



LR-N14-0091

10 CFR 50.73

APR 11 2014

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001


LER 311/2014-003-00  
Salem Nuclear Generating Station Unit 2  
Renewed Facility Operating License No. DPR-75  
NRC Docket No. 50-311

SUBJECT: Enforcement Discretion Received for Exceeding Allowable Outage  
Time for Inoperable Offsite Power Source

The Licensee Event Report, "Enforcement Discretion Received for Exceeding Allowable Outage Time for Inoperable Offsite Power Source," is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B), "Any operation which was prohibited by the plant's Technical Specifications..."

The attached LER contains no commitments. Should you have any questions or comments regarding the submittal, please contact David Lafleur of Salem Regulatory Assurance at 856-339-1754.

Sincerely,

  
John F. Perry  
Site Vice President – Salem

Attachments (1)

APR 11 2014

10 CFR 50.73

Page 2  
LR-N14-0091

cc Mr. W. Dean, Administrator – Region 1, NRC  
Mr. J. Lamb, Licensing Project Manager – Salem, NRC  
Mr. P. Finney, USNRC Senior Resident Inspector, Salem (X24)  
Mr. P. Mulligan, Manager IV, NJBNE  
Mr. T. Joyce, President and Chief Nuclear Officer – Nuclear  
Mr. T. Cachaza, Salem Commitment Tracking Coordinator  
Mr. L. Marabella, Corporate Commitment Tracking Coordinator  
Mr. D. Lafleur, Salem Regulatory Assurance



**LICENSEE EVENT REPORT (LER)**

(See Page 2 for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

<b>1. FACILITY NAME</b> Salem Generating Station – Unit 2	<b>2. DOCKET NUMBER</b> 05000311	<b>3. PAGE</b> 1 OF 4
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**4. TITLE** Enforcement Discretion Received for Exceeding Allowable Outage Time for Inoperable Offsite Power Source

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
02	16	2014	2014	- 003	- 000	04	11	2014	FACILITY NAME	DOCKET NUMBER
										05000
										05000

<b>9. OPERATING MODE</b>		<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>									
1	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)							
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
10. POWER LEVEL  100%	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(vii)(B)							
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)							
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)							
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)							
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)							
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER							
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A							

**12. LICENSEE CONTACT FOR THIS LER**

<b>FACILITY NAME</b> David Lafleur, Senior Compliance Engineer, Salem Generating Station	<b>TELEPHONE NUMBER (Include Area Code)</b> 856-339-1754
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**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
B	EA	XFMR	G080	Y					

<b>14. SUPPLEMENTAL REPORT EXPECTED</b>			<b>15. EXPECTED SUBMISSION DATE</b>		
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE)			<input checked="" type="checkbox"/> NO		
	MONTH	DAY	YEAR		

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

On February 13, 2014, at 1356 hours, the Salem Unit 2, 24 Station Power Transformer (SPT) was declared inoperable due to elevated transformer combustible gas levels indicating an active internal thermal fault. Salem requested enforcement discretion from the Nuclear Regulatory Commission (NRC) for 6 days because the time required to replace and return the 24 SPT to operable status would have exceeded TS 3.8.1.1, Action a.3, allowable outage time of 72 hours for inoperability of a single independent power source.

The NRC granted enforcement discretion on February 15, 2014, for 6 additional days. Successful completion and return to service of the 24 SPT occurred on February 18, 2014 at 0315 hours and the Notice of Enforcement Discretion (NOED) was terminated.

This report is being made in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation which was prohibited by the plant's Technical Specifications..."



**LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET**

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Salem Generating Station – Unit 2	05000311	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 4
		2014	- 003	- 000	

**NARRATIVE**

**PLANT AND SYSTEM IDENTIFICATION**

Westinghouse – Pressurized Water Reactor (PWR/4)

Energy Industry Identification System {EIS} codes and component function identifier codes appear as {SS/CCC}

Station Power Transformer: {EA/XFMR}

**IDENTIFICATION OF OCCURRENCE**

Event Date: February 16, 2014

Discovery Date: February 16, 2014

**CONDITIONS PRIOR TO OCCURRENCE**

Salem Unit 2 was in Operational Mode 1, operating at 100 percent Rated Thermal Power (RTP). No additional structures, systems or components were inoperable at the time of the discovery that contributed to the event.

**DESCRIPTION OF OCCURRENCE**

On February 13, 2014, at 1356, the Unit 2, 24 SPT {EA/XFMR} was declared inoperable as a result of indications of an internal thermal fault detected by the online dissolved gas in oil monitor. The 24 SPT was removed from service as required by guidance contained in an Adverse Condition Monitoring and Contingency Plan. Operators entered TS 3.8.1, “AC Sources – Operating” for unavailability of one of two redundant offsite power sources to the Class IE AC Distribution system. TSAS 3.8.1.1, Action a.3. requires restoration of the SPT 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.

The estimated time required to replace the transformer with an onsite, available like-for-like spare was 9 days. On February 14, 2014, Salem notified the NRC that it intended to submit a request for a NOED to not enforce compliance with TSAS 3.8.1.1, Action a.3 for a total of 6 days. The additional time requested was to complete actions required to replace, test and return the 24 SPT to service.

On February 15, 2014, at 2115, the NRC granted discretion to not enforce compliance with TSAS 3.8.1.1, Action a.3. for an additional 6 days.

(01-2014)

**LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Salem Generating Station – Unit 2	05000311	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 4
		2014	- 003	- 000	

**NARRATIVE**

By letter dated February 17, 2014, "Request for Enforcement Discretion for Salem Unit 2 Offsite Alternating Current (AC) Sources", Salem Unit 2 requested that the NRC exercise discretion to not enforce compliance with the actions required in TSAS 3.8.1.1, Action a.3., from 1356 on February 16, 2014, until the estimated completion of the 24 SPT replacement, but not to exceed 1356, on February 22, 2014.

The NOED was terminated on February 18, 2014 at 0315, when the 24 SPT was successfully replaced, tested, and energized, and Unit 2 exited TSAS 3.8.1.1, Action a.3.

On February 19, 2014, NRC issued letter "Notice of Enforcement Discretion for PSEG Nuclear Regarding Salem Unit 2" granting enforcement discretion.

**CAUSE OF OCCURRENCE**

On February 13, 2014, the 24 SPT experienced a step change in the amount of dissolved gasses detected in the transformer oil. The dissolved gases in the oil were primarily ethylene, methane and acetylene. No significant generation of carbon-monoxide or carbon-dioxide occurred. This indicated a high temperature thermal fault, internal to the transformer, in an area of the transformer away from paper insulation.

**PREVIOUS SIMILAR OCCURRENCES**

A review of LERs at Salem Generating Station dating back to 2011 identified no similar events.

**SAFETY CONSEQUENCES AND IMPLICATIONS**

Risk insights using Salem's Probabilistic Risk Assessment (PRA) model indicated that the risk increase associated with inoperability of the 24 SPT for an additional 7 days past the TS Completion Time of 72 hours was within the station's normal work control levels. The risk assessment was completed using the methodology prescribed in NRC Inspection Manual Chapter 0410, "Notices of Enforcement Discretion".

To further mitigate risk impact during the enforcement discretion period, Salem Unit 2 implemented a series of compensatory actions including protection of vital equipment, and operator table-top reviews of normal, abnormal, and emergency operating procedures applicable to a further loss of off-site and on-site electrical distribution and generating equipment.

A review of this event determined that a Safety System Functional Failure (SSFF) as defined in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance Indicator Guideline, did not occur. This event did not prevent the ability of a system to fulfill its safety function to either shutdown the reactor, remove residual heat, control the release of radioactive material, or mitigate the consequences of an accident.

**LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Salem Generating Station – Unit 2	05000311	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 4
		2014	- 003	- 000	

**NARRATIVE**

**CORRECTIVE ACTIONS**

1. The 24 SPT was replaced.
2. Additional corrective actions will be determined based on the cause of the 24 SPT combustible gas generation.

**COMMITMENTS**

No commitments are made in this LER.