NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Salem Generating Station - Unit 1	0 5 0 0 0 2 7 2	1 OF 0 4

TITLE (4)

T. S. Surveillance 4.7.9e.1 (Snubber Functional Testing)Historical Non-Compliance

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(S)
0 4	0 4	8 9	8 9	0 1 5	0 0	0 4	1 9	8 9	Salem - Unit 2	0 5 0 0 0 3 1 1
										0 5 0 0 0

OPERATING MODE (9): N

POWER LEVEL (10): N/A

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check one or more of the following)* (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER *(Specify in Abstract below and in Text, NRC Form 366A)*
20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
M. J. Pollack - LER Coordinator	6 0 9 3 3 9 - 4 0 2 2

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES *(If yes, complete EXPECTED SUBMISSION DATE)*	X NO				

ABSTRACT *(Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines)* (16)

On 4/4/89, it was discovered by Inservice Inspection (ISI) and System Engineering personnel that Tech. Spec. Functional Surveillance 4.7.9e.1, for mechanical snubbers, was not fully complied with. The requirement to compare the drag force with the last functional test has historically not been performed. The root cause of this event has been attributed to inadequate administrative control. The original Tech. Spec. interpretation was, "if the manufacturer's acceptance criteria was met the functional surveillance criteria was met". This was not correct. Tech. Spec. 4.7.9e.1 requires comparison of current drag force surveillance results with the previous surveillance results. The review of historical snubber functional testing results for both Salem Unit 1 and Unit 2 has been completed. One in-service snubber, in Unit 2, was replaced due to the comparison check required by Tech. Spec. 4.7.9e. The snubber testing field directive has been revised to include comparison checks as per the Tech. Specs. Appropriate ISI supervision and management have been made cognizant of the changes to the field directive testing requirements. A license change to the Tech. Specs. snubber functional surveillance requirements will be issued. This license change will request deletion of the requirement to compare the drag forces between consecutive functional tests.

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PLANT AND SYSTEM IDENTIFICATION:

Westinghouse - Pressurized Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as {xx}

IDENTIFICATION OF OCCURRENCE:

Technical Specification Surveillance 4.7.9e.1 (Snubber Functional Testing) Historical Non-Compliance

Discovery Date: 4/04/89

Report Date: 4/19/89

This report was initiated by Incident Report No. 89-191.

CONDITIONS PRIOR TO OCCURRENCE:

N/A

DESCRIPTION OF OCCURRENCE:

On April 4, 1989, it was discovered by Inservice Inspection (ISI) and System Engineering personnel that Technical Specification Functional Surveillance 4.7.9e.1, for mechanical snubbers, was not fully complied with. The requirement to compare the drag force with the last functional test has historically not been performed. The ISI and System Engineering personnel were reviewing the snubber surveillance requirements for possible modifications.

Technical Specification 3.7.9 states:

> "All snubbers listed in Tables 3.7-4a and 3.7-4b shall be OPERABLE."

Technical Specification Surveillance 4.7.9.e.1 states:

> "The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force. The drag force shall not have increased more than 50% since the last functional test."

APPARENT CAUSE OF OCCURRENCE:

The root cause of this event has been attributed to inadequate administrative control.

The original Technical Specification interpretation was, "if the manufacturer's acceptance criteria was met the functional surveillance criteria was met". This was not correct. Technical Specification 4.7.9e.1 requires comparison of current drag force surveillance results with the previous surveillance results.

ANALYSIS OF OCCURRENCE:

As stated in Technical Specification 4.7.9.e.1, two provisions to verify mechanical snubber functional testing are required by Technical Specifications: 1) measurement of the force required to initiate free motion (drag force) thereby insuring the force is less than required and 2) compare the measured force to the previous test results insuring the value has not increased by more than 50%.

Item 2 above, was not performed at Salem Unit 2 prior to the fourth refueling outage and at Salem Unit 1 prior to the eighth refueling outage. Although the comparison was not performed the test data from each of the past refuelings (both Units) is available.

A review of the drag forces for consecutive refueling outages has been performed. The force required to initiate free motion has been measured and is below the manufacturer's maximum allowable drag force. Testing was performed on site by Wyle Laboratories; however, different functional testing machines were used each outage. The use of different machines can contribute to the slight variations between outage testing. Additionally, Unit 1 and Unit 2 snubbers may not occupy the same location during consecutive outages. They can be cycled from spares to in-service. The direction of loading can change depending upon installation.

Test data comparisons from the past three Unit 1 refuelings has shown four snubbers to have exceeded 50% of the previous measured drag force. The Unit 1 test data comparison failures were: two from the seventh with the sixth refueling outages; one from the sixth with the fifth; and one from the fifth with the fourth. The snubbers which failed the 50% comparison were not returned to service due to other concerns.

The last Unit 2 refueling (third) test data comparison revealed nine Unit 2 snubbers to have exceeded 50% of the previous measured drag force. One of these snubbers was found to still be in service. It was replaced in April of this year.

Since the required test data comparisons were not made, the test population was not increased as is required by Technical Specification Surveillance 4.7.9c. The entire population of PSA-1/2 and 1/4 snubbers is functionally tested each outage. No additional sampling was required due to one of the failed Unit 1 snubbers and one of the Unit 2 failed snubbers. Technical Specification Surveillance 4.7.9c states:

> "At least once per 18 months during shutdown, a representative sample of 10% of the total of each type of snubber in use in the plant shall be functionally tested either in place or in a bench test. For each type of snubber that does not meet the functional test acceptance criteria of Specification 4.7.9d or 4.7.9e, an additional 10% of that type of snubber shall be functionally tested."

ANALYSIS OF OCCURRENCE: (cont'd)

All snubbers have been functionally tested in accordance with the manufacturer's acceptance criteria. The increase in drag force to values below the acceptance limit does not constitute a failure or render the snubber inoperable. The manufacturer has issued Pacific Scientific Test Report 871 in April 1984 to confirm that increases in drag forces below the acceptance value do not compromise operability. The test report further states that an increase in drag force from one inspection period to the next does not establish a trend that can be used to predict snubber failure. Therefore, all snubbers in service are considered operable.

Based upon the manufacturer's test report, a comparison of drag force test results between outages does not indicate snubber degradation. The snubbers' drag forces did not exceed the maximum allowed value. Therefore, this event did not affect the health or safety of the public. However, since the Technical Specification Surveillance requirements were not complied with in their entirety, this event is reportable in accordance with Code of Federal Regulations 10CFR 50.73(a)(2)(i)(B).

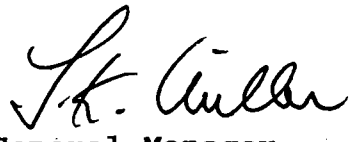
CORRECTIVE ACTIONS:

The review of historical snubber functional testing results for both Salem Unit 1 and Unit 2 has been completed. One in-service snubber, in Unit 2, was replaced due to the comparison check required by Technical Specification 4.7.9e.

The snubber testing field directive (No. S-C-MPOO-MFD-284-1, "Functional Testing of Mechanical Snubbers Salem Generating Station Units 1 & 2") has been revised to include comparison checks as per the Technical Specifications.

Appropriate inservice inspection supervision and management have been made cognizant of the changes to the field directive testing requirements.

A license change to the Technical Specifications snubber functional surveillance requirements will be issued. This license change will request deletion of the requirement to compare the drag forces between consecutive functional tests.



General Manager -
Salem Operations

MJP:pc

SORC Mtg. 89-032

PSE&G

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

Salem Generating Station

April 19, 1989

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
LICENSEE EVENT REPORT 89-015-00

This Licensee Event Report is being submitted pursuant to the requirements of the Code of Federal Regulations 10CFR 50.73(a)(2)(i)(B). This report is required within thirty (30) days of discovery.

Sincerely yours,

L. K. Miller
General Manager -
Salem Operations

MJP:pc

Distribution

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