

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
Salem Generating Station - Unit 2

DOCKET NUMBER (2)

0 5 0 0 0 3 1 1 1 OF 0 3

PAGE (3)

TITLE (4)

Pressurizer Overpressure Protection System Actuation

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)						
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER (5)				
0	2	1	5	8	4	8	4	0	0	3	0	5	0	0	0
0	2	1	5	8	4	8	4	0	0	3	1	5	8	4	0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)									
POWER LEVEL (10)	20.402(b)	20.406(e)	50.73(a)(2)(iv)	73.71(b)						
	20.406(a)(1)(i)	50.36(e)(1)	50.73(a)(2)(v)	73.71(e)						
	20.406(a)(1)(ii)	50.36(e)(2)	50.73(a)(2)(vii)	<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 306A)						
	20.406(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	Special Report						
	20.406(a)(1)(iv)	50.33(a)(2)(ii)	50.73(a)(2)(viii)(B)							
	20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(z)							

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
J. L. Rupp	6 0 9 3 3 9 - 4 3 0 9

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input checked="" type="checkbox"/>	<input type="checkbox"/>				

ABSTRACT (Limit to 1800 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On February 15, 1984, during a maintenance shutdown, the Pressurizer Overpressure Protection System (Power Operated Relief Valves 2PR-1 and 2PR-2) actuated due to the induced pressure transient caused by starting a reactor coolant pump. The reactor coolant pump was started as part of the procedure during Reactor Coolant System fill and vent operations. The highest system pressure observed was 350 psig. Both relief valves closed within three to four seconds following actuation, and Reactor Coolant System pressure returned to 325 psig. Operations were in accordance with operating procedures; e.g., the reactor coolant pump was not started until the minimum pressure limit for operation (325 psig) was reached, and all steam generator secondary temperatures were less than fifty degrees above reactor coolant loop temperatures. The relief valve setpoints were low in the required band. This, coupled with the minimum required pressure for operating reactor coolant pumps during fill and vent operations, resulted in the POPS actuation. All systems and indications functioned as designed. This special report is being submitted, in accordance with the Technical Specifications, because POPS was used to mitigate a Reactor Coolant System pressure transient. The Operating Procedure is being amended to provide additional pressure control guidance to operators during fill and vent operations.

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PLANT AND SYSTEM IDENTIFICATION:

Westinghouse - Pressurized Water Reactor

Energy Industry Identification System (EIIS) codes are indentified in the text as [XX].

IDENTIFICATION OF OCCURRENCE:

Pressurizer Overpressure Protection System (POPS) - Channel I and Channel II Initiation During Reactor Coolant System Fill and Vent

Event Date: 02/15/84

Report Date: 03/15/84

This report was initiated by Incident Report No. 84-033

CONDITIONS PRIOR TO OCCURRENCE:

Mode 5 - Rx Power 000 % - Unit Load 0000 MWe

DESCRIPTION OF OCCURRENCE:

On February 15, 1984, during a maintenance shutdown, Reactor Coolant System [AB] fill and vent operations were in progress. At 1339 hours, with indicated Reactor Coolant System pressure at 325 psig, No. 22 Reactor Coolant Pump was started. The resultant pressure transient actuated both Pressurizer Overpressure Protection Channels (Power Operated Relief Valves 2PR-1 and 2PR-2). This was indicated by "initiated" lights on the control room console and alarms on the overhead annunciator. The highest indicated pressure observed by the control room operator was approximately 350 psig (on the POPS bezel section of the control room console) and 340 psig (on the Hot Leg Pressure Recorder). Both 2PR-1 and 2PR-2 closed within three to four (3-4) seconds following actuation, and Reactor Coolant System pressure returned to 325 psig. The Commission was notified of the occurrence at 1414 hours.

APPARENT CAUSE OF OCCURRENCE:

The induced pressure transient, caused by starting the reactor coolant pump, actuated 2PR-1 and 2PR-2. The valves actuated at a minimum indicated pressure of 340 to 350 psig. The Technical Specifications require the setpoint to be less than or equal to 375 psig. Since both of these valves are controlled by 0-3000 psig transmitters, the apparent indicated error of 25 to 35 psig is well within the plus or minus two percent (+-2%) channel accuracy for the transmitter and loads. The combination of the minimum pressure requirements for running reactor coolant pumps, for fill and vent operations, and the POPS setpoint being low in the required band, resulted in the POPS actuation.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

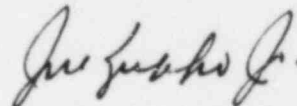
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ANALYSIS OF OCCURRENCE:

Operations were in accordance with operating procedures; e.g., the reactor coolant pump was not started until the minimum pressure limit for operation (325 psig) was reached, and all steam generator secondary temperatures were less than fifty degrees above reactor coolant loop temperatures. 2PR-1 and 2PR-2 remained open for a minimal amount of time (3-4 seconds) following actuation. Had either of the valves failed to close, the operator would have responded by closing the blocking valves (2PR-6 or 2PR-7). All systems and indications functioned as designed. There was no undue risk to the health or safety of the public due to this occurrence. In accordance with Technical Specification 3.4.10.3 (Action Requirement c.), because the POPS was used to mitigate a Reactor Coolant System pressure transient, this special report is being submitted pursuant to the requirements of Technical Specification 6.9.2.

CORRECTIVE ACTION:

To provide additional operator guidance, Operating Procedure OPII-1.3.4 (Filling and Venting the Reactor Coolant System) will be amended. Step 5.11 will be changed to instruct personnel to control pressure between 325 and 360 psig, using the Letdown Pressure Control Valve (CV18), while starting reactor coolant pumps.



General Manager-
Salem Operations

JLR:tns

SORC Mtg 84-030



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

Salem Generating Station

March 15, 1984

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

Dear Sir:

SALEM GENERATING STATION
LICENSE NO. DPR-75
DOCKET NO. 50-311
UNIT NO. 2
LICENSEE EVENT REPORT 84-003-00

This Licensee Event Report (Special Report) is being submitted pursuant to the requirements of Technical Specification 6.9.2. This report is required within thirty (30) days of discovery.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "J. M. Zupko, Jr.", written in a cursive style.

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

JR:k11 949

CC: Distribution