunction with the containment spray systems to remove heat and radioactive contamination from the containment atmosphere in the event of a design basis accident. Operability of either all fan coil groups or of both containment spray systems is necessary to ensure offsite radiation dose is maintained within the limits of 10CFR100. Action Statement 3.6.2.3.b requires: with two groups of containment cooling fans inoperable, restore at least one group of cooling fans to operable status within 72 hours, or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

Because the leakage was immediately isolated, containment integrity was maintained. Containment cooling capability was provided by the containment spray systems. The occurrence, therefore, involved no risk to the health or safety of the public. Due to the loss of redundancy in design and engineered safety features, the event constituted operation in a degraded mode permitted by the limiting conditions for operation.

CORRECTIVE ACTION:

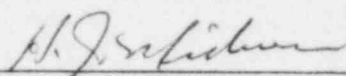
As noted, the leakage was immediately isolated and prompt notification was performed in accordance with Technical Specification 6.9.1.8. The leaking coil was blanked off, and No. 23 CFCU was satisfactorily tested. At 1950 hours, August 30, 1982, No. 23 CFCU was declared operable, and Limiting Condition for Operation Action Statement 3.6.2.3b was terminated. Design Change Request 2EC-0505 has been issued to replace the CFCU cooling coils with coils manufactured of AL-6X steel, for improved erosion and corrosion resistance in the service water environment. This change is scheduled for implementation during the next refueling outage. A commitment to submit a Supplemental Report upon completion was made in LER 82-070/01T.

FAILURE DATA:

A number of containment service water leaks due to similar failures of CFCU cooling coils have occurred since January 1, 1982.

Westinghouse Electric Corporation
Containment Fan Coil Unit
U-Tube Cooling Coil

Prepared By R. Heller



General Manager -
Salem Operations

SORC Meeting No. 82-80