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

SPECIAL REPORT 311/02-003-00 SALEM GENERATING STATION - UNIT 2 FACILITY OPERATING LICENSE NO. DPR-75 DOCKET NO. 50-311

Gentlemen:

This Special Report entitled "Failure To Maintain Elements Of The Salem Fire Protection Program" is being submitted pursuant to the requirements of Salem Unit 2 Operating License Condition 2.1.

Sincerely,

D. F. Garchow Vice President -Operations

Attachment

BJT

Mr. H. J. Miller, Administrator - Region I
 USNRC Region I
 475 Allendale Road
 King of Prussia, PA 19406

Distribution LER File 3.7



NRC FORM 366 (7-2001)

### **U.S. NUCLEAR REGULATORY**

COMMISSION

#### LICENSEE EVENT REPORT (LER)

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APPROVED BI OMBINO. 3150-0104 EXPINED 7-51-2004
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1 OF

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#### SALEM GENERATING STATION UNIT 2

FAILURE TO MAINTAIN ELEMENTS OF THE SALEM FIRE PROTECTION PROGRAM.																		
5. EVENT DATE				6. LER NUMBER			7.1	7. REPORT DATE			8. OTHER FACILITIES INVOLVED							
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9 OPERATING 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)																		
9. OPERA MODE		1		20.2	201(b)		20.220	3(a)(3)(i	ii)		50.73(a)(2)(ii)	)(B)	5	0.73(a	a)(2)(ix)(A)	)		
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NAME						TELEPHONE NUMBER (Include Area Code)												
Brian J. Thomas, Licensing Engineer						856-339-2022												
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2. DOCKET NUMBER 05000311

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

At approximately 1730 hours on May 20, 2002, preliminary test results were obtained for tracer gas tests being performed for the Unit 1 Elevation 78 Lower Electrical Penetration Area and the Unit 1 Elevation 64' 4160 Volt Switchgear Room. Results from these tests identified room leakage sufficient to prevent the carbon dioxide system in these areas from maintaining the required concentration of 50% for a hold time of 20 minutes as required by NFPA-12. At the time the results were presented, a review of data from tests being performed in the Unit 2 Elevation 78' Lower Electrical Penetration Area indicated that similar results would be expected for this area as well. An extent of condition review was performed considering that the primary leakage was through the CO<sub>2</sub> isolation dampers and it was determined that the Unit 2 4160 Volt Switchgear Room, and the Unit 1 & 2 460 Volt Switchgear Rooms may also be affected such that these rooms may not be capable of maintaining the carbon dioxide concentration of 50% for the hold time of 20 minutes. As a result the carbon dioxide systems for these six fire areas were impaired and fire watches were established in accordance with the Fire Protection Program.

The cause of the excessive leakage is under investigation as are appropriate corrective actions. A supplemental report will be issued by August 2, 2002 to report on the results of the investigation.

This report is being made in accordance with Unit 2 License Condition 2.I, which requires reporting any violation of the Fire Protection Program (License Condition 2.C.10).

NRC FORM 366A	U.S. NUCLEAR REGULATORY COMMISSION									
(0-1998)	LICENSEE EVEN	Г REPORT (L	ER)							
TEXT CONTINUATION										
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TEXT (If more s	pace is required, use additional copies	of NRC Form 3	56A) <b>(17)</b>							
PLANT AND S	YSTEM IDENTIFICATION									
Westinghouse -	<ul> <li>Pressurized Water Reactor</li> </ul>									
Carbon Dioxide	Suppression System (LW/-)									
* Energy Indust as (SS/CCC)	ry Identification System {EIIS} code	s and compon	ent functi	on ide	ntifier cod	es appear				
CONDITIONS	PRIOR TO OCCURRENCE									
Salem Unit 1 a	nd Unit 2 were in Mode 1 at 100% p	ower at the tim	ne of disc	overy.						
DESCRIPTION	OF OCCURRENCE									
At approximate tests being perf Elevation 64' 4 to prevent the of 50% for a hold review of data f Area indicated review was per and it was dete Switchgear Roo the carbon diox dioxide system accordance wit fire areas at Sa	ly 1730 hours on May 20, 2002, pre formed for the Unit 1 Elevation 78 Lo 160 Volt Switchgear Room. Results carbon dioxide system in these areas time of 20 minutes as required by N from tests being performed in the Ur that similar results would be expected formed considering that the primary ermined that the Unit 2 4160 Volt Sw oms may also be affected such that kide concentration of 50% for the ho is for these six fire areas were impain the the Fire Protection Program. Trace alem Unit 1 and 2:	liminary test re ower Electrical from these te s from maintai FPA-12. At th nit 2 Elevation ed for this area leakage was to itchgear Room these rooms n Id time of 20 m red and fire was ser gas testing	esults wer Penetrat sts identif ning the r the time the 78' Lowe as well. through the nay not b ninutes. A atches we has beer	re obta ion Ar fied ro require e resu An es ne CO Unit e capa As a re re est n perfo	ained for tr rea and the om leakaged concent Its were pr trical Pene trical Pene trical Pene table of con $_2$ isolation 1 & 2 460 able of ma esult the ca ablished in prmed in th	acer gas e Unit 1 le sufficient tration of resented, a etration ndition dampers Volt intaining arbon n he following				
(1) Unit 1 EL. 7 (2) Unit 1 EL. 6 (3) Unit 2 EL. 7 (4) Unit 2 EL. 6	78' Lower Electrical Penetration Area 64' 4160 Volt Switchgear Room 78' Lower Electrical Penetration Area 64' 4160 Volt Switchgear Room	1								
The tracer gas of the carbon of Report 050002 Volt Switchgea	testing was performed to determine lioxide fire suppression system for th 72 & 05000311/1999010, the initial or Rooms and the 78' Electrical Pene	actual field co nese fire areas carbon dioxide etration Areas	onditions f As doc concent did not de	for inc ument ration emons	lusion in a ed in NRC tests for th trate that t	re-analysis Inspection ne 4160 he required				

NRC FORM 366A (6-1998)	U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER) TEXT CONTINUATION												
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## PRIOR SIMILAR OCCURRENCES

The cause of occurrence is still under investigation; upon completion of the investigation this section will be revised to determine the extent of any prior similar occurrences.

## SAFETY CONSEQUENCES

Although leakage from the ventilation supply and exhaust dampers affects the ability to achieve or maintain the carbon dioxide design concentration in accordance with NFPA-12, the carbon dioxide discharge into these areas still provides a fire suppression function until manual fire suppression activities can be initiated. Fire watches have been placed in these areas in accordance with the Fire Protection Program. These fire watches, along with the automatic early warning (ionization) fire detection will alert the dedicated onsite fire brigade who will respond and extinguish any fire using manual fire suppression methods. The fire brigade can manually activate an additional carbon dioxide system discharge as necessary to assist with the control or extinguishment of a fire. Based on the above, there is reasonable assurance that Salem Units 1 and 2 can achieve and maintain safe shutdown in the event of a fire in the 4160 Volt Switchgear Rooms, the 460 Volt Switch Rooms and the Electrical Penetration Areas.

# **CORRECTIVE ACTIONS:**

As an immediate corrective action, fire watches were established in accordance with the Fire Protection Program.

The development of appropriate corrective actions to address the cause of the leakage is ongoing. Information regarding any corrective actions will be submitted in a supplement to this special report. The supplement to this Special Report will be submitted by August 2, 2002

#### COMMITMENTS

The corrective actions cited in this Special Report are voluntary enhancements and do not constitute commitments.