



Entergy Nuclear Operations, Inc.
Vermont Yankee
P.O. Box 0500
185 Old Ferry Road
Brattleboro, VT 05302-0500
Tel 802 257 5271

July 30, 2007
Docket No. 50-271
BVY 07-054
TAC No. MC 9668

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

Reference: 1. Letter, Entergy to USNRC, "Vermont Yankee Nuclear Power Station, License No. DPR-28, License Renewal Application," BVY 06-009, dated January 25, 2006.
2. Letter, USNRC to Entergy, "Request for Additional Information for the Review of the Vermont Yankee Nuclear Power Station, License Renewal Application", NVY 07-093, dated July 24, 2007.
3. Letter, USNRC to Entergy, "Safety Evaluation Report with Confirmatory Items Related to the License Renewal of Vermont Yankee Nuclear Power Station," NVY 07-036, dated March 30, 2007.

**Subject: Vermont Yankee Nuclear Power Station
License No. DPR-28 (Docket No. 50-271)
License Renewal Application, Amendment 28**

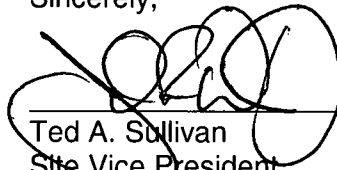
On January 25, 2006, Entergy Nuclear Operations, Inc. and Entergy Nuclear Vermont Yankee, LLC (Entergy) submitted the License Renewal Application (LRA) for the Vermont Yankee Nuclear Power Station (VYNPS) as indicated by Reference 1. This letter contains two attachments as listed below to address an NRC Request for Additional Information (RAI) as indicated by Reference 2 and a Safety Evaluation Report (SER) Confirmatory Item as indicated by Reference 3.

- Attachment 1: VYNPS License Renewal RAI 4.3.3-1 Response
- Attachment 2: SER Confirmatory Item Response Clarification

Should you have any questions concerning this letter, please contact Mr. Dave Mannai at (802) 258-5422.

I declare under penalty of perjury that the foregoing is true and correct, executed on July 30, 2007.

Sincerely,


Ted A. Sullivan
Site Vice President
Vermont Yankee Nuclear Power Station

cc: See next page
enc: Attachments 1 & 2

A117

WCR

cc: Mr. James Dyer, Director
U.S. Nuclear Regulatory Commission
Office O5E7
Washington, DC 20555-00001

Mr. Samuel J. Collins, Regional Administrator
U.S. Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Mr. Jack Strosnider, Director
U.S. Nuclear Regulatory Commission
Office T8A23
Washington, DC 20555-00001

Mr. Jonathan Rowley, Senior Project Manager
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
MS-O-11F1
Rockville, MD 20853

Mr. Mike Modes
USNRC RI
475 Allendale Rd,
King of Prussia, PA 19406

Mr. James S. Kim, Project Manager
U.S. Nuclear Regulatory Commission
Mail Stop O 8 C2A
Washington, DC 20555

USNRC Resident Inspector
Entergy Nuclear Vermont Yankee, LLC
P.O. Box 157 (*for mail delivery*)
Vernon, Vermont 05354

Mr. David O'Brien, Commissioner
VT Department of Public Service
112 State Street – Drawer 20
Montpelier, Vermont 05620-2601

Diane Curran, Esq.
Harmon, Curran, Spielberg & Eisenberg, LLP
1726 M Street, N.W., Suite 600
Washington, D.C. 20036

Attachment 1

Vermont Yankee Nuclear Power Station

License Renewal Application

Amendment 28

VYNPS License Renewal RAI 4.3.3-1 Response

**VERMONT YANKEE NUCLEAR POWER STATION
LICENSE RENEWAL APPLICATION
ATTACHMENT 1**

RAI 4.3.3-1:

The license renewal application (LRA) for the Vermont Yankee Nuclear Power Station listed several reactor coolant pressure boundary components that did not receive a plant-specific metal fatigue analysis and cumulative usage factor (CUF). The applicant generated LRA Commitment No. 27 to address this issue. In the commitment, the applicant committed to take one of the following options or a combination of options to ensure that the time-limited aging analysis (TLAA) on environmentally-assisted fatigue (EAF) of these components, and any other Class 1 components requiring reanalysis for EAF, will be acceptable under 10 CFR 54.21(c)(1) for the period of extended operation:

Option (1): either refine the existing fatigue analyses or perform new fatigue analyses using at least one of four suboptions under this option.

Option (2): manage aging by an aging management program (AMP) for the period of extended operation.

Option (3): repair or replace the impacted component prior to exceeding a CUF of 1.0.

In order to make a determination on the acceptability of the applicant's TLAA on EAF under the requirements of 10 CFR 54.21(c)(1), the staff requests that the applicant provide additional information on the option (or options) that will be used for LRA Commitment No. 27. The applicant is requested to describe the methodology that will be used for the chosen option(s) in sufficient detail for staff review. Specifically, the staff requests that:

- A. If Option (1) is chosen, describe the methodology and the process that will be used to ensure that assumptions, transients, cycles, external loadings, F_{en} values, and analysis methods are valid for the refined or new fatigue analyses.

In the event the refined analyses performed under Option (1) result in CUFs greater than 1.0, describe the option(s) that may be used in addition to Option (1).

- B. If Option (2) is chosen, describe the AMP in sufficient detail with regard to inspection scope, inspection methods, inspection frequency, and inspection qualification techniques.
- C. If Option (3) is chosen, describe how the repair or replacement activity will be implemented in accordance with applicable repair or replacement requirements of the ASME Code Section XI.

RAI 4.3.3-1 Response:

Vermont Yankee (VY) intends to comply with Commitment 27 by demonstrating, through the implementation of Option 1, that the cumulative usage factors (CUF) of the most fatigue sensitive locations are less than 1.0 throughout the license renewal period, considering both mechanical and environmental effects. The processes that will be used to develop the calculations for Option 1 are established design and configuration management processes. These processes are governed by Entergy's 10 CFR 50 Appendix B Quality Assurance (QA) program and include design input verification and independent reviews ensuring that valid assumptions, transients, cycles, external

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loadings, analysis methods, and environmental fatigue life correction factors will be used in the refined or new fatigue analyses.

The analysis methods for determination of stresses and fatigue usage will be in accordance with an NRC endorsed Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section III Rules for Construction of Nuclear Power Plant Components Division 1 Subsection NB, Class 1 Components, Subarticles NB-3200 or NB-3600 as applicable to the specific component.

VY will utilize design transients from VY Design Specifications as well as design transient information from typical BWR-4 references to bound all operational transients. The numbers of cycles used for evaluation will be based on the design number of cycles and actual VY cycle counts projected out to the end of the license renewal period (60 years).

Environmental effects on fatigue usage will be assessed using methodology consistent with the Generic Aging Lessons Learned Report, NUREG-1801, Rev. 1, (GALL) that states; "The sample of critical components can be evaluated by applying environmental life correction factors (F_{en} Methodology) to the existing ASME Code fatigue analyses. Formulae for calculating the environmental life correction factors are contained in NUREG/CR-6583 for carbon and low-alloy steels and in NUREG/CR-5704 for austenitic stainless steels."

The Fatigue Monitoring Program currently tracks actual plant transients and evaluates these against the design transients. Current cycle counts show no limits are approached or are expected to be approached for the current license term. VY has committed to modify the current fatigue monitoring program to require periodic updates of the cumulative usage factors and to include corrective actions if the numbers of analyzed transients are approached (LRA Commitments No. 5 and No.7). The Fatigue Monitoring Program will ensure that the numbers of transient cycles experienced by the plant remain within the analyzed numbers of cycles and hence, the component CUFs remain below the values calculated in the design basis fatigue evaluations. If ongoing monitoring indicates the potential for a condition outside that analyzed above, Vermont Yankee may perform further reanalysis of the identified configuration using established configuration management processes as described above.

If Option 2 of Commitment 27 becomes necessary, the inspection program submitted for approval by the NRC will be described in terms of the ten elements specified in Branch Technical Position RLSB-1 (NUREG-1800, Appendix A-1). Parameters monitored will be the presence and sizing of cracks. Frequency of inspection and acceptance criteria will be established such that detection of aging effects will occur before there is a loss of the component intended function(s). The method of inspection will be a qualified volumetric technique based on plant-specific and industry-wide operating experience.

If Option 3 becomes necessary, repair or replacement of the affected component(s) will be in accordance with established plant procedures governing repair and replacement activities. These established procedures are governed by Entergy's 10 CFR 50 Appendix B QA program and meet the applicable repair or replacement requirements of the ASME Code Section XI.

Attachment 2

Vermont Yankee Nuclear Power Station

License Renewal Application Supplement

Amendment 28

SER Confirmatory Item Response Clarification

**VERMONT YANKEE NUCLEAR POWER STATION
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ATTACHMENT 2**

License Renewal Application Changes

VERMONT YANKEE NUCLEAR POWER STATION LICENSE RENEWAL APPLICATION SUPPLEMENT ATTACHMENT 2

The following information is provided as a supplement to the previously submitted License Renewal Application. The need for this information was identified as a Safety Evaluation Report (SER) Confirmatory Item.

Note: Insertions = underlined, deletions = strike-through

Nonsafety-Related Components Affecting Safety-Related Systems Subject to Aging Management Review

The following is provided to clarify the systems which are included in the scope of license renewal.

- Table 2.2-1a is revised to include the following new information :

**Table 2.2-1a
Mechanical Systems within the Scope of License Renewal**

System Code	System Code Name	LRA Section
<u>103</u>	<u>HD & HV Instruments</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>AE</u>	<u>Air Evacuation</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>BLD</u>	<u>Building (drainage system components)</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>CWP</u>	<u>Circulating Water Priming</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>ES</u>	<u>Extraction Steam</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>HD</u>	<u>Heater Drain</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>HV</u>	<u>Heater Vent</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>HWC</u>	<u>Hydrogen Water Chemistry</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>
<u>MUD</u>	<u>Make-up Demineralizer</u>	<u>Section 2.3.3.13,</u> <u>Miscellaneous Systems in</u> <u>Scope for (a)(2)</u>

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<u>SO</u>	<u>Seal Oil</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>TBCCW</u>	<u>Turbine Building Closed Cooling Water</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>TG</u>	<u>Main Turbine Generator</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>TLO</u>	<u>Turbine Lube Oil</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>

- The mechanical systems added to Table 2.2-1a (above) are hereby removed from Table 2.2-2 "Mechanical Systems Not within the Scope of License Renewal"

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The following is provided to clarify the description of systems which are included in the scope of license renewal.

- Table 2.3.3.13-A is revised to include the following new information:

**Table 2.3.3.13-A
Systems within the Scope of License Renewal based on the Potential for
Physical Interaction with Safety-Related Components (10 CFR 54.4(a)(2))**

System Code	System Name	Section with System Description
<u>103</u>	<u>HD & HV Instruments</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>AE</u>	<u>Air Evacuation</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>AS</u>	<u>Auxiliary Steam</u>	<u>Section 2.3.4.1, Auxiliary Steam</u>
<u>BLD</u>	<u>Building (drainage system components)</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>CWP</u>	<u>Circulating Water Priming</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>ES</u>	<u>Extraction Steam</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>HD</u>	<u>Heater Drain</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>HV</u>	<u>Heater Vent</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>HWC</u>	<u>Hydrogen Water Chemistry</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>MS</u>	<u>Main Steam</u>	<u>Section 2.3.4.3, Main Steam</u>
<u>MUD</u>	<u>Make-up Demineralizer</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>SA</u>	<u>Service Air</u>	<u>Section 2.3.3.7, Instrument Air</u>

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<u>SO</u>	<u>Seal Oil</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>TBCCW</u>	<u>Turbine Building Closed Cooling Water</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>TG</u>	<u>Main Turbine Generator</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>
<u>TLO</u>	<u>Turbine Lube Oil</u>	<u>Section 2.3.3.13, Miscellaneous Systems in Scope for (a)(2)</u>

- LRA Section 2.3.3.13.2 is revised to add descriptions of systems newly added to the scope of license renewal as follows.

HD & HV Instruments

The purpose of the 103 system is to provide indication, alarm, and control functions for associated systems (heater drains and heater vents).

Air Evacuation

The purpose of the AE system is to evacuate gases from the main turbine and main condenser during startup and maintain the system free of noncondensable gases during operation.

Building (drainage system components)

The BLD system includes floor drains and the site sewers. This system classification also designates buildings and structures which are evaluated in Section 2.4 of this LRA..

Circulating Water Priming

The purpose of the CWP system is to provide for evacuation of the discharge side of the main condenser.

Extraction Steam

The purpose of the ES system is to supply steam to the shell side of various feedwater heaters for condensate and feedwater heating.

Heater Drain

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The purpose of the HD system is to provide proper level and control for the moisture separator and feedwater heaters by providing drain capability to the main condenser.

Heater Vent

The purpose of the HV system is to provide for venting of non-condensable gases back to the main condenser.

Hydrogen Water Chemistry

The purpose of the HWC system is to mitigate the chemical conditions in the reactor that allow IGSCC in the recirculation piping and reactor vessel internals. The HWC system injects hydrogen into the reactor feedwater at the suction of the feedwater pumps.

Make-up Demineralizer

The purpose of the MUD system is to provide a supply of treated water to the DW system that may be used as makeup for the station and reactor cycles.

Seal Oil

The purpose of the SO system is to provide shaft sealing for the main generator.

Turbine Building Closed Cooling Water

The purpose of the TBCCW system is to supply demineralized water to cool various nonsafety-related auxiliary equipment located in the turbine building in support of power generation

Main Turbine Generator

The purpose of the TG system is to convert the thermodynamic energy of steam into a reliable source of electrical energy for use on the transmission network and the station auxiliary busses.

Turbine Lube Oil

The purpose of the TLO system is to provide lube oil for lubrication of the main turbine.

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The following is provided to clarify the description of components subject to aging management review which are to be included in aging management programs during the period of extended operation.

- Table 2.3.3.13-B is revised to include the following new information:

**Table 2.3.3.13-B
Description of Nonsafety-Related System Components Subject to Aging Management
Review Based on 10 CFR 54.4(a)(2) for Physical Interactions**

System Code	Nonsafety-Related Components Subject to AMR
<u>103</u>	<u>Portion of the system in the turbine building</u>
<u>AE</u>	<u>Portion of the system in the turbine building</u>
AOG	Portion of the system <u>inside</u> associated with the plant stack loop seal structure
<u>AS</u>	<u>Portion of the system in the turbine building</u>
<u>BLD</u>	<u>The portion of the system in the reactor building and the turbine building</u>
C	Portion of the system at the ECCS keep-full station in the turbine building, as well as the area on elevation 252 in the turbine building where service water piping runs along the wall. Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
CD	<u>Portion of the system in the turbine building.</u> Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
CST	Portion of the system in the CST valve and instrument enclosure, the primary containment building, and the reactor building, <u>and the turbine building.</u> Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.

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CW	Portion of the system in cooling tower #2 cell 1 <u>and the turbine building.</u>
<u>CWP</u>	<u>Portion of the system in the turbine building</u>
DG	Portion of the system in the diesel generator rooms in the turbine building Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
DW	Portion of the system in the control building, the reactor building, and at the diesel generator rooms in the turbine building and in the CST valve and instrument enclosure. Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
<u>ES</u>	<u>Portion of the system in the turbine building</u>
FDW	Portion of the system in the reactor building and in primary containment <u>and the turbine building</u>
FO	Portion of the system in the fuel oil transfer pump house <u>and the turbine building.</u> Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
FP	Portion of the system in cooling tower #2 cell 1 and the reactor building, <u>the turbine building, and the service water pump area of the intake structure.</u> Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
HB	Portion of the system in the CST valve and instrument enclosure, the control building, the reactor building, and at the diesel generator rooms in the turbine building Components outside the safety class pressure boundary yet relied upon to provide structural/seismic support for the pressure boundary.
<u>HD</u>	<u>Portion of the system in the turbine building</u>

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<u>HV</u>	<u>Portion of the system in the turbine building</u>
HVAC	Portion of the system in the reactor building <u>and the turbine building</u> . Components outside the safety class pressure boundary yet relied upon to provide structural/seismic support for the pressure boundary.
<u>HWC</u>	<u>Portion of the system in the turbine building</u>
IA	The portion of the system in the reactor building <u>and the turbine building</u> that requires aging management review due to potential spatial interaction are the cooling and lubrication subcomponents for the containment air compressor (C-2-1A) and its pre-cooler and after-cooler, as well as the air dryer towers (tanks), drain piping, valves, and traps associated with the <u>instrument air dryers (D-1-1A and D-1-1B)</u> and the containment air dryer (D-2-1A), as well as the drain piping, valves, and traps associated with the air receiver tank and knock-out drum (TK-55-1A and TK-154-1A). Components outside the safety class pressure boundary yet relied upon to provide structural/seismic support for the pressure boundary.
<u>MS</u>	<u>Portion of the system in the turbine building</u>
<u>MUD</u>	<u>Portion of the system in the turbine building</u>
PASS	Portion of the system in the reactor building <u>and the turbine building</u> . Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
PW	Portion of the system in the "A" diesel generator room in the turbine building
RDW	Portion of the system in the CST valve and instrument enclosure, service water pump area of the intake structure, plant stack, primary containment building, and reactor building <u>and turbine building</u> . Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.
RHRSW	Portion of the system in the reactor building <u>and the turbine building</u> . Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.

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<u>SA</u>	<p>The portion of the system in the turbine building that requires aging management review due to potential spatial interaction includes the drain piping, valves, and traps associated with the air receiver tanks (TK-5-1A and TK-5-1B).</p> <p>Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.</p>
<u>SC</u>	<p>Portion of the system in the turbine building</p> <p>Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.</p>
<u>SO</u>	<p>Portion of the system in the turbine building</p>
<u>SPL</u>	<p>Portion of the system in the reactor building, turbine building, and plant stack.</p> <p>Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.</p>
<u>SW</u>	<p>Portion of the system in the service water pump area of the intake structure and the reactor building and the turbine building.</p> <p>Components outside the safety class pressure boundary, yet relied upon to provide structural/seismic support for the pressure boundary.</p>
<u>TBCCW</u>	<p>Portion of the system in the turbine building</p>
<u>TG</u>	<p>Portion of the system in the turbine building</p>
<u>TLO</u>	<p>Portion of the system in the turbine building</p>

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The following is provided to clarify the description of components subject to aging management review which are to be included in aging management programs during the period of extended operation.

- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-43, HD & HV Instruments (103) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-44, Air Evacuation (AE) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Rupture disk</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>
<u>Trap</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-1, Augmented Offgas (AOG) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line item.

Component Type	Intended Function¹
<u>Steam trap</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-45, Auxiliary Steam (AS) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Stream trap</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-46, Building (drainage system components) System (BLD), Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Table 2.3.3-13-2, Condensate (C) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Orifice</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Steam trap</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-4, Condensate Demineralizer (CD) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Table 2.3.3-13-7, Condensate Storage and Transfer (CST) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line item.

Component Type	Intended Function¹
<u>Filter housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-9, Circulating Water (CW) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Expansion joint</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-47, Circulating Water Priming (CWP) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Trap</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-10, Diesel Generator and Auxiliaries (DG) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised to delete the following line item.

Component Type	Intended Function¹
Compressor housing	Pressure boundary

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-48, Extraction Steam (ES) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
Bolting	Pressure boundary
Expansion joint	Pressure boundary
Orifice	Pressure boundary
Piping	Pressure boundary
Tubing	Pressure boundary
Valve body	Pressure boundary

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-13, Feedwater (FDW) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Orifice</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Table 2.3.3-13-14, Fuel Oil (FO) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line item.

Component Type	Intended Function¹
<u>Strainer housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-15, Fire Protection (FP) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Orifice</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-18, House Heating Boiler (HB) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-49, Heater Drain (HD) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-50, Heater Vent (HV) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Orifice</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Table 2.3.3-13-21, Heating, Ventilation, and Air Conditioning (HVAC) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items and deleting one line item.

Component Type	Intended Function¹
<u>Duct</u>	<u>Pressure boundary</u>
<u>Fan housing</u>	<u>Pressure boundary</u>
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Heat exchanger (tubes)</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-51, Hydrogen Water Chemistry (HWC) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Table 2.3.3-13-22, Instrument Air (IA) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised to delete the following line item.

Component Type	Intended Function¹
<u>Compressor housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-52, Main Steam (MS) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Orifice</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-53, Make-up Demineralizer (MUD) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-29, Potable Water (PW) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-54, Service Air (SA) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Trap</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-39, Stator Cooling (SC) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line items.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-55, Seal Oil (SO) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Sight glass</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Table 2.3.3-13-41, Sampling (SPL) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line item.

Component Type	Intended Function¹
<u>Strainer housing</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Table 2.3.3-13-42, Service Water (SW) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, is revised adding the following line item.

Component Type	Intended Function¹
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-56, Turbine Building Closed Cooling Water (TBCCW) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-57, Main Turbine Generator (TG) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Turbine casing</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 2.3.3 is revised to add a new Table 2.3.3-13-58, Turbine Lube Oil (TLO) System, Nonsafety-Related Components Affecting Safety-Related Systems-Components Subject to Aging Management Review, as follows.

Component Type	Intended Function¹
<u>Bolting</u>	<u>Pressure boundary</u>
<u>Filter housing</u>	<u>Pressure boundary</u>
<u>Heat exchanger (shell)</u>	<u>Pressure boundary</u>
<u>Piping</u>	<u>Pressure boundary</u>
<u>Pump casing</u>	<u>Pressure boundary</u>
<u>Strainer housing</u>	<u>Pressure boundary</u>
<u>Tank</u>	<u>Pressure boundary</u>
<u>Tubing</u>	<u>Pressure boundary</u>
<u>Valve body</u>	<u>Pressure boundary</u>

1. For component types included under 10 CFR 54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs.

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-43, HD & HV Instruments (103) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 (AP-64)	3.3.1-31	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-44, Air Evacuation (AE) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Filter housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Rupture disk	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-57	A
Rupture disk	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-4	C
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Trap	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Trap	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 (AP-64)	3.3.1-31	C

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Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E- 33 (S-09)	3.4.1-4	A

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- LRA Section 3.3.2, Table 3.3.2-13-1, Augmented Offgas (AOG) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.A-17 (S-15)	3.4.1-29	C
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	C
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Steam trap	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	V.E-7 (E-44)	3.2.1-31	A
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	C
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Steam trap	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	V.E-7 (E-44)	3.2.1-31	A
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.A-17 (S-15)	3.4.1-29	C
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	C
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	V.D2-32 (E-10)	3.2.1-1	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Valve body	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-45, Auxiliary Steam (AS) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	One-Time Inspection			H
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.A-17 (S-15)	3.4.1-29	C
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	C
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Steam trap	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	V.E-7 (E-44)	3.2.1-31	A
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.A-17 (S-15)	3.4.1-29	C
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	C
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Steam trap	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Steam trap	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Tubing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	V.E-7 (E-44)	3.2.1-31	A

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Tubing	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	V.D2-31 (E-07)	3.2.1-19	A
Tubing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.A-17 (S-15)	3.4.1-29	C
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	C
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	V.D2-32 (E-10)	3.2.1-1	A
Valve body	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-46, Buildings (drainage system components) System (BLD), Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E

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- LRA Section 3.3.2, Table 3.3.2-13-2, Condensate (C) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	One-Time Inspection			H
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-7 (S-18)	3.4.1-5	A
Orifice	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Orifice	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	A
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.B2-4 (S-15)	3.4.1-29	C
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Pump casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Steam trap	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.B2-4 (S-15)	3.4.1-29	C
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	A
Steam trap	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Steam trap	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Steam trap	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C

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Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Tank	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

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- LRA Section 3.3.2, Table 3.3.2-13-4, Condensate Demineralizer (CD) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-4 (S-34)	3.4.1-22	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VIII.I-10 (SP-12)	3.4.1-41	C
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Filter housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Pump casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Tank	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	VIII.I-2 (SP-6)	3.4.1-41	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-5 (SP-61)	3.4.1-15	C

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- LRA Section 3.3.2, Table 3.3.2-13-7, Condensate Storage and Transfer (CST) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Filter housing	Pressure boundary	Carbon steel	Air – outdoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Filter housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

- LRA Section 3.3.2, Table 3.3.2-13-9, Circulating Water (CW) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Expansion joint	Pressure boundary	Stainless steel	Condensation (ext)	Loss of material	System Walkdown	VII.I-11 (A-81)	3.3.1-58	A
Expansion joint	Pressure boundary	Stainless steel	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E
Tank	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Tank	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-47, Circulating Water Priming (CWP) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Carbon steel	Air – outdoor (ext)	Loss of material	System Walkdown	VII.I-1 (AP-28)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Bolting	Pressure boundary	Stainless steel	Air – outdoor (ext)	None	None			G
Piping	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VIII.H-10 (S-42)	3.4.1-28	A
Piping	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VIII.E-6 (S-24)	3.4.1-31	E
Pump casing	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VIII.H-10 (S-42)	3.4.1-28	A
Pump casing	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VIII.E-6 (S-24)	3.4.1-31	E
Tank	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VIII.H-10 (S-42)	3.4.1-28	A
Tank	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VIII.E-6 (S-24)	3.4.1-31	E
Trap	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VIII.H-10 (S-42)	3.4.1-28	A
Trap	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VIII.E-6 (S-24)	3.4.1-31	E
Tubing	Pressure boundary	Copper alloy < 15% Zn	Condensation (ext)	Loss of material	System walkdown	VII.F1-16 (A-46)	3.3.1-25	E
Tubing	Pressure boundary	Copper alloy < 15% Zn	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VIII.E-18 (SP-31)	3.4.1-32	E
Valve body	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VIII.H-10 (S-42)	3.4.1-28	A

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Valve body	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VIII.E-6 (S-24)	3.4.1-31	E
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- LRA Section 3.3.2, Table 3.3.2-13-10, Diesel Generator & Auxiliaries (DG) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised to delete the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Compressor housing	Pressure boundary	Carbon steel	Air—indoor (ext)	Loss of material	System Walkdown	VII.H-8 (A-77)	3.3.1-58	A
Compressor housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control—Closed-Cooling Water	VII.H2-23 (A-25)	3.3.1-47	B
Compressor housing	Pressure boundary	Carbon steel	Untreated air (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.H2-21 (A-23)	3.3.1-71	E, 302

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-48, Extraction Steam (ES) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-4 (S-34)	3.4.1-22	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VIII.I-10 (SP-12)	3.4.1-41	C
Expansion joint	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VIII.I-10 (SP-12)	3.4.1-41	A
Expansion joint	Pressure boundary	Stainless steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-13 (SP-46)	3.4.1-37	C
Expansion joint	Pressure boundary	Stainless steel	Steam > 270°F (int)	Cracking – fatigue	TLAA – metal fatigue			H
Expansion joint	Pressure boundary	Stainless steel	Steam > 270°F (int)	Cracking	Water Chemistry Control - BWR	VIII.B2-1 (SP-45)	3.4.1-13	A
Expansion joint	Pressure boundary	Stainless steel	Treated water > 270°F (int)	Cracking	Water Chemistry Control - BWR	VIII.A-11 (SP-45)	3.4.1-13	C
Expansion joint	Pressure boundary	Stainless steel	Treated water > 270°F (int)	Cracking – fatigue	TLAA – metal fatigue			H
Expansion joint	Pressure boundary	Stainless steel	Treated water > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-1 (SP-16)	3.4.1-16	A
Orifice	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Orifice	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.C-5 (S-15)	3.4.1-29	A
Orifice	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking – fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Orifice	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-3 (S-04)	3.4.1-2	A
Orifice	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Orifice	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-6 (S-09)	3.4.1-4	A
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.C-5 (S-15)	3.4.1-29	A
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-3 (S-04)	3.4.1-2	A

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Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-6 (S-09)	3.4.1-4	A
Tubing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Tubing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-6 (S-09)	3.4.1-4	A
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.C-5 (S-15)	3.4.1-29	A
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-3 (S-04)	3.4.1-2	A
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Valve body	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-6 (S-09)	3.4.1-4	A

- LRA Section 3.3.2, Table 3.3.2-13-13, Feedwater (FDW) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	One-Time Inspection			H
Heat exchanger (shell)	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	One-Time Inspection			H
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C

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Orifice	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Orifice	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.D2-6 (S-11)	3.4.1-1	A
Orifice	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Piping	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.C-5 (S-15)	3.4.1-29	A
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-3 (S-04)	3.4.1-2	A
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Pump casing	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Pump casing	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	One-time inspection			H
Pump casing	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Cracking - fatigue	One-time inspection			H
Strainer housing	Pressure boundary	Carbon steel	Treated water > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Tubing	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	A
Tubing	Pressure boundary	Stainless steel	Lube oil (int)	Loss of material	Oil analysis	VII.C1-8 (AP-47)	3.3.1-26	D
Tubing	Pressure boundary	Stainless steel	Treated water > 270°F (int)	Cracking – fatigue	TLAA – metal fatigue			H
Tubing	Pressure boundary	Stainless steel	Treated water > 270°F (int)	Loss of material	Water chemistry control – BWR	VIII.D2-4 (SP-16)	3.4.1-16	A
Tubing	Pressure boundary	Stainless steel	Treated water > 270°F (int)	Cracking	Water Chemistry Control - BWR	VIII.A-11 (SP-45)	3.4.1-13	C
Valve body	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.C1-17 (AP-30)	3.3.1-14	D
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Flow accelerated corrosion	VIII.C-5 (S-15)	3.4.1-29	A

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Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	A
Valve body	Pressure boundary	Carbon steel	Steam > 220°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.C-3 (S-04)	3.4.1-2	A

- LRA Section 3.3.2, Table 3.3.2-13-14, Fuel Oil (FO) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Fuel oil (int)	Loss of material	Diesel fuel monitoring	VII.H1-10 (A-30)	3.3.1-20	E
Strainer housing	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	A
Strainer housing	Pressure boundary	Stainless steel	Fuel oil (int)	Loss of material	Diesel fuel monitoring	VII.H1-6 (AP-54)	3.3.1-32	E

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- LRA Section 3.3.2, Table 3.3.2-13-15, Fire Protection (FP) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Orifice	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Orifice	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Fire water system	VII.G-24 (A-33)	3.3.1-68	B
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Fire Water System	VII.G-24 (A-33)	3.3.1-68	B
Strainer housing	Pressure boundary	Gray cast iron	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Strainer housing	Pressure boundary	Gray cast iron	Raw water (int)	Loss of material	Fire Water System	VII.G-24 (A-33)	3.3.1-68	B
Strainer housing	Pressure boundary	Gray cast iron	Raw water (int)	Loss of material	Selective leaching	VII.G-14 (A-51)	3.3.1-85	A

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- LRA Section 3.3.2, Table 3.3.2-13-18, House Heating Boiler (HB) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VII.I-11 (A-81)	3.3.1-58	A
Heat exchanger (shell)	Pressure boundary	Carbon steel	Steam> 220° F (int)	Loss of material	Water chemistry control – auxiliary systems	VII.C2-14 (A-25)	3.3.1-47	E, 305
Heat exchanger (shell)	Pressure boundary	Carbon steel	Steam> 220° F (int)	Cracking - fatigue	One-time inspection			H
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water chemistry control – auxiliary systems	VII.C2-14 (A-25)	3.3.1-47	E, 305
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VII.I-11 (A-81)	3.3.1-58	A
Strainer housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water chemistry control – auxiliary systems	VII.C2-14 (A-25)	3.3.1-47	E, 305

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-49, Heater Drain (HD) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-4 (S-34)	3.4.1-22	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VIII.I-10 (SP-12)	3.4.1-41	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Pump casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Tank	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	VIII.I-2 (SP-6)	3.4.1-41	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-5 (SP-61)	3.4.1-15	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-50, Heater Vents (HV) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-4 (S-34)	3.4.1-22	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VIII.I-10 (SP-12)	3.4.1-41	C
Orifice	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Orifice	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Tank	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	VIII.I-2 (SP-6)	3.4.1-41	A
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-5 (SP-61)	3.4.1-15	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	A

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- LRA Section 3.3.2, Table 3.3.2-13-21, Heating, Ventilation, and Air Conditioning (HVAC) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Duct	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Duct	Pressure boundary	Carbon steel	Air – indoor (int)	Loss of material	System Walkdown	V.B-1 (E-25)	3.2.1-32	E
Fan housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Fan housing	Pressure boundary	Carbon steel	Air – indoor (int)	Loss of material	System Walkdown	V.B-1 (E-25)	3.2.1-32	E
Heat exchanger (shell)	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System Walkdown	VII.I-11 (A-81)	3.3.1-58	A
Heat exchanger (shell)	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Service water integrity	VII.C1-19 (A-38)	3.3.1-76	D
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Service water integrity	VII.C1-19 (A-38)	3.3.1-76	D
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Strainer housing	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Service water integrity	VII.C1-19 (A-38)	3.3.1-76	D

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-51, Hydrogen Water Chemistry (HWC) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 (AP-64)	3.3.1-31	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

- LRA Section 3.3.2, Table 3.3.2-13-22, Instrument Air (IA) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised to delete the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Compressor housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.D-3 (A-80)	3.3.1-57	A
Compressor housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Closed-Cooling Water	VII.C2-14 (A-25)	3.3.1-47	D
Piping	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil Analysis	VII.C1-17 (AP-30)	3.3.1-14	E
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – BWR	VII.E3-18 (A-35)	3.3.1-17	C

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-52, Main Steam (MS) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-4 (S-34)	3.4.1-22	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VIII.I-10 (SP-12)	3.4.1-41	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking - fatigue	One-Time Inspection			H
Heat exchanger (shell)	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Orifice	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Orifice	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking – fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	A
Orifice	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Flow accelerated corrosion	VIII.B2-4 (S-15)	3.4.1-29	A
Orifice	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.B2-3 (S-05)	3.4.1-37	A
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Piping	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	A
Piping	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Flow accelerated corrosion	VIII.B2-4 (S-15)	3.4.1-29	A
Piping	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.B2-3 (S-05)	3.4.1-37	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	C
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C

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Tubing	Pressure boundary	Copper alloy < 15% Zn	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 (AP-64)	3.3.1-31	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 (AP-64)	3.3.1-31	C
Tubing	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VIII.I-10 (SP-12)	3.4.1-41	A
Tubing	Pressure boundary	Stainless steel	Steam > 270°F (int)	Cracking – fatigue	TLAA – metal fatigue			H
Tubing	Pressure boundary	Stainless steel	Steam > 270°F (int)	Loss of material	Water chemistry control – BWR	VIII.B2-2 (SP-46)	3.4.1-37	A
Tubing	Pressure boundary	Stainless steel	Steam > 270°F (int)	Cracking	Water Chemistry Control - BWR	VIII.B2-1 (SP-45)	3.4.1-13	A
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Valve body	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	A
Valve body	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Flow accelerated corrosion	VIII.B2-4 (S-15)	3.4.1-29	A
Valve body	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.B2-3 (S-05)	3.4.1-37	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.D2-7 (S-09)	3.4.1-4	C

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-53, Make-up Demineralizer (MUD) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Filter housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Tank	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 AP-64)	3.3.1-31	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

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- LRA Section 3.3.2, Table 3.3.2-13-29, Potable Water (PW) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Filter housing	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Strainer housing	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Tank	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-54, Service Air (SA) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Air – indoor (int)	Loss of material	System Walkdown	V.B-1 (E-25)	3.2.1-32	E
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Tank	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E
Trap	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Trap	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Air – indoor (int)	Loss of material	System Walkdown	V.B-1 (E-25)	3.2.1-32	E
Valve body	Pressure boundary	Carbon steel	Untreated water (int)	Loss of material	Periodic Surveillance and Preventive Maintenance	VII.G-24 (A-33)	3.3.1-68	E

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- LRA Section 3.3.2, Table 3.3.2-13-39, Stator Cooling (SC) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Filter housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Auxiliary Systems	VII.C2-14 (A-25)	3.3.1-47	E
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Auxiliary Systems	VII.C2-14 (A-25)	3.3.1-47	E
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Auxiliary Systems	VII.C2-14 (A-25)	3.3.1-47	E
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Strainer housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Auxiliary Systems	VII.C2-14 (A-25)	3.3.1-47	E
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Tank	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Auxiliary Systems	VII.C2-14 (A-25)	3.3.1-47	E
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control – Auxiliary Systems	VII.C2-14 (A-25)	3.3.1-47	E

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-55, Seal Oil (SO) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Filter housing	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Sight glass	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Sight glass	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Sight glass	Pressure boundary	Glass	Air – indoor (ext)	None	None	VII.J-8 (AP-14)	3.3.1-93	A
Sight glass	Pressure boundary	Glass	Lube oil (int)	None	None	VII.J-10 (AP-15)	3.3.1-93	A
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Tank	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D

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- LRA Section 3.3.2, Table 3.3.2-13-41, Sampling (SPL) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A
Strainer housing	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	A
Strainer housing	Pressure boundary	Stainless steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

- LRA Section 3.3.2, Table 3.3.2-13-42, Service Water (SW) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, is revised adding the following line items.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VII.I-11 (A-81)	3.3.1-58	A
Heat exchanger (shell)	Pressure boundary	Carbon steel	Raw water (int)	Loss of material	Service water integrity	VII.C1-5 (A-64)	3.3.1-77	B
Heat exchanger (shell)	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	A
Heat exchanger (shell)	Pressure boundary	Stainless steel	Condensation (ext)	Loss of material	System walkdown	VII.F1-1 (A-09)	3.3.1-27	E
Heat exchanger (shell)	Pressure boundary	Stainless steel	Raw water (int)	Loss of material	Service water integrity	VII.C1-15 (A-54)	3.3.1-79	D
Pump casing	Pressure boundary	Carbon steel	Condensation (ext)	Loss of material	System walkdown	VII.I-11 (A-81)	3.3.1-58	A
Pump casing	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	A
Pump casing	Pressure boundary	Stainless steel	Condensation (ext)	Loss of material	System walkdown	VII.F1-1 (A-09)	3.3.1-27	E
Pump casing	Pressure boundary	Stainless steel	Raw water (int)	Loss of material	Service water integrity	VII.C1-15 (A-54)	3.3.1-79	D

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-56, Turbine Building Closed Cooling Water (TBCCW) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Closed Cooling Water	VII.C2-14 (A-25)	3.3.1-47	B
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Closed Cooling Water	VII.C2-14 (A-25)	3.3.1-47	B
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Closed Cooling Water	VII.C2-14 (A-25)	3.3.1-47	B
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Tank	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Closed Cooling Water	VII.C2-14 (A-25)	3.3.1-47	B
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control – Closed Cooling Water	VII.C2-14 (A-25)	3.3.1-47	B
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control – Closed Cooling Water	VII.C2-14 (A-25)	3.3.1-47	B

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-57, Main Turbine Generator (TG) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Filter housing	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking – fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Filter housing	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control – BWR	VIII.A-15 (S-04)	3.4.1-2	C
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking – fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Piping	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Flow Accelerated Corrosion	VIII.A-17 (S-15)	3.4.1-29	C
Piping	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control – BWR	VIII.A-15 (S-04)	3.4.1-2	C
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Treated water > 270°F (int)	Cracking - fatigue	One-time inspection			H
Pump casing	Pressure boundary	Carbon steel	Treated water > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Turbine casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Turbine casing	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking - fatigue	One-time inspection			H
Turbine casing	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Turbine casing	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-18 (A-35)	3.3.1-17	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 (AP-64)	3.3.1-31	C

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Tubing	Pressure boundary	Copper alloy < 15% Zn	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VII.E3-9 (AP-64)	3.3.1-31	C
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Valve body	Pressure boundary	Carbon steel	Steam > 270°F (int)	Cracking - fatigue	TLAA – metal fatigue	VIII.B2-5 (S-08)	3.4.1-1	C
Valve body	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Flow accelerated corrosion	VIII.A-17 (S-15)	3.4.1-29	C
Valve body	Pressure boundary	Carbon steel	Steam > 270°F (int)	Loss of material	Water Chemistry Control - BWR	VIII.A-15 (S-04)	3.4.1-2	C
Valve body	Pressure boundary	Carbon steel	Treated water (int)	Loss of material	Water Chemistry Control - BWR	VIII.E-33 (S-09)	3.4.1-4	A

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- LRA Section 3.3.2 is revised to add a new Table 3.3.2-13-58, Turbine Lube Oil (TLO) System, Nonsafety-Related Components Affecting Safety-Related Systems - Summary of Aging Management Evaluation, as follows.

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG -1801, Vol.2 Item	Table 1 Item	Notes
Bolting	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-4 (AP-27)	3.3.1-43	E
Bolting	Pressure boundary	Stainless steel	Air – indoor (ext)	None	None	VII.J-15 (AP-17)	3.3.1-94	C
Filter housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Filter housing	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Heat exchanger (shell)	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.F1-10 (AP-41)	3.3.1-59	C
Heat exchanger (shell)	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Piping	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Piping	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Pump casing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VII.I-8 (A-77)	3.3.1-58	A
Pump casing	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Strainer housing	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Strainer housing	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Tank	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Tank	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Tubing	Pressure boundary	Copper alloy < 15% Zn	Air – indoor (ext)	None	None	V.F-3 (EP-10)	3.2.1-53	C
Tubing	Pressure boundary	Copper alloy < 15% Zn	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D
Valve body	Pressure boundary	Carbon steel	Air – indoor (ext)	Loss of material	System Walkdown	VIII.H-7 (S-29)	3.4.1-28	A
Valve body	Pressure boundary	Carbon steel	Lube oil (int)	Loss of material	Oil analysis	VII.G-22 (AP-30)	3.3.1-14	D

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- LRA Section B.1.21 is revised to add the following systems to the list of nonsafety-related systems affecting safety-related components managed by the One-Time Inspection Program.
 - Auxiliary Steam (AS)
 - Condensate (C)
 - Feedwater (FDW)
 - House Heating Boiler (HB)
 - Main Steam (MS)
 - Main Turbine Generator (TG)

- LRA Section B.1.22 is revised to add the following systems to the list of nonsafety-related systems affecting safety-related components managed by the Periodic Surveillance and Preventive Maintenance Program.
 - Buildings (drainage system components) (BLD)
 - Circulating Water Priming (CWP)
 - Service Air (SA)