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Fax: 419-321-7582April 15, 2011
L-11-114

10 CFR 54

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

Davis-Besse Nuclear Power Station, Unit No. 1
Docket No. 50-346, License Number NPF-3
Reply to Request for Additional Information for the Review of the Davis-Besse Nuclear Power Station, Unit No. 1, License Renewal Application, Sections 2.2 & 2.3 (TAC No. ME4640), License Renewal Application Amendment No. 3, and Revised License Renewal Application Boundary Drawings

By letter dated August 27, 2010, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102450565), FirstEnergy Nuclear Operating Company (FENOC) submitted an application pursuant to Title 10 of the *Code of Federal Regulations*, Part 54 for renewal of Operating License NPF-3 for the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1. By letter dated March 18, 2011 (ADAMS Accession No. ML110700732), the Nuclear Regulatory Commission (NRC) requested additional information to complete its review of the License Renewal Application (LRA).

The Attachment provides the FENOC reply to the NRC request for additional information. The NRC request is shown in bold text followed by the FENOC response. Enclosure A provides Amendment No. 3 to the DBNPS LRA. Enclosure B provides revised LRA boundary drawings.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Clifford I. Custer, Fleet License Renewal Project Manager, at 724-682-7139.

A145
NRC

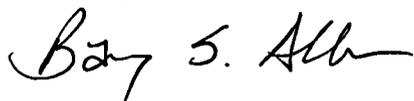
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I declare under penalty of perjury that the foregoing is true and correct. Executed on April 15, 2011.

Sincerely,



Barry S. Allen

Attachment:

Reply to Request for Additional Information for the Review of the Davis-Besse Nuclear Power Station, Unit No. 1, License Renewal Application, Sections 2.2 & 2.3

Enclosures:

- A. Amendment No. 3 to the DBNPS License Renewal Application
- B. Revised License Renewal Application Boundary Drawings

cc: NRC DLR Project Manager
NRC Region III Administrator

cc: w/o Attachment or Enclosures
NRC DLR Director
NRR DORL Project Manager
NRC Resident Inspector
Utility Radiological Safety Board

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SECTION 2.2 PLANT-LEVEL SCOPING RESULTS

Question RAI 2.2-01

License renewal application (LRA) Section 2.2, Tables 2.2-1, Table 2.2-2 and Table 2.2-3 provide the results of applying the license renewal scoping criteria to the systems, structures, and commodities. The license renewal scoping criteria was described in Section 2.1. The following updated safety analysis report (USAR) systems could not be located in LRA Tables 2.2-1 or 2.2-2.

USAR Section	System
5.2.6 Loose Parts Monitoring	Loose Parts Monitoring System
9.2.4.2 System Description	Domestic Water System
10.4.8 Steam Generator Blow Down System	Steam Generator Blowdown System
11.5 Solid Waste System	Solid Waste System
9.1.4. Fuel Handling System	Fuel Handling System

The staff requests that the applicant justify its exclusion of the above systems in Tables 2.2-1, 2.2 2 or 2.2-3.

RESPONSE RAI 2.2-01

The following Updated Safety Analysis Report (USAR) systems are either determined to be not within the scope of license renewal, within the scope of license renewal, or are structural components covered in the structural sections of the LRA. Their scoping determinations are as follows:

Loose Parts Monitoring System – The Loose Parts Monitoring System is evaluated as part of the Miscellaneous Subsystems, which is listed in LRA Table 2.2-2, “License Renewal Scoping Results for Electrical and I&C Systems.” The Miscellaneous Subsystems are not within the scope of license renewal since they do not satisfy the scoping criteria of 10 CFR 54.4(a)(1), (a)(2), or (a)(3).

Domestic Water System – The Domestic Water System is evaluated as part of the Makeup Water Treatment System, which is listed in LRA Table 2.2-1, “License Renewal Scoping Results for Mechanical Systems.” The Makeup Water Treatment System is within the scope of license renewal.

Steam Generator Blowdown System – The Steam Generator Blowdown System is evaluated as part of the Main Steam System, which is listed in LRA Table 2.2-1, “License Renewal Scoping Results for Mechanical Systems.” The Main Steam System is within the scope of license renewal.

Solid Waste System – The Solid Waste System is no longer in use as described in USAR Section 11.5.3. This system is evaluated as part of the Spent Resin Transfer System, which is listed in LRA Table 2.2-1, “License Renewal Scoping Results for Mechanical Systems.” The Spent Resin Transfer System is within the scope of license renewal.

Fuel Handling System – The Fuel Handling System is evaluated as structural components as part of in-scope Auxiliary Building and Containment structures, which are listed in LRA Table 2.2.-3, “License Renewal Scoping Results for Structures.” The Auxiliary Building and Containment structures and structural components, including Fuel handling components such as cranes, bridges, trolley, rails, girders, fuel handling tools and equipment, and fuel transfer tubes, are within the scope of license renewal.

SECTION 2.3 SCOPING AND SCREENING RESULTS: MECHANICAL SYSTEMS

Question RAI 2.3-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an aging management review (AMR) by reviewing the results of the screening of components within the license renewal boundary.

For the drawing locations identified in the table below, the continuation of piping in scope for license renewal could not be found.

License Renewal Application (LRA) Section / Drawing Number & Location	Continuation Issue
2.3.3.3 Auxiliary Steam and Station Heating System	
LR-M021, Rev 1, F-14 &G-14	Valves SH528 & SH537 continuation drawings were not provided.
LR-M021, Rev 1, F-13 &G-13	Valves SH331 & SH332 continuation drawings were not provided.
LR-M021, Rev 1, F-12 &G-12	Valves SH30 & SH31 continuation drawings were not provided.
LR-M021, Rev 1, F-11 & G-11	Valves SH544 & SH520 continuation drawings were not provided.

LR-M021, Rev 1, F-9	Valves SH156 & SH157 continuation drawings were not provided.
LR-M021, Rev 1, F-8	Valves SH175 & SH176 continuation drawings were not provided.
2.3.3.11 Demineralized Water Storage System	
LR-M010C Rev. 0, K-10 and K-11	Continuation of 1"-HCD-37 overflow piping and 1"HCD-38 piping is not provided.
2.3.3.19 Makeup Water Treatment System	
Drawing LR-M011, Rev 0, A-8, B-7 and E-6	LR Note 1 and Note 7 indicate Station Plumbing continues on drawings M-160, M-161 and M-192. These continuation drawings were not provided.
2.3.3.30 Station Blackout Diesel Generator System	
LR-M017D Rev. 0, H-8	Continuation to the governor air booster pump is not provided.
2.3.3.31 Station Plumbing, Drains, and Sumps System	
M-041C, G-3, 7 & 10	Continuation of 4"-MSD-3 to containment normal sump is not provided.
2.3.4.1 Auxiliary Feedwater System	
LR-M006D, Rev 0, G-10	Valve AF2659 continuation drawings are not provided.
LR-M006D, Rev 0,G-12	Valves AF416A & AF416B continuation drawings were not provided.
LR-M006D, Rev 0,H-12	Valves AF498A & AF498B continuation drawings were not provided.
2.3.4.3 Main Feedwater System	
LR-M-006D, Rev 0, C-2 & G-4	Valves FW5885A & FW500A continuation drawings were not provided.
2.3.4.4 Main Steam System	
LR-M003A, Rev 0, B-2 & E-3	Valves IA566 & IA562 continuation drawings were not provided.
LR-M003A, Rev 0, D-7 & F-7	Valves MS210A & MS209A continuation drawings were not provided.
LR-M003C, Rev 1, E-11 & F-11	Valves MS2063 (MS2067) & MS2062 (MS2066) continuation drawings were not provided.
LR-M003C, Rev 1, H-5 & H-7	Valves MS58 & MS59 continuation drawings were not provided.
LR-M003C, Rev 1, K-5	Valves MS53 & MS54 continuation drawings were not provided.
LR-M003C, Rev 1, K-9	Valves MS51 & MS52 continuation drawings were not provided.
LR-M007A, Rev 0, D-6 & D-9	Valves ICS11AB & ISB11BB continuation drawings were not provided.

LR-M007B, Rev 1, D-2 & D-9	Valves IA1008E & IA1009E continuation drawings were not provided.
LR-M007B, Rev 1, B-3 & B-12	Valves FW2685B, FW2685D, FW2686B & FW2686D continuation drawings were not provided
LR-M007B, Rev 1, B-5 & B-11	Valves AF6456A, AF6456B, AF6457A & AF6457B continuation drawings were not provided.

The staff requests the applicant to provide sufficient information to locate the license renewal boundary. If the continuation cannot be shown on license renewal boundary drawings, then provide additional information describing the extent of the scoping boundary and verify whether or not there are additional AMR component types between the continuation and the termination of the scoping boundary. If the scoping classification of a section of the piping changes over the continuation, provide additional information to clarify the change in scoping classification.

RESPONSE RAI 2.3-01

2.3.3.3 Auxiliary Steam and Station Heating System	
LR-M021, Rev 1, F-14 & G-14	Valves SH528 & SH537 continuation drawings were not provided.

There are no continuations from valves SH528 and SH537. The drawing accurately depicts the station configuration.

LR-M021, Rev 1, F-13 & G-13	Valves SH331 & SH332 continuation drawings were not provided.
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There are no continuations from valves SH331 and SH332. The drawing accurately depicts the station configuration.

LR-M021, Rev 1, F-12 & G-12	Valves SH30 & SH31 continuation drawings were not provided.
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There are no continuations from valves SH30 and SH31. The drawing accurately depicts the station configuration.

LR-M021, Rev 1, F-11 & G-11	Valves SH544 & SH520 continuation drawings were not provided.
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There are no continuations from valves SH544 and SH520. The drawing accurately depicts the station configuration.

LR-M021, Rev 1, F-9	Valves SH156 & SH157 continuation drawings were not provided.
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There are no continuations from valves SH156 and SH157. The drawing accurately depicts the station configuration.

LR-M021, Rev 1, F-8	Valves SH175 & SH176 continuation drawings were not provided.
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There are no continuations from valves SH175 and SH176. The drawing accurately depicts the station configuration.

2.3.3.11 Demineralized Water Storage System	
LR-M010C Rev. 0, K-10 and K-11	Continuation of 1"-HCD-37 overflow piping and 1"HCD-38 piping is not provided.

The overflow line and drain line are within the scope of license renewal. There is no continuation from the overflow piping. The drawing accurately depicts the station configuration. Any water in the pipe proceeds to the Station Plumbing, Drains, and Sumps System after it leaves the Demineralized Water Storage System.

2.3.3.19 Makeup Water Treatment System	
Drawing LR-M011, Rev 0, A-8, B-7 and E-6	LR Note 1 and Note 7 indicate Station Plumbing continues on drawings M-160, M-161 and M-192. These continuation drawings were not provided.

LR-M011 Note C states that portions of the Domestic Water Supply and Recirculation Loop piping are routed through the Auxiliary Building and are therefore in scope. Drawings M-160, M-161, and M-192 are for piping in the Turbine Building and Office Building, and are not included because they are not used to show the license renewal scoping boundary. The in-scope portions of station plumbing include nonsafety-related piping components used to supply domestic water to various plant areas for typical domestic uses, such as sanitation, showers and sinks.

2.3.3.30 Station Blackout Diesel Generator System	
LR-M017D Rev. 0, H-8	Continuation to the governor air booster pump is not provided.

A booster servomotor is attached to the hydraulic governor to provide initial hydraulic pressure for fuel rack movement to ensure rapid starting of the engine. The servomotor is an air-operated hydraulic piston (i.e., an active component) that receives air from the air start system when the starting solenoid valve is opened. The line leading to this active component is highlighted to show it is within the scope of License Renewal.

2.3.3.31 Station Plumbing, Drains, and Sumps System	
M-041C, G-3, 7 & 10	Continuation of 4"-MSD-3 to containment normal sump is not provided.

LR-M041C shows the drain lines from the containment air cooler drip pans are within the scope of license renewal. Any water in the drain pipe proceeds to a floor drain and on through the station drains to the containment normal sump.

2.3.4.1 Auxiliary Feedwater System	
LR-M006D, Rev 0, G-10	Valve AF2659 continuation drawings are not provided.

There is no continuation from valve AF2659. The drawing accurately depicts the station configuration.

LR-M006D, Rev 0,G-12	Valves AF416A & AF416B continuation drawings were not provided.
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There is no continuation from valves AF416A and AF416B. The drawing accurately depicts the station configuration.

LR-M006D, Rev 0,H-12	Valves AF498A & AF498B continuation drawings were not provided.
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There is no continuation from valves AF498A and AF498B. The drawing accurately depicts the station configuration.

2.3.4.3 Main Feedwater System	
LR-M-006D, Rev 0, C-2 & G-4	Valves FW5885A & FW500A continuation drawings were not provided.

There are no continuations from valves FW5885A and FW500A. The drawing accurately depicts the station configuration.

2.3.4.4 Main Steam System	
LR-M003A, Rev 0, B-2 & E-3	Valves IA566 & IA562 continuation drawings were not provided.

There are no continuations from valves IA566 and IA562. The drawing accurately depicts the station configuration.

LR-M003A, Rev 0, D-7 & F-7	Valves MS210A & MS209A continuation drawings were not provided.
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There are no continuations from valves MS210A and MS209A. The drawing accurately depicts the station configuration.

LR-M003C, Rev 1, E-11 & F-11	Valves MS2063 (MS2067) & MS2062 (MS2066) continuation drawings were not provided.
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There are no continuations from valves MS2063 (MS2067) and MS2062 (MS2066). The drawing accurately depicts the station configuration.

LR-M003C, Rev 1, H-5 & H-7	Valves MS58 & MS59 continuation drawings were not provided.
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There are no continuations from valves MS58 and MS59. The drawing accurately depicts the station configuration.

LR-M003C, Rev 1, K-5	Valves MS53 & MS54 continuation drawings were not provided.
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The drain lines from MS53 and MS54 are within the scope of license renewal. Any water in the pipe proceeds to the Station Plumbing, Drains, and Sumps System after it leaves the Main Steam System.

LR-M003C, Rev 1, K-9	Valves MS51 & MS52 continuation drawings were not provided.
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The drain lines from MS51 and MS52 are within the scope of license renewal. Any water in the pipe proceeds to the Station Plumbing, Drains, and Sumps System after it leaves the Main Steam System.

LR-M007A, Rev 0, D-6 & D-9	Valves ICS11AB & ISB11BB continuation drawings were not provided.
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Valve ISB11BB does not exist; the correct valve number is ICS11BB. There are no continuations from valves ICS11AB and ICS11BB. The drawing accurately depicts the station configuration.

LR-M007B, Rev 1, D-2 & D-9	Valves IA1008E & IA1009E continuation drawings were not provided.
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There are no continuations from valves IA1008E and IA1009E. The drawing accurately depicts the station configuration.

LR-M007B, Rev 1, B-3 & B-12	Valves FW2685B, FW2685D, FW2686B & FW2686D continuation drawings were not provided
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There are no continuations from valves FW2685B, FW2685D, FW2686B and FW2686D. The drawing accurately depicts the station configuration.

LR-M007B, Rev 1, B-5 & B-11	Valves AF6456A, AF6456B, AF6457A & AF6457B continuation drawings were not provided.
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There are no continuations from valves AF6456A, AF6456B, AF6457A and AF6457B. The drawing accurately depicts the station configuration.

2.3.3 AUXILIARY SYSTEMS

2.3.3.4 Boron Recovery System

Question RAI 2.3.3.4-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

License renewal drawing LR-M033B, Rev 0, location G-8 shows a section of 10 CFR 54.4 (a)(2) piping (1"-HSC-18) continuing from drawing LR-M037D, location C-5 (from the Sodium Hydroxide Mix Tank) where it is not included in scope of license renewal.

The staff requests the applicant to provide additional information to clarify the scoping classification of this pipe section.

RESPONSE RAI 2.3.3.4-01

The 1"-HSC-18 piping continued from drawing LR-M033B, location G-8, to LR-M037D, location C-5, is within the scope of license renewal and subject to AMR. LR-M037D is revised to include the highlighting of this line.

The component types within the added highlighting are included within the evaluation boundaries of the Chemical Addition System, and consist of "Bolting", "Piping" and "Valve Body". These component types are already addressed in the Chemical Addition System information in the LRA, and the AMR results are presented in LRA Table 3.3.2-5, "Aging Management Review Results – Chemical Addition System," rows 5-8, 27-30, and 97-100. Therefore, no changes are required to the Chemical Addition System description or tables in the LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

2.3.3.11 Demineralized Water Storage System

Question RAI 2.3.3.11-01

In LRA Section 2.1 the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

License renewal drawing LR-M010C Rev. 0, location K-11, shows a fluid level gage component that provides a pressure boundary function. This component type was not included in LRA Table 2.3.3-11, "Demineralized Water Storage System Components Subject to Aging Management Review."

The staff requests the applicant to justify the exclusion of the fluid level gage component type from LRA Table 2.3.3-11.

RESPONSE RAI 2.3.3.11-01

Fluid level gage (i.e., water level indicator) LG3686 depicted on LR-M10C is in a line that serves a structural integrity function and is within the scope of license renewal as indicated by the highlighting. However, this water level indicator (i.e., instrument) is exempt from AMR because 10 CFR 54.21(a)(1)(i) specifically excludes water level indicators.

2.3.3.12 Emergency Diesel Generators System

Question RAI 2.3.3.12-01

In LRA Section 2.1, the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

Drawings LR-OS041A1, location G-3, and LR-OS041A2, locations G-21, show sight glass components as in scope for license renewal. At locations G-7 and G-25 on the same drawings, flow glass components are shown as in scope for license renewal. The sight glass and flow glass components perform a pressure boundary function but were not included in LRA Table 2.3.3-12, "Emergency Diesel Generator System Components Subject to Aging Management Review."

The staff requests the applicant to justify the exclusion of the sight glass and flow glass components from LRA Table 2.3.3-12.

RESPONSE RAI 2.3.3.12-01

The sight glasses (i.e., water level indicators) associated with expansion tanks T121-1 and T121-2 and flow gages (i.e., flow indicators) FG94A and FG94B on license renewal boundary drawings LR OS041A1 and LR-OS041A2 are within the scope of license renewal as indicated by the highlighting. However, these water level indicators and flow indicators (i.e., instruments) are exempt from AMR because 10 CFR 54.21(a)(1)(i) specifically excludes indicators, such as, but not limited to, pressure and water level indicators.

2.3.3.18 Makeup and Purification System

Question RAI 2.3.3.18-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

License renewal drawing LR-M031C, Rev 0, location D-13, shows 10 CFR 54.4(a)(2) line 1 ½"-HSC-61 continuing to drawing LR-M040A, location E-8, where it is shown as not in scope.

The staff requests the applicant to provide additional information to clarify the scoping classification of this pipe section.

RESPONSE RAI 2.3.3.18-01

The 1½"-HSC-61 line continued on LR-M040A, location E-8, is within the scope of license renewal and subject to AMR. LR-M040A is revised to include the highlighting of this line.

The component types within the added highlighting are included within the evaluation boundaries of the System, and consist of "Bolting", "Piping" and "Valve Body". These component types are already addressed in the Reactor Coolant Vent and Drain System information in the LRA, and the AMR results are presented in LRA Table 3.3.2-24, "Aging Management Review Results – Reactor Coolant Vent and Drain System,"

rows 5-8, 38, 41, 42, 87, 90, 91, 93, 96, and 97. Therefore, no changes are required to the Reactor Coolant Vent and Drain System description or tables in the LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

2.3.3.19 Makeup Water Treatment System

Question RAI 2.3.3.19-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

License renewal drawing LR-M011, Rev 0, location C-7, shows a 6"-JEE line in scope for 10 CFR 54.4(a)(2). The license renewal boundary is shown to end at valve DM65 without an explanation for the scoping change. If the piping and components downstream of this point have not left a space containing components in scope for 10 CFR54.4(a)(1) then the scoping boundary for spatial interaction should not end.

The staff requests the applicant to justify its exclusion of the the piping and components upstream of valve DM65 from the scope of license renewal.

RESPONSE RAI 2.3.3.19-01

Components upstream of valve DM65 on license renewal boundary drawing LR-M011 are located outside, in the station yard, and are therefore not within the scope of license renewal for 10 CFR 54.4(a)(2) considerations. License renewal drawing LR-M011 is revised to add a license renewal note beyond the highlighting at valve DM65 to document the basis for exclusion of the piping and components upstream of valve DM65.

Since there are no changes to the highlighting on license renewal drawing LR-M011, no changes are required to LRA Table 3.3.2-19, "Aging Management Review Results – Makeup Water Treatment System."

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

2.3.3.21 Miscellaneous Liquid Radwaste System

Question RAI 2.3.3.21-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

Drawing LR-M039A, Rev 1, location E-8, provides LR Note B which states "Components beyond the highlighting are in the Condensate Demineralizer system and are not within the scope of license renewal." The staff questions if the piping and components downstream of this point occupy a space containing components in scope for 10 CFR 50.4(a)(1) and therefore, would be required to be in scope for spatial interaction.

The staff requests the applicant to justify its exclusion of the components downstream of LR Note B from scope of license renewal.

RESPONSE RAI 2.3.3.21-01

Additional piping components upstream of LR Note B on license renewal boundary drawing LR-M039A, Rev.1, have been determined to be located in the Auxiliary Building. Valves WM15, WM23, WM38, and WM243 and the associated piping located within the Auxiliary Building are within the scope of license renewal and subject to AMR. LR-M039A is revised to include this additional highlighting.

Piping components beyond the additional highlighting are located in the Turbine Building and are not within the scope of license renewal for 10 CFR 54.4(a)(2) considerations. For clarification, Note B on drawing LR-M039A is revised to read "Components beyond the highlighting are in the Condensate Demineralizer System, which is located in the Turbine Building where (a)(2)-NSAS [nonsafety-affecting-safety] considerations are not a concern, and are not in the scope of license renewal."

The component types within the added highlighting are included within the evaluation boundaries of the Miscellaneous Liquid Radwaste System, and consist of "Bolting", "Piping" and "Valve Body". These component types are already addressed in the Miscellaneous Liquid Radwaste System information in the LRA, and the AMR results are presented in LRA Table 3.3.2-21, "Aging Management Review Results – Miscellaneous Liquid Radwaste System," rows 1-4, 22-25, and 89-92. Therefore, no changes are required to the Miscellaneous Liquid Radwaste System description or tables in the LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

Question RAI 2.3.3.21-02

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

Drawing LR-M039B, Rev 1, location E-3, downstream of valve WM142 provides LR Note B which states "Components beyond the highlighting are not in the scope of license renewal." The staff questions if these components occupy a space containing components in scope for 10 CFR 50.4(a)(1) and would therefore be required to be in scope for spatial interaction.

The staff requests the applicant to justify its exclusion of the components downstream of valve WM142 from scope of license renewal.

RESPONSE RAI 2.3.3.21-02

The line downstream of valve WM142 on license renewal boundary drawing LR-M039B is the miscellaneous waste evaporator tank (T28) gaseous vent path to the station vent. The components in this nonsafety-related vent path do not contain fluid; therefore, the components downstream of valve WM142 are not within the scope of license renewal. For clarification, drawing LR-M039B, LR Note B, is revised to read, "Components beyond the highlighting do not contain liquid or steam and are not within the scope of license renewal."

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

Question RAI 2.3.3.21-03

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

Drawing LR-M037C, Rev 0, location K-12, shows 1 ½"-HSC-109 continued from drawing LR-M037D as in scope. However, drawing LR-M037D, location C-1 shows this piping as not in-scope.

The staff requests the applicant to provide additional information to clarify the scoping classification of this pipe section.

RESPONSE RAI 2.3.3.21-03

Line 1½"-HSC-109, shown on license renewal boundary drawing LR-M037C, Rev. 0, location K 12, is isolated from the Miscellaneous Liquid Radwaste System at valve WC101 (location H-7) and at valve WC102 (location H-12), and is isolated by closed valves as shown on drawing LR M037D. Because line 1½"-HSC-109 is isolated from sources of water or steam, the components in the line were evaluated as having an internal environment of air. Since components containing air/gas cannot adversely affect safety-related SSCs due to leakage or spray, line 1½"-HSC-109 is not considered to be within the scope of license renewal for 10 CFR 54.4(a)(2). Therefore, license renewal boundary drawing LR-M037C is revised to remove the highlighting from the continuation indicator (location K-12) to valve WC101 (location H-7) and to valve WC102 (location H-12). Also, LR Note C is added to drawing LR-M037C at isolation valve WC101 (location H-7) and at isolation valve WC102 (location H-12). Note C reads "Boundary ends at isolation: upstream components are no longer used as noted in USAR Table 11.2-1."

Since no component/material/environment combinations within the evaluation boundaries of the Boron Recovery System were eliminated as a result of the removed highlighting on license renewal drawing LR-M037C, no changes are required to the Boron Recovery System description or tables in the LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

2.3.3.22 Nitrogen Gas System

Question RAI 2.3.3.22-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

License renewal drawing LR-M019, Rev 0, locations E/F-14, and K-1, show electrical penetrations PIC 5SX [P1C 5SX], PIL 5WX [P1L 5WX] and P2L 2CX as not in scope for license renewal. However similar electrical penetrations at locations A thru D-14 and E thru F-1 are shown as in scope for license renewal to the upstream check valve.

The staff requests the applicant to justify its exclusion of electrical penetrations PIC 5SX, PIL 5WX and P2L 2CX from the scope of license renewal.

RESPONSE RAI 2.3.3.22-01

All containment electrical penetrations, including electrical penetrations P1C 5SX, P1L 5WX and P2L 2CX, are within the scope of license renewal; however, the mechanical Nitrogen System components shown on license renewal drawing LR-M019 and associated with containment electrical penetrations P1C 5SX, P1L 5WX and P2L 2CX are not within the scope of license renewal as clarified below.

Since containment electrical penetrations themselves are structural components, they are not highlighted on license renewal drawing LR-M019. All containment electrical penetrations are within the scope of license renewal and are addressed in LRA Table 2.4-1, "Containment Components Subject to Aging Management Review," under the component type "Penetrations (Mechanical and Electrical, containment boundary)."

License renewal boundary drawing LR-M019 is highlighted to show mechanical system components within the scope of license renewal. Drawing LR-M019, Note 10, indicates that the subject electrical penetrations have been replaced by Conax penetration modules, whereas the similar electrical penetrations at locations A thru D-14 and E thru F-1 are Amphenol penetration modules. As indicated by the typical arrangement shown at location D-1 on LR-M019, the safety-related (Q) boundary for a Conax penetration does not extend beyond the electrical penetration to the upstream check valve in the Nitrogen System supply line to the penetration, whereas the Q-boundary for an Amphenol penetration is located at the upstream check valve in the Nitrogen System supply line. Furthermore, nonsafety-related Nitrogen System components beyond the Q-boundary for the subject electrical penetrations are not within the limits of piping requiring Seismic Class I analyses, and are not within the scope of license renewal for a nonsafety-affecting-safety function. Therefore, the Nitrogen System components beyond the Q-boundary at electrical penetrations P1C 5SX, P1L 5WX and P2L 2CX are not within the scope of license renewal.

2.3.3.25 Sampling System

Question RAI 2.3.3.25-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

License renewal drawing LR-M-042C, location E-2, shows line $\frac{3}{4}$ " -HCC-112 continuing from drawing M-031C, location C-4 as in scope for license renewal; however the same line is shown as not in scope on drawing LR-M-031C.

The staff requests the applicant to provide additional information to clarify the scoping classification of this pipe section.

RESPONSE RAI 2.3.3.25-01

Line ¾"-HCC-112 shown on license renewal boundary drawing LR-M042C, location E-2, is a vent line attached to the gas space of the makeup tank (T4, shown on drawing LR-M031C at location B/C-11). This line contains a gas internal environment, and does not contain liquid or steam; therefore, the vent line components are not within the scope of license renewal for 10 CFR 54.4(a)(2) nonsafety-affecting-safety considerations. License renewal drawing LR-M042C is revised to remove the highlighting from the makeup tank vent line (¾"-HCC-112) at location E-2. LR-M042C is revised to add LR Note C to the drawing at isolation valve SS-829 (location F-2/3); LR Note C reads, "Components beyond the highlighting do not contain liquid or steam nor are attached to safety-related components. Therefore, these components are not within the scope of license renewal."

Since no component/material/environment combinations within the evaluation boundaries of the Sampling System were eliminated as a result of the removed highlighting on license renewal drawing LR-M042C, no changes are required to the Sampling System description or tables in the LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

Question RAI 2.3.3.25-02

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

License renewal drawing LR-M-042B, Rev 0, location E-8, shows a sample line (sample No. S-039-6) as not in scope for license renewal. However, on drawing LR-M039B this sample line is shown as in scope for license renewal starting at location H-7 and returning at location E-4.

The staff requests the applicant to provide additional information to clarify the scoping classification of this pipe section.

RESPONSE RAI 2.3.3.25-02

Sample line (Sample No. S-039-6) on LR-M042B at location E-8, that continues from LR-M039B, locations H-7 and E-4, is within the scope of license renewal and subject to AMR. LR-M042B is revised to include the highlighting of Sample No. S-039-6 (location E-8) in the Reactor Primary Coolant and Radwaste System Table.

The component types within the added highlighting are included within the evaluation boundaries of the Sampling System, and consist of "Bolting", "Piping", "Tubing" and "Valve Body"; these component types are addressed in LRA Table 2.3.3-25, "Sampling System Components Subject to Aging Management Review." The materials and external environments for these component types are addressed in LRA Table 3.3.2-25, "Aging Management Review Results – Sampling System," rows 5-8, 50, 51, 87, 88, 109 and 110. However, the internal environment rows for the component types "Piping", "Tubing" and "Valve Body" are not included in the table. The LRA is revised to add the "Raw Water" environment from the Miscellaneous Liquid Radwaste System to Table 3.3.2-25 for the Sampling System component types "Piping", "Tubing" and "Valve Body", and the Collection, Drainage, and Treatment Components Inspection Program to manage the aging effects. LRA Section 3.3.2.1.25 is revised to add the new "Raw Water" environment and the Collection, Drainage, and Treatment Components Inspection Program to the Sampling System information. LRA Appendix B, Section B.2.9 is revised to add the Sampling System to the scope of the Collection, Drainage, and Treatment Components Inspection Program.

See Enclosure A to this letter for the revision to the DBNPS LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

2.3.3.26 Service Water System

Question RAI 2.3.3.26-01

LRA Section 2.1 describes the applicant's scoping methodology, which specifies how systems or components were determined to be included in scope of license renewal. The staff confirms the inclusion of all components subject to an AMR by reviewing the results of the screening of components within the license renewal boundary.

On drawing LR-M041A, Rev. 0, location K-5, the continuation of 3/8" HBD piping from Dilution Pump P180 is shown in scope for license renewal. Contrary to the information in bullet 3 on Page 2.3-129 of the LRA, the 3/8" HBD piping is not shown as a rubber hose on drawing LR-M041A.

The staff requests the applicant to provide clarification as to whether the 3/8" HBD line is pipe or rubber hose.

RESPONSE RAI 2.3.3.26-01

The 3/8" HBD continuation piping from dilution pump P180 on drawing LR-M041A, Rev. 0, location K-5, is a pipe and not a rubber hose. LRA Section 2.3.3.26, "Service Water System," page 2.3-129, third bullet, is revised to delete the words "dilution pump".

See Enclosure A to this letter for the revision to the DBNPS LRA.

2.3.3.30 Station Blackout Diesel Generator System

Question RAI 2.3.3.30-01

In LRA Section 2.1, the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

The applicant depicts on LRA drawing LR-M017D, Rev.0, location G-4 and J-4 an air dryer housing and at location E-10 an air intake vibration damper housing in scope of license renewal. However, the air dryer and vibration damper housings were not included in LRA Table 2.3.3-30.

The staff requests the applicant to justify the exclusion of these housing components from LRA Table 2.3.3-30, "Station Blackout Diesel Generator System Components Subject to Aging Management Review."

RESPONSE RAI 2.3.3.30-01

The air dryer housings and the air intake vibration damper are within the scope of license renewal in accordance with 10 CFR 54.4(a)(3) and are subject to AMR, as clarified below.

The air dryer housings are evaluated as the component type "Filter Body". These filter bodies are constructed of aluminum and are within the scope of license renewal in accordance with 10 CFR 54.4(a)(3) and subject to AMR. The component type "Filter Body" is addressed in LRA Table 2.3.3-30, "Station Blackout Diesel Generator System Components Subject to Aging Management Review," and the AMR results are

addressed in LRA Table 3.3.2-30, "Aging Management Review Results – Station Blackout Diesel Generator System," rows 10 and 11.

The air intake vibration damper does not have a housing. The air intake vibration damper is an elastomeric component evaluated as the component type "Flexible Connection", and is within the scope of license renewal in accordance with 10 CFR 54.4(a)(3) and subject to AMR. The component type "Flexible Connection" is addressed in LRA Table 2.3.3-30, and the AMR results are addressed in LRA Table 3.3.2-30 rows 18 and 19.

Question RAI 2.3.3.30-02

In LRA Section 2.3.3.30 in the SBODG Jacket Water System on page 2.3-139 there is a discussion in paragraph four about two fans which start automatically to cool the radiator cooling coils when needed. The applicant stated "If the fans are out of service, and the SBODG must be run, most of the cooling can be provided by spraying water on the radiator coils. Engine load capacity in this case will have to be limited to prevent engine overheating depending on weather conditions."

The spray system components for spraying water on the radiator coils are not identified in the LRA or in Chapter 8 of the USAR. It is not clear if these components are required to be in scope for license renewal.

The staff requests the applicant provide a description for the method for spraying down the radiator coils and clarify if the necessary components are in scope for license renewal.

RESPONSE RAI 2.3.3.30-02

Although described in a plant operating procedure for use during plant emergency operations, the components used to spray the radiator cooling coils for the station blackout diesel generator (SBODG) are beyond the current licensing basis for the Davis-Besse station blackout (SBO) regulated event. Therefore, the components used to spray the SBODG radiator cooling coils are not in scope for license renewal for the SBO regulated event.

As described in the Davis-Besse operating procedure for the SBODG, spraying fire water on the radiator coils is employed when emergency operation of the SBODG is required and neither radiator fan is operating or one fan has failed and jacket water outlet temperature approaches 195°F. SBODG cooling is then aided by manually spraying fire water on the radiator using fire hoses from hose house #4 (HH4), pressurized by either the electric or diesel fire pump. However, the emergency cooling function is not described nor discussed in the NRC Safety Evaluation Reports on SBO, in Davis-Besse correspondence to the NRC, nor in the Davis-Besse USAR. Therefore,

the components used to spray the SBODG radiator cooling coils are not within the scope of license renewal for the SBO regulated event in accordance with 10 CFR 54.4(a)(3) because they are not part of the Davis-Besse current licensing basis for the SBO regulated event.

Question RAI 2.3.3.30-03

In LRA Section 2.1, the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

On drawing LR-M017D, Rev. 0, location H-4 and K-4 there are check valves DA205 and DO204 [DA204] respectively that are needed to maintain pressure in the air receiver tanks for the SBODG Air Start System. The 1-inch pipelines currently end the scoping boundary at manually operated, normally open ball valves DA207 and DA206 while check valves DA205 and DA204 are not included within the boundary. The check valves typically function to maintain air pressure in the air receiver tank. An example of check valves in scope on similar air receiver tanks is shown on LRA drawing LR M017B, Rev. 0 at locations C-5, E-6, G-6 and J-5.

The staff requests the applicant to provide an explanation why the license renewal boundaries do not extend to the DA205 and DA204 check valves.

RESPONSE RAI 2.3.3. 30-03

The license renewal evaluation boundaries for the Station Blackout Diesel Generator System do not extend to the DA205 and DA204 check valves on license renewal boundary drawing LR-M017D because the check valves are not needed to maintain pressure in the air receiver tanks for the SBODG Air Start System. This scoping determination is explained below.

The SBODG components highlighted on LR-M017D are within the scope of license renewal in compliance with 10 CFR 54.4(a)(3) for the SBO (10 CFR 50.63) regulated event. Compliance with 10 CFR 54.4(a)(3) is accomplished by including components in scope that are in main flow paths that perform the regulated event intended functions and by including branch lines up to and including the first valve on each branch line. The air receiver tanks (T209-1 & 2) are the main components that perform the regulated event pressure boundary intended function for the SBODG. The check valves DA204 and DA205 on drawing LR-M017D, at locations H-4 and K-4, are in branch lines where the first isolation valves beyond the air receiver tanks (T209-1 & 2) are valves DA206 and DA207, respectively. For the branch lines that include valves DA204 and DA205,

valves DA206 and DA207 are the valves that are needed to maintain air pressure in the air receiver tanks.

Unlike the check valves DA204 and 205 described above, the check valves on drawing LR-M017B, (DA24, 25, 38 & 39), are within the Q-boundary of the Emergency Diesel Generator (EDG) Air Start Subsystem. Therefore, the license renewal boundaries do not extend to the DA205 and DA204 check valves.

2.3.4 STEAM AND POWER CONVERSION SYSTEMS

2.3.4.1 Auxiliary Feedwater System

Question RAI 2.3.4.1-01

In LRA Section 2.1, the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

Drawing LR-M006D, Rev. 0, location H-9, shows piping (6" HBD-137) that is in scope for 10 CFR 54.4(a)(2) as non-safety piping attached to safety related piping. The scoping boundary ends at the limit of the Seismic Analysis (S/I flag), but it is not clear if the piping downstream of this point is still within the same space as the safety related components. The staff questions if this pipe line downstream of the S/I interface is fluid filled and located in the vicinity of 10 CFR 54.4(a)(1) components.

The staff requests the applicant to provide sufficient information to verify that the not in scope piping is not located in an area with 10 CFR 54.4(a)(1) components.

RESPONSE RAI 2.3.4.1-01

On license renewal boundary drawing LR-M006D, Rev. 0, at location H-9, nonsafety-related components highlighted in magenta are located within the Auxiliary Building. Components beyond the highlighting at location H-9, are located in the Turbine Building, and are therefore, not within the scope of license renewal for 10 CFR 54.4(a)(2) nonsafety-affecting-safety considerations. For clarification, license renewal drawing LR-M006D is revised to include LR Note B at location H-9 to signify that highlighting ends at the Turbine Building wall.

Since there are no changes to the highlighting on license renewal drawing LR-M006D, no scoping changes have occurred, and no changes are required to the system descriptions or tables in the LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

2.3.4.3 Main Feedwater System

Question RAI 2.3.4.3-01

In LRA Section 2.1, the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

The applicant depicts on drawing LR-M006D, Rev 0, locations H-2, and C-14, drip rim drains below the Motor Driven Start-up Feed Pump 1-1, and Aux. Feed Pumps P14-1 and P14-2 as not in of scope. These drains may contain fluid and are apparently in an area that contains safety related components, in which case they would be included within the scope of license renewal under 10 CFR 54.4(a)(2).

The staff requests the applicant to provide additional information to explain why the drip rim drain and connected piping are not in scope.

RESPONSE RAI 2.3.4.3-01

The drip rim drains below motor driven start-up feed pump 1-1 shown on license renewal drawing LR M006D, Rev. 0, location H-2, and aux feed pumps P14-1 and P14-2 at location C 14, are in scope for license renewal 10 CFR 54.4(a)(2) considerations. LR-M006D is revised to highlight these drip rim drains.

The component types within the added highlighting consist of "Drain Pan" and "Piping", and are within the license renewal scoping boundaries of the Auxiliary Feedwater System and the Main Feedwater System. However, the "Drain Pan" component type is not listed in LRA Table 2.3.4-1, "Auxiliary Feedwater System Components Subject to Aging Management Review," or Table 3.4.2-1, "Aging Management Review Results – Auxiliary Feedwater System," for the Auxiliary Feedwater System, or in Table 2.3.4-3, "Main Feedwater System Components Subject to Aging Management Review," or Table 3.4.2-3, "Aging Management Review Results - Main Feedwater System," for the Main Feedwater System.

The component type "Piping" is addressed for the Auxiliary Feedwater System in LRA Table 2.3.4 1, and in Table 3.4.2-1, rows 54 and 60, and for the Main Feedwater System in Table 2.3.4 3. However, for the Main Feedwater System, only the external environment for the added drain piping is addressed in LRA Table 3.4.2-3, row 74. The LRA is revised to add the component type "Drain Pan" to LRA Tables 2.3.4-1, 2.3.4-3, 3.4.2-1 and 3.4.2-3, and to add the internal environment for the Main Feedwater System drain piping to LRA Table 3.4.2-3.

See Enclosure A to this letter for the revision to the DBNPS LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

2.3.4.4 Main Steam System

Question RAI 2.3.4.4-01

In LRA Section 2.1, the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

The applicant depicts on drawing LR-M045, Rev 1, locations D-12 and D-14, piping to valves SC200 and SC201 from the to Steam Generator Wet Lay-Up Chemical Addition Tanks as not in scope. However, these tanks as well as additional piping lines connected to the tanks are shown as in scope for 10 CFR 54.4(a)(2).

The staff requests the applicant to justify its exclusion of the ¾" piping to valves SC200 and SC201 from the scope of license renewal.

RESPONSE RAI 2.3.4.4-01

The ¾" piping to valves SC200 and SC201 from the steam generator wet lay-up chemical addition tanks is not within the scope of license renewal for 10 CFR 54.4(a)(2) considerations because it does not contain liquid or steam. This scoping determination is justified below.

The steam generator wet lay-up chemical addition tanks are atmospheric tanks that are normally vented to atmosphere. The ¾" piping to valves SC200 and SC201 (and beyond) from the steam generator wet lay-up chemical addition tanks (T139-1 & 2) are the vent lines for the tanks. As shown on LR-M045, valves SC200 and SC201 are normally open. The piping is attached to the tops of the tanks, and therefore does not contain fluid or steam. NEI 95-10, as endorsed by Regulatory Guide 1.188, states that

nonsafety-related “components containing air/gas cannot adversely affect safety-related SSCs due to leakage or spray. Therefore, these systems are not considered to be in scope for 54.4(a)(2)”. LRA Section 2.1.1.2, “Nonsafety-Affecting-Safety Scoping Criteria,” describes the specific method used at Davis-Besse to perform scoping determinations for 10 CFR 54.4(a)(2). The method described in LRA Section 2.1.1.2 was used to determine that the ¾” piping to valves SC200 and SC201 (and beyond) from the steam generator wet lay-up chemical addition tanks is not in scope for license renewal for 10 CFR 54.4(a)(2) because it does not contain liquid or steam.

Question RAI 2.3.4.4-02

In LRA Section 2.1, the applicant states that its screening process was used to identify the passive, long-lived structures and components in the scope of license renewal and subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

Drawing LR-M-045, Rev 1, locations E-11 and E-13, shows anti-siphon devices downstream of the Steam Generator Wet Lay-Up Chemical Addition Metering Pumps 1-1 and 1-2 as not in scope. The piping to which these components are attached is in scope for 10 CFR 54.4(a)(2).

The staff requests the applicant to provide additional information to explain why the anti-siphon device is not in scope and not listed as a component type in LRA Table 2.3.4-4, “Main Steam System Components Subject to Aging Management Review.”

RESPONSE RAI 2.3.4.4-02

The anti-siphon devices downstream of the steam generator wet lay-up chemical addition metering pumps (P259-1 & 2) depicted on LR-M045, locations E-11 and E-13, are within the scope of license renewal and subject to AMR. LR-M045 is revised to include highlighting of the anti-siphon devices.

The anti-siphon devices are within the evaluation boundaries of the Main Steam System. LRA Tables 2.3.4-4, “Main Steam System Components Subject to Aging Management Review,” and 3.4.2-4, “Aging Management Review Results – Main Steam System,” are amended to include these components.

See Enclosure A to this letter for the revision to the DBNPS LRA.

See Enclosure B to this letter for the revision to the LRA Boundary Drawings.

Enclosure A

Davis-Besse Nuclear Power Station (DBNPS), Unit No. 1

Letter L-11-114

Amendment No. 3 to the DBNPS License Renewal Application

Page 1 of 11

License Renewal Application Sections Affected

Section 2.3.3.26

Table 2.3.4-1

Table 2.3.4-3

Table 2.3.4-4

Section 3.3.2.1.25

Table 3.3.2-25

Table 3.4.2-1

Table 3.4.2-3

Table 3.4.2-4

Appendix B, Section B.2.9

The Enclosure identifies the change to the License Renewal Application (LRA) by Affected LRA Section, LRA Page No., and Affected Paragraph and Sentence. The count for the affected paragraph, sentence, bullet, etc. starts at the beginning of the affected Section or at the top of the affected page, as appropriate. Below each section the reason for the change is identified, and the sentence affected is printed in *italics* with deleted text *lined-out* and added text *underlined*.

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
2.3.3.26	Page 2.3-129	3rd bullet, 1st sentence

The packing leak-off drain line on the Davis-Besse dilution pump (P180) is a pipe, and not a rubber hose as described in LRA Section 2.3.3.26, "Service Water System," subsection "Components Subject to AMR." LRA Section 2.3.3.26 is revised to read:

- *The rubber hoses attached to the service water pumps and dilution pump (DB-P3-1 through 3), the strainers downstream of the pumps (DB-F15-1 through 3), and the radiation element (DB-RE8432) are installed for housekeeping purposes to direct packing leak-off to floor drains, and perform no license renewal intended function. Therefore, the rubber hoses are not subject to AMR.*

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
Table 2.3.4-1	Page 2.3-153	New Row

The drip rim drains below the auxiliary feedwater pumps were determined to be within the scope of license renewal and subject to aging management review (AMR). The component type "Drain Pan", however, is not addressed in LRA Table 2.3.4-1, "Auxiliary Feedwater System Components Subject to Aging Management Review." This revision adds the "Drain Pan" component type with an intended function of "Structural integrity" to LRA Table 2.3.4-1, and Table 2.3.4-1 is revised to read:

Component Type	Intended Function (as defined in Table 2.0-1)
<i><u>Drain Pan</u></i>	<i><u>Structural integrity</u></i>

Affected LRA Section **LRA Page No.** **Affected Paragraph and Sentence**

Table 2.3.4-3 **Page 2.3-158** **New Row**

The drip rim drain below the motor driven start-up feed pump was determined to be within the scope of license renewal and subject to AMR. The component type "Drain Pan", however, is not addressed in LRA Table 2.3.4-3, "Main Feedwater System Components Subject to Aging Management Review." This revision adds the "Drain Pan" component type with an intended function of "Structural integrity" to LRA Table 2.3.4-3, and Table 2.3.4-3 is revised to read:

Component Type	Intended Function (as defined in Table 2.0-1)
<i><u>Drain Pan</u></i>	<i><u>Structural integrity</u></i>

Affected LRA Section **LRA Page No.** **Affected Paragraph and Sentence**

Table 2.3.4-4 **Page 2.3-162** **New Row**

The anti-siphon devices downstream of the steam generator wet lay-up chemical addition pumps were determined to be within the scope of license renewal and subject to AMR. The component type "Anti-siphon Device", however, is not addressed in LRA Table 2.3.4-4, "Main Steam System Components Subject to Aging Management Review." This revision adds the "Anti-siphon Device" component type with an intended function of "Structural integrity" to LRA Table 2.3.4-4, and Table 2.3.4-4 is revised to read:

Component Type	Intended Function (as defined in Table 2.0-1)
<i><u>Anti-siphon Device</u></i>	<i><u>Structural integrity</u></i>

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
Section 3.3.2.1.25	Page 3.3-30	New "Environments" Bullet

A sample line that contains liquid from the Miscellaneous Liquid Radwaste System was added to the scope of the Sampling System and is subject to AMR. The liquid in the sample line is considered "Raw Water". The "Raw Water" environment, however, is not addressed in LRA Section 3.3.2.1.25, "Sampling System." The new "Raw Water" environment is added to the subheading "Environments," and LRA Section 3.3.2.1.25 is revised to read:

Environments

The subject mechanical components of the Sampling System are exposed to the following normal plant operating environments:

- Air-indoor uncontrolled
- Air with borated water leakage
- Air with steam or water leakage
- Closed cycle cooling water
- Closed cycle cooling water > 60°C (> 140°F)
- Gas
- Raw water
- Treated borated water
- Treated borated water > 60°C (> 140°F)
- Treated water

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
Section 3.3.2.1.25	Page 3.3-31	New "Aging Management Programs" Bullet

A sample line that contains liquid from the Miscellaneous Liquid Radwaste System was added to the scope of the Sampling System and is subject to AMR. The stainless steel sample line components have an internal environment that is evaluated as "Raw Water", and the aging effects will be managed by the Collection, Drainage, and Treatment Components Inspection Program. The program, however, is not addressed in LRA Section 3.3.2.1.25, "Sampling System." The Collection, Drainage, and Treatment Components Inspection Program is added to the subheading "Aging Management Programs," and LRA Section 3.3.2.1.25 is revised to read:

Aging Management Programs

The following aging management programs manage the aging effects for the subject mechanical components of the Sampling System:

- Bolting Integrity Program
- Boric Acid Corrosion Program
- Closed Cooling Water Chemistry Program
- Collection, Drainage, and Treatment Components Inspection Program
- External Surfaces Monitoring Program
- One-Time Inspection
- PWR Water Chemistry Program

Affected LRA Section **LRA Page No.** **Affected Paragraph and Sentence**

Table 3.3.2-25 **Page 3.3-445** **6 New AMR Rows**

A sample line that contains liquid from the Miscellaneous Liquid Radwaste System was added to the scope of the Sampling System and is subject to AMR. The stainless steel sample line components have an internal environment that is evaluated as "Raw Water", and the aging effects will be managed by the Collection, Drainage, and Treatment Components Inspection Program. The internal environment rows for the Sampling System component types "Piping", "Tubing" and "Valve Body", however, are not included in LRA Table 3.3.2-25, "Aging Management Review Results – Sampling System." This revision adds rows to LRA Table 3.3.2-25 to address the AMR results for component types "Piping", "Tubing" and "Valve Body", and Table 3.3.2-25 is revised to read:

Table 3.3.2-25 Aging Management Review Results – Sampling System								
Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801, Volume 2 Item	Table 1 Item	Notes
<i>Piping</i>	<i>Structural integrity</i>	<i>Stainless Steel</i>	<i>Raw water (Internal)</i>	<i>Cracking</i>	<i>Collection, Drainage, and Treatment Components Inspection</i>	<i>N/A</i>	<i>N/A</i>	<i>H 0316</i>
<i>Piping</i>	<i>Structural integrity</i>	<i>Stainless Steel</i>	<i>Raw water (Internal)</i>	<i>Loss of material</i>	<i>Collection, Drainage, and Treatment Components Inspection</i>	<i>VII.C1-15</i>	<i>3.3.1-79</i>	<i>E</i>

Table 3.3.2-25 Aging Management Review Results – Sampling System								
Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801, Volume 2 Item	Table 1 Item	Notes
<u>Tubing</u>	<u>Structural integrity</u>	<u>Stainless Steel</u>	<u>Raw water (Internal)</u>	<u>Cracking</u>	<u>Collection, Drainage, and Treatment Components Inspection</u>	<u>N/A</u>	<u>N/A</u>	<u>H 0316</u>
<u>Tubing</u>	<u>Structural integrity</u>	<u>Stainless Steel</u>	<u>Raw water (Internal)</u>	<u>Loss of material</u>	<u>Collection, Drainage, and Treatment Components Inspection</u>	<u>VII.C1-15</u>	<u>3.3.1-79</u>	<u>E</u>
<u>Valve Body</u>	<u>Structural integrity</u>	<u>Stainless Steel</u>	<u>Raw water (Internal)</u>	<u>Cracking</u>	<u>Collection, Drainage, and Treatment Components Inspection</u>	<u>N/A</u>	<u>N/A</u>	<u>H 0316</u>
<u>Valve Body</u>	<u>Structural integrity</u>	<u>Stainless Steel</u>	<u>Raw water (Internal)</u>	<u>Loss of material</u>	<u>Collection, Drainage, and Treatment Components Inspection</u>	<u>VII.C1-15</u>	<u>3.3.1-79</u>	<u>E</u>

Affected LRA Section **LRA Page No.** **Affected Paragraph and Sentence**

Table 3.4.2-1 **Page 3.4-41** **2 New AMR Rows**

The drip rim drains below the auxiliary feedwater pumps were determined to be within the scope of license renewal and subject to AMR. The component type “Drain Pan”, however, is not addressed in LRA Table 3.4.2-1, “Aging Management Review Results – Auxiliary Feedwater System.” This revision adds rows to address the AMR results for the “Drain Pan” component type to LRA Table 3.4.2-1, and Table 3.4.2-1 is revised to read:

Table 3.4.2-1 Aging Management Review Results – Auxiliary Feedwater System								
Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801, Volume 2 Item	Table 1 Item	Notes
<i>Drain Pan</i>	<i>Structural integrity</i>	<i>Steel</i>	<i>Air-indoor uncontrolled (Internal)</i>	<i>Loss of material</i>	<i>External Surfaces Monitoring</i>	<i>VIII.H-7</i>	<i>3.4.1-28</i>	<i>C 0405</i>
<i>Drain Pan</i>	<i>Structural integrity</i>	<i>Steel</i>	<i>Air-indoor uncontrolled (External)</i>	<i>Loss of material</i>	<i>External Surfaces Monitoring</i>	<i>VIII.H-7</i>	<i>3.4.1-28</i>	<i>A</i>

Affected LRA Section LRA Page No. Affected Paragraph and Sentence

Table 3.4.2-3 Page 3.4-57 3 New AMR Rows

The drip rim drain below the motor driven start-up feed pump was determined to be within the scope of license renewal and subject to AMR. The component type “Drain Pan”, however, is not addressed in LRA Table 3.4.2-3, “Aging Management Review Results – Main Feedwater System.” Also, the internal environment for the drain piping is not addressed in the table. This revision adds rows to address the AMR results for the “Drain Pan” component type and the drain piping internal environment to LRA Table 3.4.2-3, and Table 3.4.2-3 is revised to read:

Table 3.4.2-3 Aging Management Review Results – Main Feedwater System								
Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801, Volume 2 Item	Table 1 Item	Notes
<i>Drain Pan</i>	<i>Structural integrity</i>	<i>Steel</i>	<i>Air-indoor uncontrolled (Internal)</i>	<i>Loss of material</i>	<i>External Surfaces Monitoring</i>	<i>VIII.H-7</i>	<i>3.4.1-28</i>	<i>C 0405</i>
<i>Drain Pan</i>	<i>Structural integrity</i>	<i>Steel</i>	<i>Air-indoor uncontrolled (External)</i>	<i>Loss of material</i>	<i>External Surfaces Monitoring</i>	<i>VIII.H-7</i>	<i>3.4.1-28</i>	<i>A</i>
<i>Piping</i>	<i>Structural integrity</i>	<i>Steel</i>	<i>Air-indoor uncontrolled (Internal)</i>	<i>Loss of material</i>	<i>External Surfaces Monitoring</i>	<i>VIII.H-7</i>	<i>3.4.1-28</i>	<i>C 0405</i>

Affected LRA Section **LRA Page No.** **Affected Paragraph and Sentence**
Table 3.4.2-4 **Page 3.4-81** **3 New AMR Rows**

The anti-siphon devices downstream of the steam generator wet lay-up chemical addition pumps were determined to be within the scope of license renewal and subject to AMR. The component type "Anti-siphon Device", however, is not addressed in LRA Table 3.4.2-4, "Aging Management Review Results – Main Steam System." This revision adds rows to address the AMR results for the "Anti-siphon Device" component type to LRA Table 3.4.2-4, and Table 3.4.2-4 is revised to read:

Table 3.4.2-4 Aging Management Review Results – Main Steam System								
Component Type	Intended Function(s)	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801, Volume 2 Item	Table 1 Item	Notes
<i>Anti-siphon Device</i>	<i>Structural integrity</i>	<i>Polymer</i>	<i>Treated water (Internal)</i>	<i>None</i>	<i>None</i>	<i>N/A</i>	<i>N/A</i>	<i>E</i>
<i>Anti-siphon Device</i>	<i>Structural integrity</i>	<i>Polymer</i>	<i>Air with borated water leakage (External)</i>	<i>None</i>	<i>None</i>	<i>N/A</i>	<i>N/A</i>	<i>E</i>
<i>Anti-siphon Device</i>	<i>Structural integrity</i>	<i>Polymer</i>	<i>Air-indoor uncontrolled (External)</i>	<i>Hardening and loss of strength</i>	<i>External Surfaces Monitoring</i>	<i>N/A</i>	<i>N/A</i>	<i>E</i>

<u>Affected LRA Section</u>	<u>LRA Page No.</u>	<u>Affected Paragraph and Sentence</u>
Appendix B, Section B.2.9	Page B-48	New "Aging Management Program Elements – Scope" Sub-bullet

A sample line that contains liquid from the Miscellaneous Liquid Radwaste System was added to the scope of the Sampling System and is subject to AMR. The stainless steel sample line components have an internal environment that is evaluated as "Raw Water", and the aging effects will be managed by the Collection, Drainage, and Treatment Components Inspection Program. The Sampling System, however, is not addressed in LRA Appendix B, Section B.2.9, "Collection, Drainage, and Treatment Components Inspection Program," and is added to the subheading "Aging Management Program Elements," under the subheading "Scope." LRA Section B.2.9 is revised to read:

The piping and components (filter bodies, flexible connections, heat exchanger shell and tubes, humidifier tubing, orifices, pump casings (including bolting), rupture discs, strainer bodies, tanks, tubing, and valve bodies) in the scope of this program are in the following systems:

- Auxiliary Building HVAC – Control Room Normal Ventilation System
- Fire Protection System (including Diesel Fire Pump)
- Gaseous Radwaste System
- Makeup and Purification System
- Makeup Water Treatment System
- Miscellaneous Liquid Radwaste System
- Reactor Coolant Vent and Drain System
- Sampling System
- Spent Fuel Cooling and Cleanup System
- Station Plumbing, Drains, and Sumps System

Enclosure B

Davis-Besse Nuclear Power Station (DBNPS), Unit No. 1

Letter L-11-114

Revised License Renewal Application Boundary Drawings

10 Pages

The following License Renewal Application Boundary Drawings
are revised and are enclosed:

LR Drawing LR-M006D	Revision 1
LR Drawing LR-M011	Revision 1
LR Drawing LR-M037C	Revision 1
LR Drawing LR-M037D	Revision 2
LR Drawing LR-M039A	Revision 2
LR Drawing LR-M039B	Revision 2
LR Drawing LR-M040A	Revision 2
LR Drawing LR-M042B	Revision 2
LR Drawing LR-M042C	Revision 1
LR Drawing LR-M045	Revision 2

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