



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

Salem Generating Station

March 19, 1987

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

SALEM GENERATING STATION
LICENSE NO. DPR-70
DOCKET NO. 50-272
UNIT NO. 1
REPORT 87-2
SPECIAL REPORT

This Special Report describes the circumstances surrounding a loss of AC power to the auto start logic for the diesel fire pumps. This report is being submitted in accordance with the reporting requirements of Technical Specification Action Statement 3.7.10.1.b.

Sincerely yours,

J. M. Zupko, Jr.
General Manager-
Salem Operations

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RKH:pc

Distribution

The Energy People

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PLANT IDENTIFICATION:

Salem Generating Station - Unit 1
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

FAILURE OF THE 115VAC CONTROL CENTER TO SWAP TO ITS ALTERNATE POWER SOURCE RESULTING IN A LOSS OF AC POWER TO THE AUTO START LOGIC FOR BOTH FIRE PUMPS

Event Date(s): 03/10/87

Report Date: 03/19/87

This report was initiated by Incident Report No. 87-087

CONDITIONS PRIOR TO OCCURRENCE:

Mode 5 - Rx Power 0% - Unit Load 0 MWe

DESCRIPTION OF OCCURRENCE:

On March 10, 1987, at 0640 hours, No. 1F Group Bus was taken out of service in support of work on No. 12 Station Power Transformer. When the group bus was tagged, the 115VAC Control Center located in the Fire Pump House failed to swap to its alternate power source, the No. 2H Group Bus, resulting in a loss of AC power to the auto start initiation logic for both diesel driven fire pumps. With the loss of AC power, both of the fire pumps started as designed and an alarm was received. When Fire Protection Department personnel investigated the alarm, they found the diesel fire pumps operating and notified the Control Room of the situation. Action Statement 3.7.10.1.b was entered. The fire pumps were placed in manual control and secured. In accordance with the provisions of Technical Specification Action Statement 3.7.10.1.b, an operator was stationed to start the fire pumps if necessary. Site Maintenance was subsequently notified of the failure of the 115VAC Control Center to swap to its alternate power source.

In accordance with the requirements of Technical Specification Action Statement 3.7.10.1.b, the NRC was notified at 1055 hours the same day. A written confirmation was submitted to the NRC on 3/11/87.

On 3/11/87 at 1230 hours, No. 1F Group Bus was returned to service and power was restored to the diesel fire pump auto start initiation logic. The fire pump controls were returned to "automatic" and the Action Statement was terminated.

APPARENT CAUSE OF OCCURRENCE:

Upon investigation, the "root cause" of this occurrence has been determined to be equipment failure. The 115VAC Control Center failed to swap to its alternate power source due to a failed transfer switch.

ANALYSIS OF OCCURRENCE:

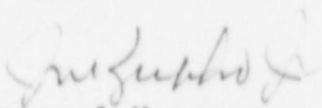
With the loss of AC power, due to the failure of the 115VAC Control Center to transfer to its alternate power source, the fire pump auto start initiation logic required by the Technical Specifications is inoperable. Stationing an operator at the pumps to manually start the pump if required is an acceptable compensatory action to provide backup fire suppression capability. There would be a delay in starting the pump depending on the time it took the Control Room or the operator to recognize the need for the pumps and the time it took to start them. Additionally, there is a backup fire suppression supply from Hope Creek Generating Station, which could be aligned to supply the Salem system.

The diesel fire pumps started, as per design, on the loss of AC power to the auto start initiation logic. In the event of an emergency, adequate water volume and pressure would have been available to the fire suppression header. Therefore, this occurrence involved no undue risk to the health and safety of the public.

Due to the loss of AC power to the auto start initiation logic, this event is considered to be reportable in accordance with the requirements of Technical Specification Action Statement 3.7.10.1.b.

CORRECTIVE ACTION:

The fire pumps were placed in manual control with an operator stationed to start them as required. Power was subsequently aligned to the fire pump auto start initiation logic from No. 1F Group Bus, and the pumps were restored to automatic control. A new auto transfer switch will be installed upon receipt from the manufacturer. No further corrective action is deemed necessary.


General Manager -
Salem Operations

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SORC Mtg. 87-017