



**APR 15 2010**

10 CFR 50  
10 CFR 51  
10 CFR 54

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

Salem Nuclear Generating Station, Unit No. 1 and Unit No. 2  
Facility Operating License Nos. DPR-70 and DPR-75  
NRC Docket Nos. 50-272 and 50-311

Subject: Corrections to the Salem Nuclear Generating Station, Unit No. 1 and Unit No. 2  
License Renewal Application

Reference: Letter from PSEG Nuclear to USNRC "Application for Renewed Operating  
Licenses – Salem Nuclear Generating Station, Unit No. 1 and Unit No. 2," dated  
August 18, 2009

PSEG Nuclear LLC has identified corrections to the Salem Nuclear Generating Station, Unit No. 1 and Unit No. 2 (Salem) License Renewal Application (LRA). As a supplement to the Salem LRA, PSEG Nuclear LLC hereby provides a tabulation of these corrections in the Enclosure to this letter. The changes are explained, and where appropriate to facilitate understanding, portions of the LRA are repeated with the change highlighted by strikethroughs for deleted text and bolded italics for inserted text.

This submittal has been discussed with the NRC License Renewal Senior Project Manager for the Salem License Renewal project.

The scope of license renewal commitments 32 and 33 (see LRA Appendix A, Section A.5, page A-67), involving enhancements to the Masonry Walls Program and the Structures Monitoring Program, is expanded to include the Circulating Water Switchgear Building, which houses some SBO recovery equipment. This is discussed under "Structure Purpose" on page 27 and further under the Appendix A changes (A.2.1.32 and A.2.1.33) on page 31 of the Enclosure. No changes to the License Renewal Commitment List, Appendix A, Section A.5, are required, since LRA Sections A.2.1.32 and A.2.1.33 are incorporated into commitments 32 and 33 by reference.

There are no other new or revised regulatory commitments contained in this letter.

If you have any questions, please contact Mr. Ali Fakhar, PSEG Manager - License Renewal, at 856-339-1646.

A141  
NRR

APR 15 2010

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 4/15/2010

Sincerely,

Paul J. Davison

Paul J. Davison  
Vice President, Operations Support  
PSEG Nuclear LLC

Enclosure: Corrections to the Salem Nuclear Generating Station, Unit No. 1 and Unit No. 2  
License Renewal Application

cc: S. Collins, Regional Administrator – USNRC Region I  
D. Ashley, Senior Project Manager, License Renewal – USNRC  
R. Ennis, Project Manager - USNRC  
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## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Introduction

This enclosure contains the descriptions of revisions made to correct errors or omissions identified subsequent to submittal of the License Renewal Application (LRA). For each revision the affected section, page, and paragraph of the LRA is provided and the change is described. If helpful for clarity, entire sentences or paragraphs from the LRA are provided with deleted text highlighted by strikethroughs and inserted text highlighted by bolded italics. Revisions to tables are shown by providing excerpts from the affected tables. Only the affected lines from the tables are provided.

#### Description of the Plant

**Affected Section: 1.4**

**LRA Page Number(s): 1-6**

**Paragraph: Description of the Plant, paragraph 3**

**Change:** A brief description of the Salem Nuclear Generating Station is provided in Section 1.4 on page 1-6 of the LRA. The third paragraph of this discussion is replaced with the following:

***The nuclear steam supply systems for Salem are pressurized water reactors that were designed and supplied by Westinghouse. Salem Unit 1 was initially licensed to 3,338 MWt. License Amendment No. 71 authorized an increase in power level to 3,411 MWt on 2/6/1986. Salem Unit 2 was initially licensed to operate at a rated power level of 3,411 MWt. License Amendment Nos. 243 (Salem Unit 1) and 224 (Salem Unit 2), dated 5/25/2001, authorized a 1.4 percent increase in the licensed rated power level to 3,459 MWt.***

#### Auxiliary Building Ventilation System

**Affected Section: 3.3.2.1.1**

**LRA Page Number(s): 3.3-3, 3.3-4**

**Paragraph: Materials List**

**Change:** The LRA incorrectly included copper alloy with 15% zinc or more, copper alloy with less than 15% zinc, galvanized steel, and polymer piping and fittings in the Auxiliary Building Ventilation System that are subject to aging management. There are no identified piping and fittings of the previously listed materials in the Auxiliary Building Ventilation System. The list of materials on pages 3.3-3 and 3.3-4 for the Auxiliary Building Ventilation System is revised to delete copper alloy with less than 15% zinc and polymer. Copper alloy with 15% zinc or more and galvanized steel are not deleted from the list of materials because there are components, other than piping and fittings, in scope for license renewal composed of these materials in the Auxiliary Building Ventilation System.

In addition, stainless steel bolting in an outdoor air environment in the Auxiliary Building Ventilation System was inadvertently omitted from the LRA. The list of materials on pages 3.3-3 and 3.3-4 for the Auxiliary Building Ventilation System is revised to add stainless steel bolting as shown below.

- ~~Copper Alloy with less than 15% Zinc~~
- ~~Polymer~~
- ***Stainless Steel Bolting***

## **Enclosure**

### **Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Affected Section: 3.3.2.1.1**

**LRA Page Number(s): 3.3-4**

**Paragraph: Aging Management Programs List**

**Change:** The list of aging management programs credited to manage aging of components in the Auxiliary Building Ventilation System provided on page 3.3-4 of the LRA includes the Bolting Integrity (B.2.1.9) program. The Bolting Integrity (B.2.1.9) program is not applicable to manage aging of bolting in the Auxiliary Building Ventilation System. The list of aging management programs provided on page 3.3-4 is revised as shown below.

• ~~Bolting Integrity (B.2.1.9)~~

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-76**

**Paragraph: Table 3.3.1**

**Change:** As discussed above, the Bolting Integrity (B.2.1.9) program is not credited to manage aging of bolting in the Auxiliary Building Ventilation System. Subsequently, the Auxiliary Building Ventilation System is deleted from the list of license renewal systems in the second sentence of paragraph one of the discussion column for Item Number 3.3.1-43 in Table 3.3.1 on page 3.3-76 as shown below.

The Bolting Integrity program, B.2.1.9, will be used to manage loss of material due to general, pitting, and crevice corrosion of the steel bolting and closure bolting exposed to indoor or outdoor air for ~~Auxiliary Building Ventilation~~, Chilled Water, Component Cooling, Compressed Air, Containment Ventilation, Demineralized Water, Emergency Diesel Generators & Auxiliaries, Fire Protection, Fresh Water, Fuel Handling and Fuel Storage, Fuel Oil System, Heating Water and Heating Steam, Non-radioactive Drain, Radiation Monitoring, Radioactive Drain, Radwaste, Sampling, Service Water, and Spent Fuel Cooling Systems.

**Affected Section: 3.3.2**

**LRA Page Number(s): 3.3-118, 3.3-120, 3.3-121**

**Paragraph: Table 3.3.2-1**

**Change:** Due to the revisions discussed above, Table 3.3.2-1 is revised as shown below. Included in this revision is the deletion of plant specific note number five, which is not shown in the excerpt from Table 3.3.2-1.

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**Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Table 3.3.2-1**  
**Auxiliary Building Ventilation System**  
**Summary of Aging Management Evaluation**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Bolting	Mechanical Closure	Carbon and Low Alloy Steel Bolting	Air - Indoor (External)	Loss of Material/General, Pitting and Crevice Corrosion	Bolting Integrity	VII.I-4	3.3.1-43	B
<b>Bolting</b>	<b>Mechanical Closure</b>	<b>Stainless Steel Bolting</b>	<b>Air - Outdoor (External)</b>	<b>Loss of Material/Pitting and Crevice Corrosion</b>	<b>Periodic Inspection</b>	<b>III.B2-7</b>	<b>3.5.1-50</b>	<b>E, 1</b>
Piping and Fittings	Pressure Boundary	Copper Alloy with 15% Zinc or More	Air - Indoor (External)	None	None	VIII.I-2	3.4.1-41	A
Piping and Fittings	Pressure Boundary	Copper Alloy with 15% Zinc or More	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-12	3.3.1-88	A
Piping and Fittings	Pressure Boundary	Copper Alloy with 15% Zinc or More	Air/Gas - Wetted (Internal)	Loss of Material/Pitting and Crevice Corrosion	Periodic Inspection	VII.F2-14	3.3.1-25	E, 2
Piping and Fittings	Pressure Boundary	Copper Alloy with less than 15% Zinc	Air - Indoor (External)	None	None	VIII.I-2	3.4.1-41	A
Piping and Fittings	Pressure Boundary	Copper Alloy with less than 15% Zinc	Air with Borated Water Leakage (External)	None	None	VII.J-5	3.3.1-99	A
Piping and Fittings	Pressure Boundary	Copper Alloy with less than 15% Zinc	Air/Gas - Wetted (Internal)	Loss of Material/Pitting and Crevice Corrosion	Periodic Inspection	VII.F2-14	3.3.1-25	E, 2
Piping and Fittings	Pressure Boundary	Galvanized Steel	Air - Indoor (External)	None	None	VII.J-6	3.3.1-92	A
Piping and Fittings	Pressure Boundary	Galvanized Steel	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A
Piping and Fittings	Pressure Boundary	Galvanized Steel	Air/Gas - Wetted (Internal)	Loss of Material/General, Pitting and Crevice Corrosion	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	VII.F2-3	3.3.1-72	C
Piping and Fittings	Pressure Boundary	Polymer	Air - Indoor (External)	None	None			F, 5
Piping and Fittings	Pressure Boundary	Polymer	Air with Borated Water Leakage (External)	None	None			F, 5
Piping and Fittings	Pressure Boundary	Polymer	Air/Gas - Wetted (Internal)	None	None			F, 5

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Chilled Water System

**Affected Section:** 2.3.3.3

**LRA Page Number(s):** 2.3-74

**Paragraph:** System Boundary, paragraph 2, sentence 1

**Change:** The system boundary flags between the Fresh Water System and the Chilled Water system were shown on both LR-205324, Sheet 1 (C-11, H-10) and LR-205216, Sheet 1 (C-7) and Sheet 2 (C-2). The boundary flags are shown correctly on LR-205324, Sheet 1 (C-11, H-10). The system boundary flags on LR-205216, Sheet 1 (C-7) and Sheet 2 (C-2) have been removed. In addition, the boundary between the Chilled Water System and the Fresh Water System was not clearly identified in the system boundary description in the LRA. For clarity, the first sentence of the second paragraph of the system boundary discussion on page 2.3-74 is revised to read as shown below.

The Chilled Water System boundary begins at the ***outlet of the Fresh Water System isolation valve to the*** chilled water expansion tank and continues through the chilled water pumps to the three chiller coolers.

**Affected Section:** 2.3.3.3

**LRA Page Number(s):** 2.3-78

**Paragraph:** Table 2.3.3-3

**Change:** A line item identifying filter housings with a leakage boundary intended function was inadvertently omitted from the Table 2.3.3-3 of the LRA. Table 2.3.3-3 is revised as shown below.

**Table 2.3.3-3      Chilled Water System  
Components Subject to Aging Management Review**

Component Type	Intended Function
<b><i>Filter Housing</i></b>	<b><i>Leakage Boundary</i></b>

**Affected Section:** 3.3.2.1.3

**LRA Page Number(s):** 3.3-6

**Paragraph:** Materials List

**Change:** The list of materials of construction for the Chilled Water System components in the LRA included ductile cast iron valves in the scope of license renewal. The identified ductile cast iron valves are on a portion of the Chilled Water System that is not in the scope of license renewal. The list of materials of construction for the Chilled Water System components in Section 3.3.2.1.3 on page 3.3-6 is revised to delete ductile cast iron as shown below.

● — ~~Ductile Cast Iron~~

**Affected Section:** 3.3.2

**LRA Page Number(s):** 3.31-142, 3.3-150, 3.3-153, 3.3-154

**Paragraph:** Table 3.3.2-3

**Change:** As discussed above, there are no identified ductile cast iron valves in scope for license renewal in the Chilled Water System. As a result, the line items for ductile cast iron valves are deleted from Table 3.3.2-3 on pages 3.3-153 and 3.3-154.

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### **Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

In addition, the line items in Table 3.3.2-3 referring to filter housings are assigned a pressure boundary function on page 3.3-142. The correct function for the filter housings is leakage boundary.

The refrigerant coolant loop for each of the chiller coolers includes a carbon steel filter housing with a pressure boundary function and an air/gas-dry internal environment. Table 3.3.2-3 is revised to include these filter housings which were inadvertently omitted. The refrigerant coolant loop for the chiller coolers also contains carbon steel and copper alloy with less than 15% zinc piping and fittings as well as copper alloy with 15% zinc or more and gray cast iron valves. The carbon steel and copper alloy with less than 15% zinc piping and fittings, and the copper alloy with 15% zinc or more and gray cast iron valves, in an air/gas-dry environment were inadvertently omitted from Table 3.3.2-3 of the LRA.

There are no identified copper alloy with 15% zinc or more or gray cast iron valves, in a closed-cycle cooling water environment, in scope for license renewal in the Chilled Water System.

Table 3.3.2-3 is revised as shown below to address the preceding issues.

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**Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Table 3.3.2-3**  
**Chilled Water System**  
**Summary of Aging Management Evaluation**

<b>Component Type</b>	<b>Intended Function</b>	<b>Material</b>	<b>Environment</b>	<b>Aging Effect Requiring Management</b>	<b>Aging Management Programs</b>	<b>NUREG-1801 Vol. 2 Item</b>	<b>Table 1 Item</b>	<b>Notes</b>
<i>Filter Housing</i>	<i>Leakage Boundary</i>	<i>Carbon Steel</i>	<i>Air - Indoor (External)</i>	<i>Loss of Material/General Corrosion</i>	<i>External Surfaces Monitoring</i>	<i>VII.I-8</i>	<i>3.3.1-58</i>	<i>A</i>
<i>Filter Housing</i>	<i>Leakage Boundary</i>	<i>Carbon Steel</i>	<i>Air with Borated Water Leakage (External)</i>	<i>Loss of Material/Boric Acid Corrosion</i>	<i>Boric Acid Corrosion</i>	<i>VII.I-10</i>	<i>3.3.1-89</i>	<i>A</i>
Filter Housing	Pressure Leakage Boundary	Carbon Steel	Closed Cycle Cooling Water (Internal)	Loss of Material/General, Pitting and Crevice Corrosion	Closed-Cycle Cooling Water System	VII.C2-14	3.3.1-47	B
Filter Housing	Pressure Leakage Boundary	Gray Cast Iron	Air - Indoor (External)	Loss of Material/General Corrosion	External Surfaces Monitoring	VII.I-8	3.3.1-58	A
Filter Housing	Pressure Leakage Boundary	Gray Cast Iron	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A
Filter Housing	Pressure Leakage Boundary	Gray Cast Iron	Closed Cycle Cooling Water (Internal)	Loss of Material/General, Pitting and Crevice Corrosion	Closed-Cycle Cooling Water System	VII.C2-14	3.3.1-47	B
Filter Housing	Pressure Leakage Boundary	Gray Cast Iron	Closed Cycle Cooling Water (Internal)	Loss of Material/Selective Leaching	Selective Leaching of Materials	VII.C2-8	3.3.1-85	A
<i>Filter Housing</i>	<i>Pressure Boundary</i>	<i>Carbon Steel</i>	<i>Air/Gas - Dry (Internal)</i>	<i>None</i>	<i>None</i>	<i>VII.J-23</i>	<i>3.3.1-97</i>	<i>A</i>
<i>Piping and Fittings</i>	<i>Pressure Boundary</i>	<i>Carbon Steel</i>	<i>Air/Gas - Dry (Internal)</i>	<i>None</i>	<i>None</i>	<i>VII.J-23</i>	<i>3.3.1-97</i>	<i>A</i>
<i>Piping and Fittings</i>	<i>Pressure Boundary</i>	<i>Copper Alloy less than 15% Zinc</i>	<i>Air/Gas - Dry (Internal)</i>	<i>None</i>	<i>None</i>	<i>VII.J-4</i>	<i>3.3.1-99</i>	<i>A</i>
<i>Piping and Fittings</i>	<i>Pressure Boundary</i>	<i>Copper Alloy less than 15% Zinc</i>	<i>Air - Indoor (External)</i>	<i>None</i>	<i>None</i>	<i>VIII.I-2</i>	<i>3.4.1-41</i>	<i>A</i>
<i>Piping and Fittings</i>	<i>Pressure Boundary</i>	<i>Copper Alloy less than 15% Zinc</i>	<i>Air with Borated Water Leakage (External)</i>	<i>None</i>	<i>None</i>	<i>VII.J-5</i>	<i>3.3.1-99</i>	<i>A</i>
Valve Body	Leakage Boundary	Ductile Cast Iron	Air - Indoor (External)	Loss of Material/General Corrosion	External Surfaces Monitoring	VII.I-8	3.3.1-58	A
Valve Body	Leakage Boundary	Ductile Cast Iron	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A



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### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

Table 3.3.2-3

Chilled Water System

(Continued)

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Valve Body	Leakage Boundary	Ductile Cast Iron	Closed Cycle Cooling Water (Internal)	Loss of Material/General, Pitting and Crevice Corrosion	Closed Cycle Cooling Water System	VII.C2-14	3.3.1-47	B
Valve Body	Pressure Boundary	Ductile Cast Iron	Air - Indoor (External)	Loss of Material/General Corrosion	External Surfaces Monitoring	VII.I-8	3.3.1-58	A
Valve Body	Pressure Boundary	Ductile Cast Iron	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A
Valve Body	Pressure Boundary	Ductile Cast Iron	Closed Cycle Cooling Water (Internal)	Loss of Material/General, Pitting and Crevice Corrosion	Closed Cycle Cooling Water System	VII.C2-14	3.3.1-47	B
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Copper Alloy with 15% Zinc or More</b>	<b>Air/Gas - Dry (Internal)</b>	<b>None</b>	<b>None</b>	<b>VII.J-4</b>	<b>3.3.1-97</b>	<b>A</b>
Valve Body	Pressure Boundary	Copper Alloy with 15% Zinc or More	Closed Cycle Cooling Water (Internal)	Loss of Material/Pitting and Crevice Corrosion	Closed Cycle Cooling Water System	VII.C2-4	3.3.1-51	B, 3
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Gray Cast Iron</b>	<b>Air/Gas - Dry (Internal)</b>	<b>None</b>	<b>None</b>	<b>VII.J-23</b>	<b>3.3.1-97</b>	<b>A</b>
Valve Body	Pressure Boundary	Gray Cast Iron	Closed Cycle Cooling Water (Internal)	Loss of Material/General, Pitting and Crevice Corrosion	Closed Cycle Cooling Water System	VII.C2-14	3.3.1-47	B
Valve Body	Pressure Boundary	Gray Cast Iron	Closed Cycle Cooling Water (Internal)	Loss of Material/Selective Leaching	Selective Leaching of Materials	VII.C2-8	3.3.1-85	A

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### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Circulating Water System

**Affected Section: 3.3.2**

**LRA Page Number(s): 3.3-157**

**Paragraph: Table 3.3.2-4**

**Change:** The NUREG-1801 Volume 2 Item Number and the Table 1 Item Number were inadvertently omitted from the line item for reinforced concrete piping and fittings in a raw water environment with a loss of material due to abrasion and/or cavitation aging effect in the Circulating Water System in Table 3.3.2-4 on page 3.3-157. The correction is shown in the following excerpt from Table 3.3.2-4.

**Table 3.3.2-4  
Circulating Water System  
Summary of Aging Management Evaluation**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Piping and Fittings	Pressure Boundary	Reinforced Concrete	Raw Water (Internal)	Loss of Material/ Abrasion; Cavitation	Open-Cycle Cooling Water System	<i>III.A6-7</i>	<i>3.5.1-45</i>	E, 3

**Affected Section: 3.5**

**LRA Page Number(s): 3.5-75**

**Paragraph: Table 3.5.1**

**Change:** Due to the correction discussed above, the Circulating Water System is added to the list of license renewal systems in the first sentence of the second paragraph of the discussion column for Item Number 3.5.1-45 in Table 3.5.1 on page 3.5-75 as shown below.

Components in ***the Circulating Water System*** and the Service Water System have been aligned to this item number based on material, environment and aging effect.

#### Compressed Air System

**Affected Section: 3.3.2.1.6**

**LRA Page Number(s): 3.3-10**

**Paragraph: Materials List**

**Change:** During the scoping process in the development of the LRA the Station Air Compressor (SAC) moisture separators were incorrectly identified as being composed of carbon steel. There was a design change in which the carbon steel SAC moisture separators were replaced with stainless steel moisture separators. Also, the piping and fittings, and valves of the SAC lubricating oil system were inadvertently omitted from scope. The piping and fittings in the SAC lubricating oil system are carbon steel. The valves in the SAC lubricating oil system are carbon steel, gray cast iron, copper alloy with 15% zinc or more, copper alloy with less than 15% zinc, and stainless steel. Due to the correction discussed above, the list of materials on page 3.3-10 for the Compressed Air System is revised to add gray cast iron. The list is revised as shown below.

- ***Gray Cast Iron***

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### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

**Affected Section: 3.3.2.2.10.4**

**LRA Page Number(s): 3.3-47**

**Paragraph: 2<sup>nd</sup> Paragraph**

**Change:** The second paragraph of Section 3.3.2.2.10.4 of the LRA is revised to include the copper alloy with less than 15% zinc valves that are part of the SAC lubricating oil system in the Compressed Air System as shown below.

Salem will implement a One-Time Inspection program, B.2.1.20, to verify the effectiveness of the Lubricating Oil Analysis program, B.2.1.27, to manage loss of material due to pitting and crevice corrosion of the copper alloy heat exchanger components **and valves** exposed to lubricating oil. The Lubricating Oil Analysis program and One-Time Inspection program manage loss of material on the Component Cooling system copper alloy heat exchanger components **and the Compressed Air System copper alloy valves** in a lubricating oil environment. These heat exchanger components have been evaluated with the Component Cooling system, which provides the cooling water to these heat exchangers. **The valves have been evaluated with the Compressed Air System.** The Lubricating Oil Analysis and One-Time Inspection programs are described in Appendix B.

**Affected Section: 3.3.2.2.12.2**

**LRA Page Number(s): 3.3-50**

**Paragraph: 2<sup>nd</sup> Paragraph**

**Change:** The Compressed Air System is added to the list of license renewal systems in the first sentence of the second paragraph of Section 3.3.2.2.12.2 as shown below.

Salem will implement a One-Time Inspection program, B.2.1.20, to verify the effectiveness of the Lubricating Oil Analysis program, B.2.1.27, to manage the loss of material due to pitting, and crevice corrosion of the stainless steel piping, piping components, piping elements, and heat exchanger components exposed to lubricating oil for the Component Cooling, **Compressed Air**, Emergency Diesel Generators & Auxiliaries, Reactor Coolant, and Service Water Systems.

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-69**

**Paragraph: Table 3.3.1**

**Change:** The first sentence of the second paragraph in the discussion column for Item Number 3.3.1-26 on page 3.3-69 is revised to include the copper alloy with less than 15% zinc valves that are part of the SAC lubricating oil system in the Compressed Air System as shown below.

The One-Time Inspection program, B.2.1.20, will be used to verify the effectiveness of the Lubricating Oil Analysis program, B.2.1.27, to manage loss of material due to pitting and crevice corrosion of the copper alloy heat exchanger components **and valves** exposed to lubricating oil in the Component Cooling System **and the Compressed Air System.**

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### **Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-73**

**Paragraph: Table 3.3.1**

**Change:** The Compressed Air System is added to the list of license renewal systems in the second sentence of the discussion column for Item Number 3.3.1-33 on page 3.3-73 as shown below.

The One-Time Inspection program, B.2.1.20, will be used to verify the effectiveness of the Lubricating Oil Analysis program, B.2.1.27, to manage loss of material due to pitting and crevice corrosion of the stainless steel piping, piping components, piping elements, and heat exchanger components exposed to lubricating oil for the Component Cooling, **Compressed Air**, Emergency Diesel Generators & Auxiliaries, Reactor Coolant, and Service Water Systems.

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-86**

**Paragraph: Table 3.3.1**

**Change:** Tanks are added to the list of component types in the second sentence of the discussion column for Item Number 3.3.1-54 on page 3.3-86 as shown below.

The Compressed Air Monitoring program, B.2.1.14, will be used to manage loss of material due to pitting and crevice corrosion of the stainless steel **tanks**, piping, piping components, and piping elements exposed to air/gas - wetted for the Compressed Air System.

**Affected Section: 3.3.2**

**LRA Page Number(s): 3.3-189, 3.3-191, 3.3-192**

**Paragraph: Table 3.3.2-6**

**Change:** Due to the correction discussed above, Table 3.3.2-6 is revised to correct the material of the SAC moisture separators from carbon steel to stainless steel. Table 3.3.2-6 is also revised to include the piping and fittings, and valves associated with the SAC lubricating oil system. The preceding corrections can be seen in the excerpt from Table 3.3.2-6 shown below.

**Enclosure**  
**Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Table 3.3.2-6**  
**Compressed Air System**  
**Summary of Aging Management Evaluation**

<b>Component Type</b>	<b>Intended Function</b>	<b>Material</b>	<b>Environment</b>	<b>Aging Effect Requiring Management</b>	<b>Aging Management Programs</b>	<b>NUREG-1801 Vol. 2 Item</b>	<b>Table 1 Item</b>	<b>Notes</b>
<b>Piping and Fittings</b>	<b>Pressure Boundary</b>	<b>Carbon Steel</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>Lubricating Oil Analysis</b>	<b>VII.G-22</b>	<b>3.3.1-14</b>	<b>B</b>
<b>Piping and Fittings</b>	<b>Pressure Boundary</b>	<b>Carbon Steel</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>One-Time Inspection</b>	<b>VII.G-22</b>	<b>3.3.1-14</b>	<b>A</b>
Tanks (SAC Moisture Separator)	Pressure Boundary	<del>Carbon</del> <b>Stainless Steel</b>	Air - Indoor (External)	<del>Loss of Material/General Corrosion</del> <b>None</b>	<del>External Surface Monitoring</del> <b>None</b>	<del>VII.I-8</del> <b>VII.J-15</b>	<del>3.3.1-58</del> <b>3.3.1-94</b>	<del>A</del> <b>C</b>
Tanks (SAC Moisture Separator)	Pressure Boundary	<del>Carbon</del> <b>Stainless Steel</b>	Air/Gas - Wetted (Internal)	<del>Loss of Material/General, Pitting and Crevice Corrosion</del>	Compressed Air Monitoring	<del>VII.G-23</del> <b>VII.D-4</b>	<del>3.3.1-71</del> <b>3.3.1-54</b>	<del>E, 2</del> <b>A</b>
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Carbon Steel</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>Lubricating Oil Analysis</b>	<b>VII.G-22</b>	<b>3.3.1-14</b>	<b>B</b>
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Carbon Steel</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>One-Time Inspection</b>	<b>VII.G-22</b>	<b>3.3.1-14</b>	<b>A</b>
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Copper Alloy with 15% Zinc or More</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/Pitting and Crevice Corrosion</b>	<b>Lubricating Oil Analysis</b>	<b>VII.H2-10</b>	<b>3.3.1-26</b>	<b>B</b>
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Copper Alloy with 15% Zinc or More</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/Pitting and Crevice Corrosion</b>	<b>One-Time Inspection</b>	<b>VII.H2-10</b>	<b>3.3.1-26</b>	<b>A</b>
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Copper Alloy with less than 15% Zinc</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/Pitting and Crevice Corrosion</b>	<b>Lubricating Oil Analysis</b>	<b>VII.H2-10</b>	<b>3.3.1-26</b>	<b>B</b>
<b>Valve Body</b>	<b>Pressure Boundary</b>	<b>Copper Alloy with less than 15% Zinc</b>	<b>Lubricating Oil (Internal)</b>	<b>Loss of Material/Pitting and Crevice Corrosion</b>	<b>One-Time Inspection</b>	<b>VII.H2-10</b>	<b>3.3.1-26</b>	<b>A</b>

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

**Table 3.3.2-3**

**Compressed Air System**

**(Continued)**

<b>Component Type</b>	<b>Intended Function</b>	<b>Material</b>	<b>Environment</b>	<b>Aging Effect Requiring Management</b>	<b>Aging Management Programs</b>	<b>NUREG-1801 Vol. 2 Item</b>	<b>Table 1 Item</b>	<b>Notes</b>
<i>Valve Body</i>	<i>Pressure Boundary</i>	<i>Gray Cast Iron</i>	<i>Lubricating Oil (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>Lubricating Oil Analysis</i>	<i>VII.G-22</i>	<i>3.3.1-14</i>	<i>B</i>
<i>Valve Body</i>	<i>Pressure Boundary</i>	<i>Gray Cast Iron</i>	<i>Lubricating Oil (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>One-Time Inspection</i>	<i>VII.G-22</i>	<i>3.3.1-14</i>	<i>A</i>
<i>Valve Body</i>	<i>Pressure Boundary</i>	<i>Stainless Steel</i>	<i>Lubricating Oil (Internal)</i>	<i>Loss of Material/ Pitting and Crevice Corrosion</i>	<i>Lubricating Oil Analysis</i>	<i>VII.H2-17</i>	<i>3.3.1.33</i>	<i>B</i>
<i>Valve Body</i>	<i>Pressure Boundary</i>	<i>Stainless Steel</i>	<i>Lubricating Oil (Internal)</i>	<i>Loss of Material/ Pitting and Crevice Corrosion</i>	<i>One-Time Inspection</i>	<i>VII.H2-17</i>	<i>3.3.1.33</i>	<i>A</i>

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Cranes and Hoists

**Affected Section:** 2.3.3.9

**LRA Page Number(s):** 2.3-114

**Paragraph:** List of cranes and hoists in the scope of license renewal

**Change:** Section 2.3.3.9 of the LRA provides a list of cranes and hoists in the scope of license renewal. The following two items are removed from that list as shown below.

~~Fuel Handling Rod Cluster Containment Changing Filter Hoist~~  
~~Aux. Bldg Monorail above Waste Monitor Valve Pit~~

During development of documents to implement LRA enhancements, it was determined that neither of these components exist as installed cranes or hoists at Salem Nuclear Generating Station.

#### Fresh Water System

**Affected Section:** 3.3.2.1.13

**LRA Page Number(s):** 3.3-19

**Paragraph:** Materials List

**Change:** The system boundary flags between the Fresh Water System and the Chilled Water system were shown on both LR-205324, Sheet 1 (C-11, H-10) and LR-205216, Sheet 1 (C-7) and Sheet 2 (C-2). The boundary flags are shown correctly on LR-205324, Sheet 1 (C-11, H-10). The system boundary flags on LR-205216, Sheet 1 (C-7) and Sheet 2 (C-2) have been removed. Correcting this issue removes all identified carbon steel piping and fittings, and valves from the scope of license renewal in the Fresh Water System. Therefore, carbon steel is deleted from the list of materials for the Fresh Water System in Section 3.3.2.1.13 of the LRA on page 3.3-19 as shown below.

●—Carbon Steel

**Affected Section:** 3.3.2.1.13

**LRA Page Number(s):** 3.3-20

**Paragraph:** Aging Management Programs List

**Change:** The External Surfaces Monitoring (B.2.1.24) program and the Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.1.26) program were specified for use to manage aging of the carbon steel components in the Fresh Water System. The External Surfaces Monitoring (B.2.1.24) program and the Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.1.26) program are deleted from the list of aging management programs credited to manage the aging effects for the Fresh Water System components on page 3.3-20 as shown below because there are no identified carbon steel components in the Fresh Water System.

●—External Surfaces Monitoring (B.2.1.24)  
●—Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components (B.2.1.26)

## **Enclosure**

### **Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-89**

**Paragraph: Table 3.3.1**

**Change:** Due to the corrections discussed above, the Fresh Water System is removed from the list of license renewal systems in the second sentence of the first paragraph of the discussion column for Item Number 3.3.1-58 in Table 3.3.1 on page 3.3-89 of the LRA as shown below.

The External Surfaces Monitoring program, B.2.1.24, will be used to manage loss of material due to general corrosion of the steel external surfaces exposed to indoor and outdoor air for the Chemical & Volume Control, Chilled Water, Component Cooling, Compressed Air, Demineralized Water, Emergency Diesel Generators & Auxiliaries, Fire Protection, ~~Fresh Water~~, Fuel Oil, Heating Water and Heating Steam, Non-radioactive Drain, Radwaste, Sampling, and Service Water Systems.

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-96**

**Paragraph: Table 3.3.1**

**Change:** The Fresh Water System is also removed from the list of license renewal systems in the second paragraph of the discussion column for Item Number 3.3.1-68 in Table 3.3.1 on page 3.3-96 of the LRA as shown below.

The Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components program, B.2.1.26, has been substituted to manage loss of material due to general, pitting, crevice, and microbiologically-influenced corrosion, and fouling of the steel piping, piping components, piping elements, tanks and heat exchangers exposed to raw water for the Component Cooling, ~~Fresh Water~~, Heating Water and Heating Steam, Non-radioactive Drain and Radwaste Systems.

**Affected Section: 3.3.2**

**LRA Page Number(s): 3.3-248, 3.3-249, 3.3-250**

**Paragraph: Table 3.3.2-13**

**Change:** In addition, the line items referring to carbon steel piping and fittings and carbon steel valves are deleted from Table 3.3.2-13 on pages 3.3-248 and 3.3-249 as seen in the excerpt from the table shown below. Also, plant specific note number one is deleted from page 3.3-250 since it is no longer applicable. Plant specific note number two is renumbered to note number one.



**Enclosure**  
**Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Table 3.3.2-13**  
**Fresh Water System**  
**Summary of Aging Management Evaluation**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Piping and Fittings	Leakage Boundary	Carbon Steel	Air - Indoor (External)	Loss of Material/General Corrosion	External Surfaces Monitoring	VII.I-8	3.3.1-58	A
Piping and Fittings	Leakage Boundary	Carbon Steel	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A
Piping and Fittings	Leakage Boundary	Carbon Steel	Raw Water (Internal)	Loss of Material/General, Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	VII.G-24	3.3.1-68	E, 1
Piping and Fittings	Leakage Boundary	Copper Alloy with 15% Zinc or More	Raw Water (Internal)	Loss of Material/Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Periodic Inspection	VII.C1-9	3.3.1-81	E, 2 1
Piping and Fittings	Leakage Boundary	Copper Alloy with less than 15% Zinc	Raw Water (Internal)	Loss of Material/Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Periodic Inspection	VII.C1-9	3.3.1-81	E, 2 1
Valve Body	Leakage Boundary	Carbon Steel	Air - Indoor (External)	Loss of Material/General Corrosion	External Surfaces Monitoring	VII.I-8	3.3.1-58	A
Valve Body	Leakage Boundary	Carbon Steel	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A
Valve Body	Leakage Boundary	Carbon Steel	Raw Water (Internal)	Loss of Material/General, Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	VII.G-24	3.3.1-68	E, 1
Valve Body	Leakage Boundary	Copper Alloy with less than 15% Zinc	Raw Water (Internal)	Loss of Material/Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Periodic Inspection	VII.C1-9	3.3.1-81	E, 2 1

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Heating Water and Heating Steam System

**Affected Section:** 2.3.3.17

**LRA Page Number(s):** 2.3-158, 2.3-159

**Paragraph:** Table 2.3.3-17

**Change:** The Heating Water and Heating Steam license renewal system can be divided into two separate plant systems; the Heating Water System and the Heating Steam System.

The Heating Steam System is fed from bleed steam from one of the main turbines. Since the quality of the steam is not maintained and moisture is possible the internal environment in this portion of the Heating Water and Heating Steam license renewal system is conservatively considered treated water. However, portions of this system are isolated and the internal environments of the isolated components should have been conservatively identified in the LRA as raw water.

The Heating Water portion of the system circulates water, heated from the Heating Steam portion of the system, in a closed loop between the heating water converters and the individual heaters or heat exchangers by the heating water circulating pumps. The internal environment of the Heating Water portion of the system is Closed-Cycle Cooling Water.

The proper environment was not consistently applied throughout the Heating Water and Heating Steam license renewal system in the LRA and is corrected. The changes identified in the excerpt of Table 2.3.3-17 shown below are required to permit environment differentiation between Salem Unit 1 and Salem Unit 2 equipment.

**Table 2.3.3-17     Heating Water and Heating Steam System**  
**Components Subject to Aging Management Review**

Component Type	Intended Function
Pump Casing ( <i>Unit 1</i> HHB condensate receiver)	Leakage Boundary
<b><i>Pump Casing (Unit 2 HHB condensate receiver)</i></b>	<b><i>Leakage Boundary</i></b>
<b><i>Tanks (Unit 1 HHB Condensate receiver)</i></b>	<b><i>Leakage Boundary</i></b>
Tanks ( <i>Unit 2</i> HHB Condensate receiver and <i>Unit 1 and Unit 2</i> Condensate Level Pot)	Leakage Boundary

**Affected Section:** 3.3.2.1.17

**LRA Page Number(s):** 3.3-24

**Paragraph:** Environments List

**Change:** Due to the correction discussed above, the list of environments is modified. The list of environments on page 3.3-24 is revised to include Treated Water and Treated Water > 140° F as shown below.

- ***Treated Water***
- ***Treated Water > 140 °F***

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

**Affected Section:** 3.3.2.1.17

**LRA Page Number(s):** 3.3-25

**Paragraph:** Aging Management Programs List

**Change:** Due to the correction discussed above, the list of aging management programs is modified. The list of aging management programs on page 3.3-25 is revised to include One-Time Inspection (B.2.1.20) and Water Chemistry (B.2.1.2) as shown below.

- ***One-Time Inspection (B.2.1.20)***
- ***Water Chemistry (B.2.1.2)***

**Affected Section:** 3.4.2.2.2.1

**LRA Page Number(s):** 3.4-9

**Paragraph:** 2<sup>nd</sup> Paragraph, first sentence

**Change:** The Heating Water and Heating Steam System is added to the list of license renewal systems in the first sentence of the second paragraph of Section 3.4.2.2.2.1 as shown below.

Salem will implement a One-Time Inspection program, B.2.1.20, for susceptible locations to verify the effectiveness of the Water Chemistry program, B.2.1.2, to manage the loss of material due to general, pitting, and crevice corrosion in steel piping, piping components, piping elements, heat exchanger components, tanks, turbine casings, and steel components exposed to treated water or steam in the Auxiliary Feedwater System, Component Cooling System, Demineralized Water System, ***Heating Water and Heating Steam System***, Main Condensate and Feedwater System, Main Condenser and Air Removal System, Main Steam System, Reactor Coolant System, Sampling System, and Steam Generators.

**Affected Section:** 3.4.2.2.6

**LRA Page Number(s):** 3.4-12

**Paragraph:** 2<sup>nd</sup> Paragraph, first sentence

**Change:** The Heating Water and Heating Steam System is added to the list of license renewal systems in the first sentence of the second paragraph of Section 3.4.2.2.6 as shown below.

Salem will implement a One-Time Inspection program, B.2.1.20, for susceptible locations to verify the effectiveness of the Water Chemistry program, B.2.1.2, to manage cracking due to stress corrosion cracking in stainless steel piping, piping components, piping elements, heat exchanger components, steam generator components, and tanks exposed to treated water > 60 deg C (>140 °F) in the Auxiliary Feedwater System, Demineralized Water System, ***Heating Water and Heating Steam System***, Main Condensate and Feedwater System, Main Steam System, Sampling System, and Steam Generators.

**Affected Section:** 3.4.2.2.7.1

**LRA Page Number(s):** 3.4-13

**Paragraph:** 2<sup>nd</sup> Paragraph, first sentence

**Change:** The Heating Water and Heating Steam System is added to the list of license renewal systems in the first sentence of the second paragraph of Section 3.4.2.2.7 as shown below.

Salem will implement a One-Time Inspection program, B.2.1.20, for susceptible locations to verify the effectiveness of the Water Chemistry program, B.2.1.2, to manage the loss of material due to pitting and crevice corrosion in aluminum, copper alloy, and stainless steel piping, piping components and piping elements, tanks, and heat exchanger components exposed to treated water in the Auxiliary Feedwater System, Chemical and Volume Control

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

System, Component Cooling System, Demineralized Water System, Main Condensate and Feedwater System, **Heating Water and Heating Steam System**, Main Condenser and Air Removal System, Main Steam System, Reactor Coolant System, Sampling System, and Steam Generators.

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-105**

**Paragraph: Table 3.3.1**

**Change:** Copper alloy is added to the second sentence in the discussion column for Item Number 3.3.1-80 on page 3.3-105 as shown below.

The Periodic Inspection program, B.2.2.2, will be substituted to manage loss of material due to pitting, crevice, and microbiologically-induced corrosion of the **copper alloy and** stainless steel piping, piping components, and piping elements exposed to raw water for these systems.

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-109**

**Paragraph: Table 3.3.1**

**Change:** Treated water is added to the list of environments in the second sentence in the discussion column for Item Number 3.3.1-85 on page 3.3-109 as shown below.

The Selective Leaching of Materials program, B.2.1.21, will be used to manage loss of material due to selective leaching of the gray cast iron piping, piping components, piping elements, tanks, fire hydrants, and heat exchanger components exposed to **treated water**, soil, raw water, or closed-cycle cooling water in the Chilled Water System, Fire Protection System, Heating Water and Heating Steam System, and Service Water System.

**Affected Section: 3.4**

**LRA Page Number(s): 3.4-17**

**Paragraph: Table 3.4.1**

**Change:** Tanks are added to the list of components in the second sentence in the discussion column for Item Number 3.4.1-4 on page 3.4-17 as shown below.

The One-Time Inspection program, B.2.1.20, will be used to verify the effectiveness of the Water Chemistry program, B.2.1.2 to manage the loss of material due to general, pitting, and crevice corrosion in steel piping, piping components, ~~and~~ piping elements, **and tanks** exposed to treated water.

**Affected Section: 3.4**

**LRA Page Number(s): 3.4-22**

**Paragraph: Table 3.4.1**

**Change:** Valves are added to the list of components in the second sentence in the discussion column for Item Number 3.4.1-15 on page 3.4-22 as shown below.

The One-Time Inspection program, B.2.1.20, will be used to verify the effectiveness of the Water Chemistry program, B.2.1.2, to manage the loss of material due to pitting and crevice corrosion in copper alloy heat exchanger components **and valves**, and aluminum tanks exposed to treated water.

## **Enclosure**

### **Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Affected Section:** 3.3.2

**LRA Page Number(s):** 3.3-269, 3.3-270, 3.3-274, 3.3-275, 3.3-276, 3.3-277

**Paragraph:** Table 3.3.2-17

**Change:** Revising the internal environments of the Heating Water and Heating Steam license renewal system results in line item changes to Table 3.3.2-17. In addition, the systems in which the shell side and tube side of the waste feed pre-heater heat exchanger and the boric acid feed pre-heater heat exchanger were evaluated were reversed in the LRA. Table 3.3.2-17 is revised to show that the carbon steel shell side of the heat exchangers are evaluated with the Heating Water and Heating Steam System. These corrections are shown in the excerpt of Table 3.3.2-17 below. The stainless steel tube side of the heat exchangers are evaluated in the Radwaste System as shown in the excerpt from Table 3.3.2-21 on page 25.

**Enclosure**  
**Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Table 3.3.2-17**  
**Heating Water and Heating Steam System**  
**Summary of Aging Management Evaluation**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Desuperheater	Leakage Boundary	Stainless Steel	<del>Closed Cycle Cooling</del> <b>Raw Water (Internal)</b>	Loss of Material/Pitting, and Crevice, <b>and Microbiologically Influenced Corrosion</b>	<del>Closed Cycle Cooling Water System</del> <b>Periodic Inspection</b>	<del>VII.C2-10</del> <b>VII.H2-18</b>	<del>3.3.1-50</del> <b>3.3.1-80</b>	D E, 3
Drain Traps	Leakage Boundary	Gray Cast Iron	<del>Closed Cycle Cooling</del> <b>Raw Water (Internal)</b>	Loss of Material/Pitting, and Crevice, <b>and Microbiologically Influenced Corrosion, and Fouling</b>	<del>Closed Cycle Cooling Water System</del> <b>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components</b>	<del>VII.C2-14</del> <b>VII.G-24</b>	<del>3.3.1-47</del> <b>3.3.1-68</b>	B E, 2
Drain Traps	Leakage Boundary	Gray Cast Iron	<del>Closed Cycle Cooling</del> <b>Raw Water (Internal)</b>	Loss of Material/Selective Leaching	Selective Leaching of Materials	<del>VII.C2-8</del> <b>VII.C1-11</b>	3.3.1-85	A
<b>Drain Traps</b>	<b>Leakage Boundary</b>	<b>Gray Cast Iron</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>Water Chemistry</b>	<b>VIII.B1-11</b>	<b>3.4.1-4</b>	<b>A</b>
<b>Drain Traps</b>	<b>Leakage Boundary</b>	<b>Gray Cast Iron</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>One-Time Inspection</b>	<b>VIII.B1-11</b>	<b>3.4.1-4</b>	<b>A</b>
<b>Drain Traps</b>	<b>Leakage Boundary</b>	<b>Gray Cast Iron</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/Selective Leaching</b>	<b>Selective Leaching of Materials</b>	<b>VII.C2-9</b>	<b>3.3.1-85</b>	<b>A</b>
Flow Element	Leakage Boundary	Stainless Steel	<del>Closed Cycle Cooling</del> <b>Raw Water (Internal)</b>	Loss of Material/Pitting, and Crevice, <b>and Microbiologically Influenced Corrosion</b>	<del>Closed Cycle Cooling Water System</del> <b>Periodic Inspection</b>	<del>VII.C2-10</del> <b>VII.H2-18</b>	<del>3.3.1-50</del> <b>3.3.1-80</b>	B E, 3
Heat Exchanger Components (Waste, Boric Acid Feed Pre-heater)	Leakage Boundary	Stainless <del>Carbon</del> Steel (Tube <b>Shell</b> Side Components)	Air - Indoor (External)	None <b>Loss of Material/General Corrosion</b>	None <b>External Surfaces Monitoring</b>	<del>VII.J-15</del> <b>VII.I-8</b>	<del>3.3.1-94</del> <b>3.3.1-58</b>	C A
Heat Exchanger Components (Waste, Boric Acid Feed Pre-heater)	Leakage Boundary	Stainless <del>Carbon</del> Steel (Tube <b>Shell</b> Side Components)	Air with Borated Water Leakage (External)	None <b>Loss of Material/ Boric Acid Corrosion</b>	None <b>Boric Acid Corrosion</b>	<del>VII.J-16</del> <b>VII.I-10</b>	<del>3.3.1-99</del> <b>3.3.1-89</b>	C A
Heat Exchanger Components (Waste, Boric Acid Feed Pre-heater)	Leakage Boundary	Stainless <del>Carbon</del> Steel (Tube <b>Shell</b> Side Components)	Raw Water (Internal)	Loss of Material/ <b>General</b> , Pitting, Crevice, and Microbiologically Influenced Corrosion, <b>and Fouling</b>	<del>Periodic Inspection</del> <b>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components</b>	<del>VII.H2-18</del> <b>VII.G-24</b>	<del>3.3.1-80</del> <b>3.3.1-68</b>	E, 3 E, 2

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

Table 3.3.2-17

#### Heating Water and Heating Steam System

(Continued)

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
<i>Piping and Fittings</i>	<i>Leakage Boundary</i>	<i>Carbon Steel</i>	<i>Treated Water (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>Water Chemistry</i>	<i>VIII.B1-11</i>	<i>3.4.1-4</i>	<i>A</i>
<i>Piping and Fittings</i>	<i>Leakage Boundary</i>	<i>Carbon Steel</i>	<i>Treated Water (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>One-Time Inspection</i>	<i>VIII.B1-11</i>	<i>3.4.1-4</i>	<i>A</i>
<i>Pump Casing (Unit 1 HHB condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Air - Indoor (External)</i>	<i>Loss of Material/General Corrosion</i>	<i>External Surfaces Monitoring</i>	<i>VII.I-8</i>	<i>3.3.1-58</i>	<i>A</i>
<i>Pump Casing (Unit 1 HHB condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Air with Borated Water Leakage (External)</i>	<i>Loss of Material/Boric Acid Corrosion</i>	<i>Boric Acid Corrosion</i>	<i>VII.I-10</i>	<i>3.3.1-89</i>	<i>A</i>
<i>Pump Casing (Unit 1 HHB condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Treated Water (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>Water Chemistry</i>	<i>VIII.B1-11</i>	<i>3.4.1-4</i>	<i>A</i>
<i>Pump Casing (Unit 1 HHB condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Treated Water (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>One-Time Inspection</i>	<i>VIII.B1-11</i>	<i>3.4.1-4</i>	<i>A</i>
<i>Pump Casing (Unit 1 HHB condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Treated Water (Internal)</i>	<i>Loss of Material/Selective Leaching</i>	<i>Selective Leaching of Materials</i>	<i>VII.C2-9</i>	<i>3.3.1-85</i>	<i>A</i>
Pump Casing ( <i>Unit 2</i> HHB condensate receiver)	Leakage Boundary	Gray Cast Iron	Air - Indoor (External)	Loss of Material/General Corrosion	External Surfaces Monitoring	VII.I-8	3.3.1-58	A
Pump Casing ( <i>Unit 2</i> HHB condensate receiver)	Leakage Boundary	Gray Cast Iron	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A
Pump Casing ( <i>Unit 2</i> HHB condensate receiver)	Leakage Boundary	Gray Cast Iron	Raw Water (Internal)	Loss of Material/General, Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	VII.G-24	3.3.1-68	E, 2
Pump Casing ( <i>Unit 2</i> HHB condensate receiver)	Leakage Boundary	Gray Cast Iron	Raw Water (Internal)	Loss of Material/Selective Leaching	Selective Leaching of Materials	VII.G-14	3.3.1-85	A
<i>Tanks (Unit 1 HHB Condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Air - Indoor (External)</i>	<i>Loss of Material/General Corrosion</i>	<i>External Surfaces Monitoring</i>	<i>VII.I-8</i>	<i>3.3.1-58</i>	<i>A</i>
<i>Tanks (Unit 1 HHB Condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Air with Borated Water Leakage (External)</i>	<i>Loss of Material/Boric Acid Corrosion</i>	<i>Boric Acid Corrosion</i>	<i>VII.I-10</i>	<i>3.3.1-89</i>	<i>A</i>
<i>Tanks (Unit 1 HHB Condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Treated Water (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>Water Chemistry</i>	<i>VIII.B1-11</i>	<i>3.4.1-4</i>	<i>C</i>
<i>Tanks (Unit 1 HHB Condensate receiver)</i>	<i>Leakage Boundary</i>	<i>Gray Cast Iron</i>	<i>Treated Water (Internal)</i>	<i>Loss of Material/General, Pitting and Crevice Corrosion</i>	<i>One-Time Inspection</i>	<i>VIII.B1-11</i>	<i>3.4.1-4</i>	<i>C</i>

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### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

Table 3.3.2-17

#### Heating Water and Heating Steam System

(Continued)

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
<b>Tanks (Unit 1 HHB Condensate receiver)</b>	<b>Leakage Boundary</b>	<b>Gray Cast Iron</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/Selective Leaching</b>	<b>Selective Leaching of Materials</b>	<b>VII.C2-9</b>	<b>3.3.1-85</b>	<b>C</b>
Tanks ( <b>Unit 2</b> HHB Condensate receiver and <b>Unit 1 and Unit 2</b> Condensate Level Pot)	Leakage Boundary	Gray Cast Iron	Air - Indoor (External)	Loss of Material/General Corrosion	External Surfaces Monitoring	VII.I-8	3.3.1-58	A
Tanks ( <b>Unit 2</b> HHB Condensate receiver and <b>Unit 1 and Unit 2</b> Condensate Level Pot)	Leakage Boundary	Gray Cast Iron	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion	Boric Acid Corrosion	VII.I-10	3.3.1-89	A
Tanks ( <b>Unit 2</b> HHB Condensate receiver and <b>Unit 1 and Unit 2</b> Condensate Level Pot)	Leakage Boundary	Gray Cast Iron	Raw Water (Internal)	Loss of Material/General, Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	VII.G-24	3.3.1-68	E, 2
Tanks ( <b>Unit 2</b> HHB Condensate receiver and <b>Unit 1 and Unit 2</b> Condensate Level Pot)	Leakage Boundary	Gray Cast Iron	Raw Water (Internal)	Loss of Material/Selective Leaching	Selective Leaching of Materials	VII.G-14	3.3.1-85	C
<b>Valve Body</b>	<b>Leakage Boundary</b>	<b>Carbon Steel</b>	<b>Raw Water (Internal)</b>	<b>Loss of Material/General, Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling</b>	<b>Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components</b>	<b>VII.G-24</b>	<b>3.3.1-68</b>	<b>E, 2</b>
<b>Valve Body</b>	<b>Leakage Boundary</b>	<b>Carbon Steel</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>Water Chemistry</b>	<b>VIII.B1-11</b>	<b>3.4.1-4</b>	<b>A</b>
<b>Valve Body</b>	<b>Leakage Boundary</b>	<b>Carbon Steel</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/General, Pitting and Crevice Corrosion</b>	<b>One-Time Inspection</b>	<b>VIII.B1-11</b>	<b>3.4.1-4</b>	<b>A</b>
<b>Valve Body</b>	<b>Leakage Boundary</b>	<b>Copper Alloy with less than 15% Zinc</b>	<b>Raw Water (Internal)</b>	<b>Loss of Material/Pitting, Crevice, and Microbiologically Influenced Corrosion</b>	<b>Periodic Inspection</b>	<b>VII.H2-11</b>	<b>3.3.1-80</b>	<b>E, 3</b>
<b>Valve Body</b>	<b>Leakage Boundary</b>	<b>Copper Alloy with less than 15% Zinc</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/Pitting and Crevice Corrosion</b>	<b>Water Chemistry</b>	<b>VIII.A-5</b>	<b>3.4.1-15</b>	<b>A</b>
<b>Valve Body</b>	<b>Leakage Boundary</b>	<b>Copper Alloy with less than 15% Zinc</b>	<b>Treated Water (Internal)</b>	<b>Loss of Material/Pitting and Crevice Corrosion</b>	<b>One-Time Inspection</b>	<b>VIII.A-5</b>	<b>3.4.1-15</b>	<b>A</b>



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### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

**Table 3.3.2-17**

**Heating Water and Heating Steam System**

(Continued)

<b>Component Type</b>	<b>Intended Function</b>	<b>Material</b>	<b>Environment</b>	<b>Aging Effect Requiring Management</b>	<b>Aging Management Programs</b>	<b>NUREG-1801 Vol. 2 Item</b>	<b>Table 1 Item</b>	<b>Notes</b>
<i>Valve Body</i>	<i>Leakage Boundary</i>	<i>Stainless Steel</i>	<i>Raw Water (Internal)</i>	<i>Loss of Material/Pitting, Crevice, and Microbiologically Influenced Corrosion</i>	<i>Periodic Inspection</i>	<i>VII.H2.18</i>	<i>3.3.1-80</i>	<i>E, 3</i>
<i>Valve Body</i>	<i>Leakage Boundary</i>	<i>Stainless Steel</i>	<i>Treated Water &gt; 140F (Internal)</i>	<i>Loss of Material/Pitting and Crevice Corrosion</i>	<i>Water Chemistry</i>	<i>VIII.B1-4</i>	<i>3.4.1-16</i>	<i>A</i>
<i>Valve Body</i>	<i>Leakage Boundary</i>	<i>Stainless Steel</i>	<i>Treated Water &gt; 140F (Internal)</i>	<i>Loss of Material/Pitting and Crevice Corrosion</i>	<i>One-Time Inspection</i>	<i>VIII.B1-4</i>	<i>3.4.1-16</i>	<i>A</i>
<i>Valve Body</i>	<i>Leakage Boundary</i>	<i>Stainless Steel</i>	<i>Treated Water &gt; 140F (Internal)</i>	<i>Cracking/Stress Corrosion Cracking</i>	<i>Water Chemistry</i>	<i>VIII.B1-5</i>	<i>3.4.1-14</i>	<i>A</i>
<i>Valve Body</i>	<i>Leakage Boundary</i>	<i>Stainless Steel</i>	<i>Treated Water &gt; 140F (Internal)</i>	<i>Cracking/Stress Corrosion Cracking</i>	<i>One-Time Inspection</i>	<i>VIII.B1-5</i>	<i>3.4.1-14</i>	<i>A</i>

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Radiation Monitoring System

**Affected Section:** 2.3.3.19

**LRA Page Number(s):** 2.3-165

**Paragraph:** System Purpose, paragraph 7

**Change:** Paragraph seven of the system purpose on page 2.3-165 in Section 2.3.3.19 of the LRA states that the plant vent monitors are nonsafety-related. This sentence is revised as shown below.

The plant vent radiation monitors are nonsafety-related and are connected to the plant vent.

**Affected Section:** 2.3.3.19

**LRA Page Number(s):** 2.3-168

**Paragraph:** System Boundary, paragraph 4

**Change:** The portion of the Radiation Monitoring System that is within the scope of license renewal aging management is in scope under 10 CFR 54.4(a)(1). This system is not in scope under 10 CFR 54.4(a)(2). Sentence two, three, four, and five of paragraph four of the system boundary description contain standard wording that describe the portion of the system in scope under 10 CFR 54.4(a)(2). Sentence two, three, four, and five of paragraph four of the system boundary description are deleted as shown below.

~~Also included in the license renewal scoping boundary of the Radiation Monitoring System are those portions of nonsafety-related piping and equipment that extend beyond the safety-related/nonsafety-related interface up to the location of the first seismic anchor, or to a point no longer in proximity to equipment performing a safety-related function, whichever extends furthest. This includes the nonsafety-related portions of the system connecting to the Auxiliary Building Ventilation System, shown in red. Included in this boundary are pressure retaining components relied upon to preserve the leakage boundary intended function of this portion of the system. For more information, refer to the license renewal boundary drawing for identification of this boundary, shown in red.~~

**Affected Section:** 2.3.3.19

**LRA Page Number(s):** 2.3-169

**Paragraph:** Reason for Scope Determination, sentence 2

**Change:** As discussed above, the Radiation Monitoring System is not in scope under 10 CFR 54.4(a)(2). However, sentence two of the Reason for Scope Determination in Section 2.3.3.19 on page 2.3-169 states that the Radiation Monitoring System is in scope under 10 CFR 54.4(a)(2). This sentence is revised as shown below.

The Radiation Monitoring System is **not** in scope under 10 CFR 54.4(a)(2) because failure of nonsafety-related portions of the system would **not** prevent satisfactory accomplishment of function(s) identified for 10 CFR 54.4(a)(1).

**Affected Section:** 2.3.3.19

**LRA Page Number(s):** 2.3-169

**Paragraph:** System Intended Functions, number 3

**Change:** The third function listed under the System Intended Functions in Section 2.3.3.19 on page 2.3-169 states that the Radiation Monitoring System is in scope of license renewal under 10 CFR 54.4(a)(2). This is incorrect. The System Intended Functions section on page 2.3-169 is revised to delete system intended function number three. System intended function number four is renumbered to number three.

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### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Radwaste System

**Affected Section: 3.3**

**LRA Page Number(s): 3.3-89**

**Paragraph: Table 3.3.1**

**Change:** In the LRA, the carbon steel shell side of the boric acid feed pre-heater heat exchanger was evaluated with the Radwaste System. The stainless steel tube side of the boric acid feed pre-heater heat exchanger was evaluated with the Heating Water and Heating Steam System. The systems in which the shell side and the tube side of the boric acid feed pre-heater were evaluated were reversed. The LRA is revised to show that the carbon steel shell side of the boric acid feed pre-heater is evaluated in the Heating Water and Heating Steam System as seen in the excerpt from Table 3.3.2-17 on page 20. The stainless steel tube side of the boric acid feed pre-heater is evaluated in the Radwaste System as shown in the excerpt from Table 3.3.2-21 below. Due to this revision the Radwaste System is no longer included in the list of systems for Item Number 3.3.1-58 in Table 3.3.1 on page 3.3-89. The second sentence in the discussion column for Item Number 3.3.1-58 is revised as follows:

The External Surfaces Monitoring program, B.2.1.24, will be used to manage loss of material due to general corrosion of the steel external surfaces exposed to indoor and outdoor air for the Chemical & Volume Control, Chilled Water, Component Cooling, Compressed Air, Demineralized Water, Emergency Diesel Generators & Auxiliaries, Fire Protection, Fresh Water, Fuel Oil, Heating Water and Heating Steam, Non-radioactive Drain, Radwaste, Sampling, and Service Water Systems

**Affected Section: 3.3.2**

**LRA Page Number(s): 3.3-291**

**Paragraph: Table 3.3.2-21**

**Change:** Due to the correction described above, three line items in Table 3.3.2-21 have been modified. These corrections can be seen in the excerpt from Table 3.3.2-21 shown below.

**Table 3.3.2-21  
Radwaste System  
Summary of Aging Management Evaluation**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Heat Exchanger Components (Boric Acid Feed Pre-heater)	Leakage Boundary	Carbon <b>Stainless</b> Steel (Shell <b>Tube</b> Side Components)	Air - Indoor (External)	Loss of Material/General Corrosion <b>None</b>	External Surfaces Monitoring <b>None</b>	VII.I-8 <b>VII.J-15</b>	3.3.1-58 <b>3.3.1-94</b>	A <b>C</b>
Heat Exchanger Components (Boric Acid Feed Pre-heater)	Leakage Boundary	Carbon <b>Stainless</b> Steel (Shell <b>Tube</b> Side Components)	Air with Borated Water Leakage (External)	Loss of Material/Boric Acid Corrosion <b>None</b>	Boric Acid Corrosion <b>None</b>	VII.I-10 <b>VII.J-16</b>	3.3.1-89 <b>3.3.1-99</b>	A <b>C</b>
Heat Exchanger Components (Boric Acid Feed Pre-heater)	Leakage Boundary	Carbon <b>Stainless</b> Steel (Shell <b>Tube</b> Side Components)	Raw Water (Internal)	Loss of Material/General, Pitting, Crevice, and Microbiologically Influenced Corrosion, and Fouling	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components <b>Periodic Inspection</b>	VII.G-24 <b>VII.H2-18</b>	3.3.1-68 <b>3.3.1-80</b>	E, 2 <b>E, 1</b>

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### SBO Yard Buildings

**Affected Section:** Table of Contents

**LRA Page Number(s):** iii, xi, xiv

**Paragraph:** 2.4.10, Table 2.4-10, Table 3.5.2-10

**Change:** During a review of the station blackout recovery procedures, it was determined that the batteries that are housed in the Circulating Water Switchgear Building provide a possible back-up source of power to the 13 kV breakers in the south end of the switchyard. This station blackout (SBO) function had not previously been identified in the SBO scoping and screening basis document as a function required for the Circulating Water Switchgear Building.

Since the Circulating Water Switchgear Building provides support, shelter and protection for the batteries that provide back-up power to breakers used as one of the possible sources of power to recover from a SBO, the Circulating Water Switchgear Building is in scope for license renewal. The scoping and screening results for the Containment, Structures, and Component Supports are modified to include the Circulating Water Switchgear Building. The title of the structural component "SBO Compressor Building" is changed to the "SBO Yard Buildings".

Addressing this issue requires corrections to various sections of the LRA. The corrections to the LRA Table of Contents are identified here. The lines in the Table of Contents for Section 2.4.10, Table 2.4-10, and Table 3.5.2-10 refer to the "SBO Compressor Building." These lines are corrected to read "SBO Yard Buildings".

**Affected Section:** 2.2

**LRA Page Number(s):** 2.2-4, 2.2-5

**Paragraph:** Table 2.2-1

**Change:** Table 2.2-1 in the LRA provides a list of scoping results for all license renewal systems, structures and commodity groups. This table listed the "SBO Compressor Building" as a structure in the scope of license renewal at Salem Nuclear Generating Station. Table 2.2-1 is corrected to say "SBO Yard Buildings" as shown in the excerpt below.

**Table 2.2-1 Plant Level Scoping Results**

System, Structure or Commodity Group	In Scope for License Renewal?	Reference
SBO Compressor <del>Building</del> <b>Yard Buildings</b>	Yes	2.4.10

**Affected Section:** 2.4

**LRA Page Number(s):** 2.4-1

**Paragraph:** List of structural components in the scope of license renewal

**Change:** The list of structural components in the scope of license renewal provided in Section 2.4 on page 2.4-1 of the LRA refers to the "SBO Compressor Building". This is corrected to read "SBO Yard Buildings".

**Affected Section:** 2.4.10

**LRA Page Number(s):** 2.4-49

**Paragraph:** Section Title

**Change:** The title of Section 2.4.10 on page 2.4-49 is "SBO Compressor Building". This is corrected to read "SBO Yard Buildings".

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

Affected Section: 2.4.10

LRA Page Number(s): 2.4-49

Paragraph: Structure Purpose

Change: The structure purpose section on page 2.4-49 is revised as follows:

#### Structure Purpose

***The SBO Yard Buildings consist of the SBO Compressor Building and the Circulating Water Switchgear Building.***

#### ***SBO Compressor Building:***

The SBO Compressor Building is a concrete block structure located northeast of the Salem Generating Station (SGS) Unit 2 containment structure. The building is a single story, approximately 28' x 15' in plan dimensions. The building foundation consists of a reinforced concrete slab bearing on compacted fill. Its roof is composed of a precast prestressed concrete hollow core slab topped with 2" of concrete reinforced with welded wire fabric. The SBO Compressor Building is a nonsafety-related structure, designed to commercial grade standards. The structure is separated from safety-related systems, structures, and components (SSCs) such that its failure would not impact a safety-related function.

The purpose of the SBO Compressor Building is to provide physical support, shelter, and protection for the SBO diesel driven air compressor and its auxiliary systems. The compressor is credited for providing control air during SBO event. Major components housed inside the building include the SBO diesel driven air compressor, regenerative air dryer, after-cooler, transformers, distribution panel, disconnect switch, and piping and piping components.

#### ***Circulating Water Switchgear Building:***

***The Circulating Water Switchgear Building is a concrete masonry structure located east of the Salem Unit 1 Containment Structure. The building is a single story, approximately 50' x 35' in plan dimensions and partitioned into three areas: two Circulating Water switchgear areas, and a battery room. The building foundation consists of a reinforced concrete slab bearing on compacted fill. The building walls consist of a concrete masonry structure (interior and exterior masonry walls), mounted on the slab on grade. The building roof is composed of a precast, prestressed, concrete hollow core slab topped with 2" of concrete, with a built-up roof. The Circulating Water Switchgear Building is a nonsafety-related structure, designed to commercial grade standards. The Circulating Water Switchgear Building is separated from safety-related systems, structures, and components (SSCs) such that its failure would not impact a safety-related function.***

***The purpose of the Circulating Water Switchgear Building is to provide physical support, shelter, and protection for nonsafety-related systems, structures, and components. The batteries provide back-up power to breakers and are used to recover from a SBO, as required by 10 CFR 50.63.***

Included in the boundary of the SBO Compressor ~~Yard Buildings~~ are reinforced concrete and prestressed concrete components, concrete block, doors, concrete anchors, concrete embedments, and miscellaneous steel. The SBO Compressor ~~Building Yard Buildings~~ is **are**

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

in scope of license renewal in its **their** entirety. Refer to the "Components Subject to Aging Management Review" table below for a complete list of components included in the boundary of the SBO Compressor **Yard Buildings**.

Not included in the boundary of the SBO Compressor Building is the SBO diesel driven air compressor and components for its auxiliary systems, component supports. The SBO Diesel driven air compressor and components for its auxiliary systems are separately evaluated with the Compressed Air System. **Not included in the boundary of the Circulating Water Switchgear Building are the electrical components which are evaluated with the electrical systems.** Component supports are separately evaluated with the Component Supports Commodity Group.

For more detail information, refer to UFSAR Section 9.3.1.

#### Affected Section: 2.4.10

LRA Page Number(s): 2.4-49

#### Paragraph: Reason for Scope Determination

**Change:** Due to the correction described above, the reason for scope determination discussion is revised to read as follows:

The SBO Compressor Building is **Yard Buildings** are not in scope under 10 CFR 54.4(a)(1) because no portions of the structure are safety-related or relied on to remain functional during and following design basis events. ~~It is~~ **The SBO Yard Buildings** are not in scope under 10 CFR 54.4(a)(2) because failure of nonsafety-related portions of the structures will not prevent satisfactory accomplishment of function(s) identified for 10 CFR 54.4(a)(1). The SBO Compressor Building **Yard Buildings** meets 10 CFR 54.4(a)(3) because ~~it~~ **the buildings** provides physical support, shelter and protection for systems, structures and components (SSCs) relied upon in the safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for Station Blackout (10 CFR 50.63). ~~It is~~ **The SBO Yard Buildings** are not relied upon in any safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for Fire Protection (10 CFR 50.48), Environmental Qualification (10 CFR 50.49), Pressurized Thermal Shock (10 CFR 50.61), or Anticipated Transients Without Scram (10 CFR 50.62).

#### Affected Section: 2.4.10

LRA Page Number(s): 2.4-51

#### Paragraph: Table 2.4-10

**Change:** The title of Table 2.4-10 on page 2.4-10 is revised as follows:

Table 2.4-10

#### SBO Compressor Yard Buildings

In addition, due to the addition of the Circulating Water Switchgear Building to the scope of license renewal, the following revision is made to Table 2.4-10 as shown in the excerpt below.

Component Type	Intended Function
Masonry walls: Above-grade <del>exterior</del> <b>all</b>	Shelter, Protection
Masonry walls: Above-grade <del>exterior</del> <b>all</b>	Structural Support

The title of Table 3.5.2-10, as presented on page 2.4-51, is corrected to read, "SBO Yard Buildings."

## **Enclosure**

### **Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

#### **Affected Section: 3.3**

**LRA Page Number(s): 3.3-79**

**Paragraph: Table 3.3.1**

**Change:** The first sentence of the fourth paragraph in the discussion column for line item number 3.3.1-45 on page 3.3-79 lists all of the license renewal structures that are aligned to this Table 1 Item number based on material, environment and aging effect in which the Structures Monitoring Program has been substituted to manage aging. Included in this list is the "SBO Compressor Building". This is revised to say "SBO Yard Buildings".

#### **Affected Section: 3.5.1**

**LRA Page Number(s): 3.5-1**

**Paragraph: Introduction**

**Change:** The introduction section provides a list of structures and commodity groups in the scope of license renewal that are addressed in Section 3.5. Contained in this list on page 3.5-1 of the LRA is an item referring to the "SBO Compressor Building (2.4.10)". This is revised to say "SBO Yard Buildings (2.4.10)".

#### **Affected Section: 3.5.2**

**LRA Page Number(s): 3.5-2**

**Paragraph: Results**

**Change:** The results section provides a list of tables that summarize the results of the aging management review for the structures and commodity groups listed in the introduction section on page 3.5-1. Contained in this list on page 3.5-2 of the LRA is an item referring to the "Table 3.5.2-10 Summary of Aging Management Evaluation - SBO Compressor Building". This is revised to say "Table 3.5.2-10 Summary of Aging Management Evaluation - SBO Yard Buildings".

#### **Affected Section: 3.5.2.1.10**

**LRA Page Number(s): 3.5-15, 3.5-16**

**Paragraph: Section 3.5.2.1.10**

**Change:** The title of Section 3.5.2.1.10 as provided on page 3.5-15 is "SBO Compressor Building". This is revised to say "SBO Yard Buildings".

In addition, the introductory sentence for the materials list, environments list, aging effects requiring management list, and aging management programs list refer to the "SBO Compressor Building". These sentences are revised to say "SBO Yard Buildings".

Finally, following the list of aging management programs is a reference to Table 3.5.2-10. The title of this table as provided on page 3.5-16 refers to the "SBO Compressor Building". This is revised to say "SBO Yard Buildings".

#### **Affected Section: 3.5.2**

**LRA Page Number(s): 3.5-248, 3.5-249, 3.5-250, 3.5-251, 3.5-252, 3.5-253, 3.5-254**

**Paragraph: Table 3.5.2-10**

**Change:** Due to the issue described above, Table 3.5.2-10 is revised as shown below. The line items shown in the excerpt from Table 3.5.2-10 shown below are from pages 3.5-252 and 3.5-253. The structure name is provided on the top of each page of Table 3.5.2-10 (pages 3.5-248 through 3.5-254) and is revised to read as follows:

**Table 3.5.2-10**

**SBO Yard Buildings**

**(Continued)**

**Enclosure**  
**Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Table 3.5.2-10**  
**SBO Compressor Yard Buildings**  
**Summary of Aging Management Evaluation**

**Table 3.5.2-10**                      **SBO Compressor Yard Buildings**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Shelter, Protection	Concrete block	Air - Indoor	Cracking, Loss of Bond, and Loss of Material (Spalling, Scaling)/Corrosion of Embedded Steel	Structures Monitoring Program	III.A3-9	3.5.1-23	C
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Shelter, Protection	Concrete block	Air - Indoor	Cracking/Restraint, Shrinkage, Creep, and Aggressive Environment	Structures Monitoring Program	III.A3-11	3.5.1-43	A, 2
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Shelter, Protection	Concrete block	Air - Outdoor	Cracking, Loss of Bond, and Loss of Material (Spalling, Scaling)/Corrosion of Embedded Steel	Structures Monitoring Program	III.A3-9	3.5.1-23	C
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Shelter, Protection	Concrete block	Air - Outdoor	Cracking/Restraint, Shrinkage, Creep, and Aggressive Environment	Structures Monitoring Program	III.A3-11	3.5.1-43	A, 2
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Shelter, Protection	Concrete block	Air - Outdoor	Cracks and Distortion/Increased Stress Levels from Settlement	Structures Monitoring Program	III.A3-3	3.5.1-28	C
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Shelter, Protection	Concrete block	Air - Outdoor	Loss of Material (Spalling, Scaling) and Cracking/Freeze-thaw	Structures Monitoring Program	III.A3-6	3.5.1-26	C
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Structural Support	Concrete block	Air - Indoor	Cracking, Loss of Bond, and Loss of Material (Spalling, Scaling)/Corrosion of Embedded Steel	Structures Monitoring Program	III.A3-9	3.5.1-23	C
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Structural Support	Concrete block	Air - Indoor	Cracking/Restraint, Shrinkage, Creep, and Aggressive Environment	Structures Monitoring Program	III.A3-11	3.5.1-43	A, 2
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Structural Support	Concrete block	Air - Outdoor	Cracking, Loss of Bond, and Loss of Material (Spalling, Scaling)/Corrosion of Embedded Steel	Structures Monitoring Program	III.A3-9	3.5.1-23	C
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Structural Support	Concrete block	Air - Outdoor	Cracking/Restraint, Shrinkage, Creep, and Aggressive Environment	Structures Monitoring Program	III.A3-11	3.5.1-43	A, 2
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Structural Support	Concrete block	Air - Outdoor	Cracks and Distortion/Increased Stress Levels from Settlement	Structures Monitoring Program	III.A3-3	3.5.1-28	C
Masonry walls: Above-grade, <del>exterior</del> <b>all</b>	Structural Support	Concrete block	Air - Outdoor	Loss of Material (Spalling, Scaling) and Cracking/Freeze-thaw	Structures Monitoring Program	III.A3-6	3.5.1-26	C



## **Enclosure**

### **Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application**

**Affected Section: A.2.1.32**

**LRA Page Number(s): A-25**

**Paragraph: Enhancement 1.d**

**Change:** In Section A.2.1.32, Masonry Wall Program, on page A-25, enhancement 1.d states that the SBO Compressor Building has been determined to be in the scope of license renewal. Enhancement 1.d is corrected to read "~~SBO Compressor~~ **Yard Buildings**". Although the words in Section A.5, License Renewal Commitment List, are unaffected by this change, it is noted that this change requires that the enhanced Masonry Wall Program (Section A.5, page A-67, No. 32) be applied to all SBO Yard Buildings during the period of extended operation.

**Affected Section: A.2.1.33**

**LRA Page Number(s): A-25**

**Paragraph: Enhancement 1.c**

**Change:** In Section A.2.1.33, Structures Monitoring Program, on page A-25, enhancement 1.c states that the SBO Compressor Building has been determined to be in the scope of license renewal. Enhancement 1.c is corrected to read "~~SBO Compressor~~ **Yard Buildings**". Although the words in Section A.5, License Renewal Commitment List, are unaffected by this change, it is noted that this change requires that the enhanced Structures Monitoring Program (Section A.5, page A-67, No. 33) be applied to all SBO Yard Buildings during the period of extended operation.

**Affected Section: B.2.1.32**

**LRA Page Number(s): B-148**

**Paragraph: Enhancement 1.d**

**Change:** In Section B.2.1.32, Masonry Wall Program, on page B-148, enhancement 1.d states that the SBO Compressor Building has been determined to be in the scope of license renewal. Enhancement 1.d is corrected to read "~~SBO Compressor~~ **Yard Buildings**".

**Affected Section: B.2.1.33**

**LRA Page Number(s): B-152**

**Paragraph: Enhancement 1.c**

**Change:** In Section B.2.1.33, Structures Monitoring Program, on page B-152, enhancement 1.c states that the SBO Compressor Building has been determined to be in the scope of license renewal. Enhancement 1.c is corrected to read "~~SBO Compressor~~ **Yard Buildings**".

#### **Selective Leaching of Materials**

**Affected Section: B.2.1.21**

**LRA Page Number(s): B-108**

**Paragraph: Operating Experience item number 2, paragraph 1, sentence 7 (last sentence)**

**Change:** The second example of operating experience provided for the Selective Leaching of Materials program in Section B.2.1.21 on page B-108 states that, "There are no components with a gray cast iron material in a brackish water environment in the scope of license renewal at Salem." However, there are gray cast iron valves in a brackish raw water environment in the Service Water system. Operating experience item number two is revised to delete this statement.

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Service Building

**Affected Section:** 2.4.11

**LRA Page Number(s):** 2.4-52

**Paragraph:** Structure Purpose, paragraph 5, sentence 4

**Change:** The Service Building provides physical support, shelter, and protection for systems, structures, and components relied upon to perform a function that demonstrates compliance with the Commission's regulations for SBO (10 CFR 50.63). The SBO function was omitted from the Service Building scoping discussion in Section 2.4.11 of the LRA. This omission is corrected in four parts of Section 2.4.11 that list the building functions. Sentence four of paragraph five of the structure purpose section on page 2.4-52 is revised as follows:

The building also provides shelter and protection for components classified as safety-related, components credited for **SBO**, ATWS, and fire protection system piping and components.

**Affected Section:** 2.4.11

**LRA Page Number(s):** 2.4-53

**Paragraph:** Structure Purpose, paragraph 7, sentence 4

**Change:** Due to the correction described above, sentence four of paragraph seven of the structure purpose section has been revised as follows:

Cable trays, concrete anchors, conduits, trenches and the protective steel barriers for the Auxiliary Feedwater System valves, masonry walls for the cable vaults and cable shafts are in the scope of license renewal because they provide structural support, shelter, and protection for safety-related components and for systems and components credited for **SBO**, ATWS and fire protection.

**Affected Section:** 2.4.11

**LRA Page Number(s):** 2.4-53

**Paragraph:** Reason for Scope Determination, sentence 3 and 4

**Change:** Sentence three and four of the reason for scope determination section on page 2.4-53 are revised as follows:

The Service Building meets 10 CFR 54.4(a)(3) because it provides physical support, shelter and protection for systems, structures, and components (SCCs) relied upon in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for Fire Protection (10 CFR 50.48), ~~and Anticipated Transients Without Scram (10 CFR 50.62),~~ **and Station Blackout (10 CFR 50.63)**. The building is not relied upon in any safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for Environmental Qualification (10 CFR 50.49), ~~or Pressurized Thermal Shock (10 CFR 50.61), or Station Blackout (10 CFR 50.63).~~

**Affected Section:** 2.4.11

**LRA Page Number(s):** 2.4-54

**Paragraph:** System Intended Functions list

**Change:** The SBO function is omitted from the list of intended functions for the Service Building on page 2.4-54 of the LRA. This list is revised to include a fourth structure intended function as provided below.

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

**4. Provides physical support, shelter, and protection for systems structures and components relied upon in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for Station Blackout (10 CFR 50.63). 10 CFR 54.4(a)(3)**

#### Service Water System

**Affected Section: 3.3.2**

**LRA Page Number(s): 3.3-333**

**Paragraph: Table 3.3.2-23**

**Change:** In the LRA the material of the shell side components of the Station Air Compressor (SAC) lubricating oil coolers were identified as stainless steel in Table 3.3.2-23 on page 3.3-333. A design change was performed and the SAC lubricating oil coolers were replaced. The material of the replacement SAC lubricating oil cooler shell side components is carbon steel. The material of the SAC lubricating oil cooler shell side components is corrected to carbon steel as seen in the excerpt of Table 3.3.2-23 shown below.

**Table 3.3.2-23  
Service Water System  
Summary of Aging Management Evaluation**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Heat Exchanger Components (Station Air Compressor - Lube Oil)	Pressure Boundary	<del>Stainless</del> <b>Carbon</b> Steel (Shellside Components)	Air - Indoor (External)	None <b>Loss of Material/General Corrosion</b>	None <b>External Surfaces Monitoring</b>	VII.J-15 <b>VII.I-8</b>	3.3.1-94 <b>3.3.1-58</b>	C <b>A</b>
Heat Exchanger Components (Station Air Compressor - Lube Oil)	Pressure Boundary	<del>Stainless</del> <b>Carbon</b> Steel (Shellside Components)	Lubricating Oil (Internal)	Loss of Material/ <b>General</b> , Pitting and Crevice Corrosion	Lubricating Oil Analysis	VII.C1-14 <b>VII.C1-17</b>	3.3.1-33 <b>3.3.1-14</b>	D, 8
Heat Exchanger Components (Station Air Compressor - Lube Oil)	Pressure Boundary	<del>Stainless</del> <b>Carbon</b> Steel (Shellside Components)	Lubricating Oil (Internal)	Loss of Material/ <b>General</b> , Pitting and Crevice Corrosion	One-Time Inspection	VII.C1-14 <b>VII.C1-17</b>	3.3.1-33 <b>3.3.1-14</b>	C, 8

## Enclosure

### Corrections to the Salem Generating Station, Unit No. 1 and Unit No. 2 License Renewal Application

#### Service Water Ventilation System

**Affected Section:** 3.3.2.1.24

**LRA Page Number(s):** 3.3-33

**Paragraph:** Materials List

**Change:** The list of materials of construction for the Service Water Ventilation System components included copper alloy bolting with 15% zinc or more in Section 3.3.2.1.24 of the LRA. There is no identified copper alloy bolting with 15% zinc or more in scope for license renewal in the Service Water Ventilation System. The list of material of construction for the Service Water Ventilation System components is revised as shown below.

• ~~Copper Alloy Bolting with 15% Zinc or More~~

**Affected Section:** 3.3.2

**LRA Page Number(s):** 3.3-346

**Paragraph:** Table 3.3.2-24

**Change:** Table 3.3.2-24 contains two line items that identify the appropriate aging management programs for copper alloy bolting with 15% zinc or more in outdoor air and indoor air environments. As discussed above, there is no identified copper alloy bolting with 15% zinc or more in scope for license renewal in the Service Water Ventilation System. Table 3.3.2-24 on page 3.3-346 is revised as shown in the excerpt below.

**Table 3.3.2-24**  
**Service Water Ventilation System**  
**Summary of Aging Management Evaluation**

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Bolting	Mechanical Closure	Copper Alloy Bolting with 15% Zinc or More	Air - Indoor (External)	None	None	VIII.1-2	3.4.1-41	C
Bolting	Mechanical Closure	Copper Alloy Bolting with 15% Zinc or More	Air - Outdoor (External)	Loss of Material/Pitting and Crevice Corrosion	Periodic Inspection			G