

December 18, 2008

L-PI-08-104 10 CFR 54

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

Prairie Island Nuclear Generating Plant Units 1 and 2 Dockets 50-282 and 50-306 License Nos. DPR-42 and DPR-60

Responses to NRC Requests for Additional Information Dated November 19, 2008 Regarding Application for Renewed Operating Licenses

By letter dated April 11, 2008, Northern States Power Company, a Minnesota Corporation, (NSPM) submitted an Application for Renewed Operating Licenses (LRA) for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2. In a letter dated November 19, 2008, the NRC transmitted Requests for Additional Information (RAIs) regarding that application. This letter provides responses to those RAIs.

Enclosure 1 provides the text of each RAI followed by the NSPM response.

If there are any questions or if additional information is needed, please contact Mr. Eugene Eckholt, License Renewal Project Manager.

Summary of Commitments

This letter contains no new commitments or changes to existing commitments.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 18, 2008.

Michael D. Wadley Site Vice President, Prairie Island Nuclear Generating Plant Units 1 and 2 Northern States Power Company - Minnesota Document Control Desk Page 2

Enclosure (1)

cc:

Administrator, Region III, USNRC License Renewal Project Manager, Prairie Island, USNRC Resident Inspector, Prairie Island, USNRC Prairie Island Indian Community ATTN: Phil Mahowald Minnesota Department of Commerce

RAI 2.3-01, 2.3-02 and 2.3-03

Because of the large number of individual items in RAIs 2.3-01 through -03, the NSPM response for each item has been integrated into the listing of items in each RAI.

RAI 2.3-01

BACKGROUND:

License renewal rule Title 10 of the *Code of Federal Regulations* (10 CFR) Section 54.21(a)(1) requires applicants to identify and list all components subject to an aging management review (AMR). The staff confirms inclusion of all components subject to AMR by reviewing the component types within the license renewal boundary.

ISSUE:

During the scoping and screening review process the continuation from one drawing to another could not be established. Drawing numbers and/or locations for the continuations were not identified, or could not be located where identified.

License Renewal Application (LRA) Section	Continuation Location
2.3.3.2	 Drawing LR-XH-1-41, location H-4, show a line continuing from the Hot Lab (LR-XH-248-1).
	NSPM Response: On drawing LR-XH-1-41, location H-4, the continuation to LR-XH-248-1 is incorrect and the boundary flag should be deleted. The continuation should be to LR-39242, location E-5, BATP'S DISCH SAMPLE LINE FLUSH, at valve DE-24-2 adjacent to the Hot Lab connection.
2.3.3.3	 Drawing LR-39245-1, location B-2, "Drain to RH Pit Sump #12 See LR-XH-1-31"
	NSPM Response: The continuation of drawing LR-39245-1, location B- 2, Drain to the RH Pit Sump #12, is shown on LR-XH-1-31, location E-3, Residual Heat Exchanger Shell Drains.
	 Drawing LR-39246-1, location G-7, "Drain to RH Pit Sump #22 See LR-XH-1001-8"
	NSPM Response: The continuation of drawing LR-39246-1, location G- 7, Drain to the RH Pit Sump #22, should be shown on LR-XH-1001-8, location E-4, at line number 1-2RH-44.
	 Drawing LR-39246-1, location H-2, "From #121 Waste Gas System See LR-39245-2"
	NSPM Response: The continuation of drawing LR-39246-1, location H- 2, From #121 Waste Gas System, is shown on LR-39245-2, location F- 8, To Unit 2 Component Cooling Pumps. The line designation 3-2CC-

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45 shown on drawing LR-39245-2 for this line is incorrect; it should be 4-2CC-45.

 Drawing LR-39246-1, location A-6, "Drain to Aerated System Sump Tank See LR-39248"

NSPM Response: The continuation of drawing LR-39246-1, location A-6, Drain to Aerate System Sump Tank, is shown on LR-39248, location F-9, 2" Drain From CC Surge Tank #21.

 Drawing LR-39245-1, location B-10, "Drain to RH Pit Sump #11 See LR-XH-1-31"

NSPM Response: The continuation of drawing LR-39245-1, location B-10, Drain to the RH Pit Sump #11, is shown on LR-XH-1-31, location E-3, Residual Heat Exchanger Shell Drains.

 Drawing LR-39245-2, location C-1, "To Unit 1 Component Cooling Pumps See LR-39245-1"

NSPM Response: The continuation of drawing LR-39245-2, location C-1, To Unit 1 Component Cooling Pumps, is shown on LR-39245-1, location A-7, From Steam Generator Blowdown Sample Panel.

 Drawing LR-39245-2, locations B-10 and C-8, both have a note that states: "Compressor Seal Make-up Line See LR-XH-1-124"

NSPM Response: Each waste gas compressor is provided with a compressor seal makeup supply from the Component Cooling system. The continuation of drawing LR-39245-2 location C-8, 121 Compressor Seal Make-up Line, is shown on LR-XH-1-124 location D-4, Component Cooling Water. The continuation of LR-39245-2 location B-10, 122 Compressor Seal Make-up Line, is shown on LR-XH-1-124 location G-4, Component Cooling Water.

 Drawing LR-39245-2, location B-8, "To Waste Gas Recombiner #122 See LR-XH-550-6"

NSPM Response: The continuation of drawing LR-39245-2, location B-8, To Waste Gas Recombiner #122, is shown on LR-XH-550-6-2, location B-6, Cooling Water 10 GPM at 120°F.

 Drawing LR-39245-2, location B-10, "To Waste Gas Recombiner #121 For Cont. See LR-XH-550-6"

NSPM Response: The continuation of drawing LR-39245-2, location B-10, To Waste Gas Recombiner #121, is shown on LR-XH-550-6-1, location B-6, Cooling Water 10 GPM at 120°F.

 Drawing LR-39245-2, location F-11, "Compressor Seal Make-up Line See LR-XH-550-1"

NSPM Response: Each waste gas compressor is provided with a compressor seal makeup supply from the Component Cooling system. The continuation of drawing LR-39245-2 location F-11, 123 Compressor Seal Make-up Line, is shown on LR-XH-550-1, location C-6, Component Cooling Water.

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 Drawing LR-39245-2, locations C-8 and F-11, "Reactor Make-up Water Supply See LR-39242"

NSPM Response: Each waste gas compressor is provided with a compressor seal makeup supply from the reactor makeup water system. The continuation of drawing LR-39245-2, locations C-8 and F-11, Reactor Make-up Water Supply, is shown on LR-39242, location F-8, To #121 and #123 Waste Gas Compressors, and is further shown on LR-XH-1-124, location D-4, and LR-XH-550-1, location C-6, Reactor Make-Up Water.

Drawing LR-39245-2, location C-1, shows a 3-CC-9 pipeline that has a continuation note stating "From Unit 1 Component Cooling Heat Exchanger See LR-39245-1" and drawing LR-39245-1, location F-7, also shows a 3-CC-9 that has a continuation note stating "To #11 Seal Water Heat Exchanger See LR-39245-2"

NSPM Response: On drawing LR-39245-1, location F-7, the line number 3-CC-9 is incorrect; the line number should be 3-CC-35. The continuation of LR-39245-2, location C-1, From Unit 1 Component Cooling Heat Exchanger, is shown on LR-39245-1, location E-3, To Steam Generator Blowdown Sample Panel.

 Drawing LR-39216-3, locations E-6 and D-5, show 3/4" lines continuing to the corrosion monitors.

NSPM Response: On drawing LR-39216-3, locations E-6 and D-5, the drawing is not intended to show a continuation. At these locations, bar style corrosion coupon holders are installed on the downstream side of the valve. The coupon holder pressure boundary is comprised of a length of pipe with fittings. Piping/fittings are included in the components shown in Table 2.3.3-6.

 Drawing LR-39217-1, location B-8, shows a 3/8" line continuing to DPI 11026 through 11029.

NSPM Response: The continuation of drawing LR-39217-1, location B-8, To DPI 11026 Thru 11029, including the referenced DPI instruments, is shown on the same drawing at the outlet side of the Generator Exciter Coolers, locations C-9 through D-9.

 License renewal LR-39216-2, location G-5, shows a 4" line to admin chiller/fan coil cooling water continued on LR-39603-3, location A-9

NSPM Response: On drawing LR-39216-2, location G-5, the continuation drawing location call out A-9 is incorrect. The continuation of LR-39216-2, location G-5, To Admin Chiller/Fan Coil Cooling Water, is shown on LR-39603-3, location H-3, 24" Cooling Water Supply Header.

 License renewal LR-39217-1, locations G-4 and G2, shows 3/4" lines to #12 and #22 AFW pump suctions continued on LR-39223.

NSPM Response: The continuation of drawing LR-39217-1, location G-4, To #22 Aux FW Pump Suction, is shown on LR-39223, location A-3, From Unit #2 Cooling Water Supply, continuing to #22 Auxiliary

2.3.3.6

Feedwater Pump. On drawing LR-39217-1, location G-4, the ³/₄" line size adjacent to ES-46883 is incorrect; the correct size is 4" line. The continuation of LR-39217-1, location G-2, To #12 Aux FW Pump Suction, is shown on LR-39223, location A-3, From Unit #2 Cooling Water Supply, continuing to #12 Auxiliary Feedwater Pump. This line is also shown on LR-39222, location A-2, From Unit 2 cooling Water Supply, continuing to #12 Auxiliary Feedwater Pump.

2.3.3.8

Drawing LR-39255-1, location C-1, states that pipeline 4-CL-32 continues "To D-1 and D-2 Diesel Gen. Room Sprinkler System."

NSPM Response: The continuation of drawing LR-39255-1, location C-1, To D1 and D2 Diesel Gen Room Sprinkler System, is on LR-39228-4, location A-9, on the 6" line supplying the D-1 and D-2 Diesel Generator Areas. LR-39228-4 does not explicitly show this connection.

2.3.3.12

Drawing LR-39247, G-2 and G-5, identify several valves in red boxes labeled #21, 22 and 23, and #11, 12 and 13, respectively. A continuation line or location is not identified.

NSPM Response: On drawing LR-39247, locations G-2 and G-5, the red boxes are the VC System charging pump hydraulic desurgers and are identified (labeled) directly below the boxes (location H-2 and H-5). The full extent of the desurger nitrogen side pressure boundary is shown, therefore no continuation line is required. The Unit 1 and Unit 2 hydraulic desurgers and the nitrogen line continuations are also shown on LR-XH-1-39, locations E-4 through G-4, and LR-XH-1001-5, locations E-4 through G-4, N2 Line for Hydraulic Desurger (Typical).

- 2.3.3.17 Drawing LR-39244:
 - Location B-1, downstream of valve SA-31-53 to Evap. Control Panel
 - Location B-1, downstream of valve SA-32-5 to 121 ADT evaporator
 - Location B-2; ¹/₂" line to Waste Evap. Control Panel
 - Location B-2, downstream of valve SA-24-2 to Unit 1 Fuel Transfer Control Panel

Location C-2, downstream of valve SA-32-20 to Hot Instr. Lab Room

- Location C-2, downstream of valve SA-53-44 to Hot Chemical Lab Water Chiller Pkg
- Location A-2, downstream of valve SA-24-1 to Unit 2 Fuel Transfer Control Panel
- Location D-2, downstream of valve SA-71-1 to Serv/Comp Bldg Addtn
- Location D-2, downstream of valve FP-117-1 to FP-104-1 Low Press
- Location C-3, downstream of valve SA-77-1 to Gas Analyzer Pnl
- Location C-3, downstream of valve SA-53-44 to Hot Chemical Lab Stm Gen Blow-on Monitor Pnl

Location C-4, downstream of valve SA-32-24 to Hot Chemical Lab.

- Location C-4, downstream of ³/₄" line to Boric Acid Evap. Cntl Pnl
- Location D-4, downstream of CD-34049 to SV-33001 and SV-33115
- Location D-5, downstream of SA-62-5 to SV-33115 and SV-33116
- Location D-5, downstream of SA-33-40 to SV-31962 and SV-31965
- Location D-6, downstream of valve SA-31-51 to Cold Chemical Lab
- Location B-6, downstream of valve SA-32-17 to Unit1 Control Room Panel
- Location B-6, downstream of valve SA-60-2 to Temp. Conn.
- Location B-6, downstream of valve SA-63-2 to TC-26016 thru TC-26024
- Location B-6, downstream of valve 2SA-20-1 to Instr. Workshop
- Location B-7, downstream of valve 2SA-32-16 to Unit2 Control Room Panel
- Location C-8, downstream of 1/2" line to Boric Acid Evap. Cntl Pnl
- Location D-7, downstream of 2SA-19-3 to #123 Air Compr Unloader Supply Cntl. Pnl
- Location D-10, downstream of 2SA-33-4 to CV-31966 thru CV-31969.
- Location B-9, downstream of 2SA-33-5 and 2SA-33-6 to #121 and #122 Hydrogen Recombiner Cntl. Pnl
- Location A-9, downstream of 2SA-65-1 to Engage-Disengage for Fuel Assembly Clamp
- Location A-9, downstream of 2SA-63-1 to reactor inflatable seal
- Location A-9, downstream of 2SA-31-1 to air hose conn for manipulator crane.
- Location F-1, downstream of SA-120-3
- Location F-1, downstream of SA-121-2
- Location F-1, downstream of SA-121-1
- Location F-12, downstream of SA-120-4
- Location F-12, downstream of SA-121-4
- Location F-11, downstream of SA-121-3
- Location E-10, downstream of 2SA-22-1 to NF-86172-1

NSPM Response: These continuations from drawing LR-39244 extend up to and include normally closed isolation valves or installed end devices, such as actuators, controllers, control panels and instruments that provide a pressure boundary for the system. The interconnected piping/fittings, valves and in-line components are within the scope of License Renewal and subject to AMR; piping/fittings, valves and other in-line components are included in Table 2.3.3-17. The end devices are

typically active components and are not subject to AMR; where the end device is a passive component, such as a tank, it is also subject to AMR and included in Table 2.3.3-17.

Note that the listed bullet for Location E-10, downstream of 2SA-22-1 to NF-86172-1, is actually an item on Drawing LR-39243 below.

Drawing LR-39243:

- Location C-2, downstream of valve SA-39-5 to warehouses
- Location C-2, downstream of valve SA-16-1 to #121 neutralizing tank
- Location C-2, line going to 1/4" to Louver valve assembly at EL.720'-0'
- Location D-2, line downstream of SA-76-1
- Location E-1, 3/4" line downstream of SA-81-1 to roof
- Location E-2, downstream of SA-80-1
- Location D-3, upstream of the 2-1/2" line and just prior to 1-1/2" line
- Location A-5, 1/4" line downstream of SA-19-1 to 1/4" to Louver valve assembly at EL.758'-6"
- Location C-6, 1/2" line downstream of SA-18-3 to Hot Chem Lab and General Chem Table
- Location D-7, upstream of SA-2-51 to Relay Room

 Location D-10, 1/4" line downstream of 2SA-19-4 to 1/4" to Louver valve assembly at EL.740'-6"

Location D-10 and D-11, downstream of 2SA-80-2 and 2SA-80-3

NSPM Response: These continuations from drawing LR-39243 extend up to and include normally closed isolation valves or installed end devices, such as actuators, controllers, control panels, and instruments that provide a pressure boundary for the system. The interconnected piping/fittings, valves and in-line components are within the scope of License Renewal and subject to AMR; piping/fittings, valves and other in-line components are included in Table 2.3.3-17. The end devices are typically active components and are not subject to AMR; where the end device is a passive component, such as a tank, it is also subject to AMR and included in Table 2.3.3-17.

2.3.3.20

Drawings LR-XH-550-6-1, location H-6, and LR- XH-550-6-2, location H-6, shows piping transitions from a decontamination water source as in scope for license renewal (a)(2).

NSPM Response: The continuation of drawing LR-XH-550-6-1, location H-6, and XH-550-6-2, location H-6, Decontamination Water Source, are shown on drawing LR-39242, location B-7, To Waste Gas Recombiners.

• Drawing LR-XH-1-664, location C-7, 1¹/₂" piping to aerated sump tank

NSPM Response: On drawing LR-XH-1-664, location C-7, the drain To Aerated Sump tank (Via Floor Drain System), ends as an open pipe

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adjacent to a floor drain. There is no drawing continuation. Auxiliary Building floor drains are shown on LR-39248.

 Drawing LR-XH-1-664, location B-3, 3" piping from the evaporator condenser rupture disc

NSPM Response: On drawing LR-XH-1-664, location B-3, the 3" piping from the evaporator condenser rupture disc ends as an open pipe; there is no drawing continuation.

 Drawing LR-39236, location H-11, downstream of WS-2-11, 2" piping to resin shipping liner, (drawing sheet number and location were not provided).

NSPM Response: On drawing LR-39236, location H-11, To Resin Shipping Liner, the LR scoping boundary is incorrect. A wall should be shown on the line to the Resin Shipping Liner downstream of valve WS-2-9 and before the sight glass; the portion of the piping outside the wall continuing to the Resin Shipping Liner should be shown as not within the scope of LR.

Drawing LR-39248, location G-2, 2" piping 2-RH-28 to #11 sump pump

NSPM Response: The continuation of drawing LR-39248, location G-2, line 2-RH-28, is shown on LR-XH-1-31, location D-5, To Residual Heat Removal Pit Sump #11.

Drawing LR-39248, location E-6, 3" fr c.c. surge tk vent unit #1

NSPM Response: The continuation of drawing LR-39248, location E-6, 3" From CC Surge Tank Vent Unit #1, is shown on drawing LR-39245-1, location F-4, To Waste Hold Up Tank, line 3-WL-106.

Drawing LR-39248, location E-6, 3" fr c.c. surge tk vent unit #2

NSPM Response: The continuation of drawing LR-39248, location E-6, 3" From CC Surge Tank Vent Unit #2, is shown on drawing LR-39246-1, location C-6, To Waste Hold Up Tank, line 3-2WL-41.

 Drawing LR-39248, location F-9, 2" piping from drain from c.c. surge tank #21

NSPM Response: The continuation of drawing LR-39248, location F-9, 2" Drain From CC Surge Tank #21, is shown on LR-39246-1, location A-6, Drain to Aerated System Sump Tank, line 2-2CC-51.

 Drawing LR-39249, location C-6, downstream of WL-52-4, 3/4" piping to sample conn.

NSPM Response: On drawing LR-39249, location C-6, Sample Connection, the piping ends downstream of valve WL-52-4 as a local sample point; there is no drawing continuation.

 Drawing LR-39249, location C-8, 3/4 WL-188, 3/4" piping to nonaerated sump tank (to equipment drain)

NSPM Response: The continuation of drawing LR-39249, location C-8, To Non-Aerated Sump Tank, line ³/₄-WL-188, is shown on LR-39248,

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location B-4, $\frac{1}{2}$ " From Non Aerated Drain Filter. As shown on the drawings, the drain line transitions from $\frac{1}{2}$ " pipe (1/2-WL-188) to $\frac{3}{4}$ " pipe (3/4-WL-188).

Drawing LR-39249, location F-8, 3/4" piping demin flush

NSPM Response: The continuation of drawing LR-39249, location F-8, Demin Flush at valve RM-15-1, is shown on LR-39242, location F-8, To R-18 Piping at valve RM-15-1.

 Drawing LR-88740, location C-2, 3/4 SB-2 piping from 12 steam generator

NSPM Response: The continuation of drawing LR-88740, location B-2, line 3/4-SB-2, is shown on LR-39238, location A-5, 12 Steam Generator Blowdown (SM-36).

• Drawing LR-88740, location H-1, 3/4-WL-399 piping to sample

NSPM Response: On drawing LR-88740, location H-1, Sample line ³/₄-WL-399 piping ends downstream of valve BD-18-4 as a local sample point; there is no drawing continuation.

 Drawing LR-88740, location E-5, 1/2" piping to sample to cold chew. lab.

NSPM Response: On drawing LR-88740, location E-5, the continuation "To Cold Chew. Lab" is incorrect; the continuation should read "to Cold Chem Lab." The continuation from LR-88740, location E-5, To Cold Chemistry Lab, extends to local sample points at the cold lab sink; the cold lab sinks are shown on LR-XH-248-1-1 and LR-248-1-2. The interconnected piping/fittings and valves are within the scope of License Renewal and subject to AMR. Piping/fittings and valves are included in Table 2.3.3-20.

Drawing LR-88740, location D-10, 1.5" piping from S.G.B. Sample panel

NSPM Response: The continuation of drawing LR-88740, location D-10, 1 ½" from SGB Sample Panel, is shown on LR-XH-248-1-1, location E-3, and LR-XH-248-1-2, E-10. The Hot Lab Sample Sink drain and drains shown downstream of Primary Coolers PC35, 36, 235 and 236, drain to the Unit 1 SGB Hold-Up Tanks via this line. The interconnected piping/fittings and valves are within the scope of License Renewal and subject to AMR. Piping/fittings and valves are included in Table 2.3.3-20.

 Drawing LR-88740, location H-8, 2-WL-53 piping drain to aerated waste via floor drain

NSPM Response: On drawing LR-88740, location H-8, line 2-WL-53 Drain to Aerated Waste Via Floor Drain ends as an open pipe adjacent to a floor drain. There is no drawing continuation. Auxiliary Building floor drains are shown on LR-39248.

- 2.3.3.21
- Drawing LR-39241-1, Location G-5, 3/4" downstream of SA-32-18 to Instrument Air (LR-39244)

NSPM Response: The continuation of drawing LR-39241-1, location G-5, $\frac{3}{4}$ " Instrument Air, is shown on LR-39244, location B-1, To #121 Potable Water Pressure Tank.

 Drawing LR-39241-4, Location D-7, Sample Flush from Reactor Makeup

NSPM Response: The continuation of drawing LR-39241-4, location D-7, Sample Flush From Reactor Makeup Supply, is shown on LR-39242, location E-5, To Water Treatment Silica Analyzer.

• Drawing LR-39241-4, Location E-7, 1/4" Temporary Water Connection

NSPM Response: On drawing LR-39241-4, location E-7, ¹/₄" Temporary Water Connection, the piping ends downstream of valve DE-159-14 as a local connection point; there is no drawing continuation.

 Drawing LR-39241-4, Location A-10, From Instrument Air System (LR-39244)

NSPM Response: The continuation of drawing LR-39241-4, location A-10, From Instrument Air System, is shown on LR-39244, location C-2, To Analytical Panel.

 Drawing LR-39241-4, Location A-1, From Instrument Air System (LR-39244)

NSPM Response: The continuation of drawing LR-39241-4, location A-1, From Instrument Air System, is shown on LR-39244, location D-4, To Vacuum Degasifier Panel.

 Drawing LR-39241-5, Location A-2, From Instrument Air System (LR-39244)

NSPM Response: The continuation of drawing LR-39241-5, location A-2, From Instrument Air System, is shown on LR-39244, location C-1, To RO Panel.

 Drawing LR-39241-5, Location D-2, From Instrument Air System (LR-39244)

NSPM Response: The continuation of drawing LR-39241-5, location D-2, From Instrument Air System, is shown on LR-39244, location C-1, To RO Panel.

 Drawing LR-39241-7, Location C-1, From Instrument Air System Drawing LR-39244

NSPM Response: The continuation of drawing LR-39241-7, location C-1, From Instrument Air System, is shown on LR-39244, location C-2, To CDI Panel.

 Drawing LR-39241-7, Location B-9, From Instrument Air System Drawing LR-39244

NSPM Response: The continuation of drawing LR-39241-7, location B-

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9, From Instrument Air System, is shown on LR-39244, location C-2, To Analytical Panel.

 Drawing LR-39241-7, Location E-1, From Instrument Air System Drawing LR-39244

NSPM Response: The continuation of drawing LR-39241-7, location E-1, From Instrument Air System, is shown on LR-39244, location C-2, To CDI Panel.

• Drawing LR-39241-7, Location F-2, Concentrated Caustic from Tote

NSPM Response: On drawing LR-39241-7, location F-2, the Concentrated Caustic from Tote represents a local connection point for a transportable caustic tote. A tote is not normally in place and there is no drawing continuation. The tote and connecting line are used for periodic maintenance and are not normally connected; the tote lines (representing hoses) outboard of the flanged connection should have been shown as not within the scope of LR.

 Drawing LR-39241-7, Location G-2, Cleaning Solution Return/Tank Fill Water From RO or CDI

NSPM Response: On drawing LR-39241-7, location G-2, the Clean-In-Place (CIP) cleaning solution return, tank fill and feed connections are representative of the local connections that can be made to the various reverse osmosis (RO) and continuous de-ionization (CDI) units. For example, at locations D-2, D-6 and F-6, there are corresponding CIP local connections points for the 123 CDI skid. The CIP skid is used for periodic maintenance and is not normally connected; the lines (representing hoses) outboard of the flanged connection should have been shown as not within the scope of LR.

• Drawing LR-39241-7, Location G-2, Concentrated Acid From Tote

NSPM Response: On drawing LR-39241-7, location G-2, the Concentrated Acid from Tote represents a local connection point for a transportable acid tote. A tote is not normally in place and there is no drawing continuation. The tote and connecting line are used for periodic maintenance and are not normally connect; the tote lines (representing hoses) outboard of the flanged connection should have been shown as not within the scope of LR.

 Drawing LR-39241-7, Location G-2, Cleaning Solution Return From RO or CDI

NSPM Response: On drawing LR-39241-7, location G-2, the Clean-In-Place (CIP) cleaning solution return, tank fill and feed connections are representative of the local connections that can be made to the various reverse osmosis (RO) and continuous de-ionization (CDI) units. For example, at locations D-2, D-6 and F-6, there are corresponding CIP local connections points for the 123 CDI skid. The CIP skid is used for periodic maintenance and is not normally connected; the lines (representing hoses) outboard of the flanged connection should have been shown as not within the scope of LR.

 Drawing LR-39241-6, Location C-1, From Degasifier Pumps Drawing LR-39241-4

NSPM Response: The continuation of drawing LR-39241-6, location C-1, From Degasifier Pumps, is shown on LR-39241-4, location F-10, To Reverse Osmosis Skids. From LR-39241-4, the continuation to 121 Reverse Osmosis System is through LR-39241-5 and onto LR-39241-6.

 Drawing LR-39241-6, Location F-1, Deionized Water from Concentrate Transfer Pump

NSPM Response: On drawing LR-39241-6, location F-1, Deionized Water from Concentrate Transfer Pumps, is incorrect. The continuation should be Deionized Water from Condensate Transfer pumps from LR-39220, location D-4.

 Drawing LR-39241-6, Location G-1, From Instrument Air System Drawing LR-39244

NSPM Response: The continuation of drawing LR-39241-6, location G-1, From Instrument Air System, is shown on LR-39244, location C-2, To CDI Panel.

 Drawing LR-39241-6, Location A-2, From Instrument Air System Drawing LR-39244

NSPM Response: The continuation of drawing LR-39241-6, location A-2, From Instrument Air System, is shown on LR-39244, location C-1, To RO Panel.

 Drawing LR-39241-8, Location C-4, Rinse/Recycle to Vacuum Degasifier Inlet, Drawing LR-39241-6

NSPM Response: The continuation of drawing LR-39241-8, location C-4, Rinse/Recycle to Vacuum Degasifier Inlet, is shown on LR-39241-6, location F-9, Rinse Recycle from Mixed Beds.

Drawing LR-39241-8, Location A-8, From Station Air System

NSPM Response: The continuation of drawing LR-39241-8, location A-8, From Station Air System, is shown on LR-39243, location D-2, By Illinois Water Treatment.

• Drawing LR-39241-8, Location A-2, To Recycle Canal

NSPM Response: On drawing LR-39241-8, location A-2, To Recycle Canal, the LR scoping boundary is incorrect. A wall should be shown on the line to the Recycle Canal downstream of the branch line to DE-156-138; the portion of the piping outside the wall should be shown as not within the scope of LR.

• Drawing LR-39241-8, Location A-2, downstream of valve DE-156-138

NSPM Response: On drawing LR-39241-8, location A-2, the piping ends downstream of valve DE-156-138 as a local connection point; there is no drawing continuation.

- 2.3.4.2 Drawings LR-39224 and LR-39225:
 - Locations B-3 and E-3, shows 1" lines as in scope for license renewal; the lines are continued as 1" "Drains to Waste."

NSPM Response: On drawing LR-39224, locations B-3 and E-3, and LR-39225, locations G-7 and D-7, Drains to Waste, the piping ends near an open funnel drain; there is no drawing continuation.

 Location E-4, shows 1-1/2" lines; the lines are continued to "Drain to Traps" on drawing LR-39233

NSPM Response: The continuation of drawing LR-39224, location E-4, Drain to Traps, is shown on LR-39233, location B-1, Bleed Steam to HP Heaters. The continuation of LR-39225, location D-6, Drain to Traps, is shown on LR-39234, location B-1, Bleed Steam to HP Heaters.

 Location C-11, shows 1" lines; the lines are continued from drawing LR-39218.

NSPM Response: The continuations of drawing LR-39224, locations C-11, C-9, C-8 and C-5, From 6" Warm Up Line, are shown on LR-39218, location C-6, To Scavenging Steam Line (Typical 4 Places). On drawing LR-39224, location C-8, the scoping classification of the 1" line continuing from LR-39218 is incorrect; the line should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(2).

The continuations of LR-39225, locations F-1, F-3, F-3 and F-5, From 6" Warm Up Line, are shown on LR-39219, location C-6, To Scavenging Steam Line (Typical 4 Places). On drawing LR-39225, locations F-3 and F-3, the scoping classifications of the 1" lines continuing from LR-39219 are incorrect; the lines should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(2).

- 2.3.4.3
- Drawing LR-39215-1, location H-5

NSPM Response: On drawing LR-39215-1, location H-5, Ball Catching Unit, 1" Drain and 1" Vent, the piping ends as a local vent/drain; there is no drawing continuation.

• Drawing LR-39215-1, locations C-2, C-3, C-4 and C-5

NSPM Response: On drawing LR-39215-1, locations C-2, C-3, C-4 and C-5, Equalizer Line, the drawing is intended to depict the pipe entering the pump suction bay below the floor. The scoping boundary ends where the pipe enters the concrete floor; there is no drawing continuation.

2.3.4.4

 Drawing LR-39253-1, location F-3, shows a line to the Unit 2 reactor make-up pumps continued on LR-39242, location E-4

NSPM Response: The continuation of drawing LR-39253-1, location F-3, From Unit 2 Reactor Make-up Pumps, is continued on LR-39242, location E-4, Seal Water to BW Waste Transfer Pumps #21 & #22.

 Drawing LR-39227, location D-4, shows two 1-1/2" lines continued on LR-XH-1002-43

NSPM Response: The continuation of drawing LR-39227, location D-4, Connection #26 Drain From Cross Under Pipe to Moisture Separator Heater, is shown on LR-XH-1002-43, locations D-1 and D-3, connection 26.

2.3.4.5

Drawings LR-39222 and LR-39223:

Locations A-8 and A-2, show continuations of pipe sections without identification numbers (from Unit 1 and Unit 2 cooling water return) to drawings LR-39216-2, LR-39217-1(for Unit 1) and LR-39216, LR-39217(for Unit 2)

NSPM Response: The continuation of drawings LR-39222 and LR-39223, location A-8, From Unit 1 Cooling Water Return and From Station Air After Cooler System, is shown on LR-39216-2, location F-8, Station Air Compressor & After Cooler System, line 3-CL-111, and #11 & #12 Auxiliary FW Pump Recirc, line 2-CL-111, continuing via 6-CL-111 to the Unit 1 Cooling Water Return Header, 24-CL-110.

The continuation of drawings LR-39222 and LR-39223, location A-3, From Unit 2 Cooling Water Return and From Station Air After Cooler System, is shown on LR-39217-1, location B-2, From Station Air Compressor & After Cooler System, line 3-CL-112, and #21 & #22 Auxiliary FW Pump Recirc, line 2-CL-112, continuing via 6-CL-112 to the Unit 2 Cooling Water Return Header, 24-2CL-56.

 Locations A-7 and A-3, show a continuation of incoming pipe sections with no identification numbers (from station air after cooling system) from drawing LR-39244.

NSPM Response: The continuations of drawings LR-39222, locations A-7 and A-3, and LR-39223, locations A-7 and A-5, From Station Air After Cooler System, are shown on LR-39244, locations H-1 and H-9, To Cooling Water Return, line 3-CL-111.

 Location B-5, show a continuation of incoming pipe sections (with no identification numbers [Condensate Transfer]) from drawing LR-39220

NSPM Response: The continuation of drawings LR-39222 and LR-39223, location B-5, Condensate Transfer to line 8-DE-56, is shown on LR-39220, location E-2, 2 $\frac{1}{2}$ " Condensate Transfer and Recycle Pump discharge lines connecting to line 8-DE-56 on either side of valve C-41-2.

 Drawings LR-39222, locations B-5 and B-3, and LR-39223, locations B-7 and B-5, show continuations of incoming pipe sections (with no identification numbers [#21 and #22 Auxiliary Feedwater Pump]) from drawing LR-39223 for unit 1 and from LR-39222 for unit 2.

NSPM Response: The continuation of drawing LR-39222, location B-5, #21 Auxiliary Feedwater Pump Motor Driven, is shown on LR-39223, locations B-7 (line 2-CL-112), B-7 (4-DE-56) and B-6 (4-2AF-2).

The continuation of drawing LR-39222, location B-3, #22 Auxiliary Feedwater Pump Turbine Driven, is shown on LR-39223, locations B-5 (line 2-CL-112), B-4 (4-DE-56) and B-3 (4-2AF-1).

The continuation of drawing LR-39223, location B-7, #11 Auxiliary Feedwater Pump Turbine Driven, is shown on LR-39222, locations B-8 (line 2-CL-111), B-7 (4-DE-56) and B-6 (4-AF-1).

The continuation of drawing LR-39223, location B-5, #12 Auxiliary Feedwater Pump Motor Driven, is shown on LR-39222, locations B-5 (line 2-CL-111), B-4 (4-DE-56) and B-4 (4-AF-2).

2.3.4.6 Drawings LR-39218 and LR-39219:,

 Location F-2, show a continuation of pipe sections 1-MS-53, 1-MS-54, 1-2MS-53 and 1-2MS-54" (DRAINS TO TRAPS), to drawings LR-39233 and LR-39234, respectively.

NSPM Response: The continuation of drawings LR-39218 and LR-39219, location F-2, Drains to Traps, is shown on LR-39233 and LR-39234, location F-11, at valves TD-24-1 / TD-24-2 and 2TD-24-1 / 2TD-24-2, respectively.

 Drawing LR-39218, location F-4, pipe sections 1-1/2-MS-62, 1-MS-55, 1-MS-56 continuation to drawing LR-39233 and drawing LR-39219, location F-4, pipe sections 1-1/2-2MS-2, 1-2MS-55, 1-2MS-56 continuations to drawing LR-39234.

NSPM Response: The continuation of drawing LR-39218, location F-4, Drain to Traps, lines 1 ½-MS-62, 1-MS-55 and 1-MS-56 are shown on LR-39233, location F-10, at valves TD-4-1 (line 1 ½-MS-62), TD-24-3 (line 1-MS-55) and TD-24-4 (line 1-MS-56), respectively.

The continuation of drawing LR-39219, location F-4, Drain to Traps, lines 1 $\frac{1}{2}$ -2MS-2, 1-2MS-55 and 1-2MS-56 are shown on LR-39234, location F-10, at valves 2TD-4-1 (line 1 $\frac{1}{2}$ -2MS-2), 2TD-24-3 (line 1-2MS-55) and 2TD-24-4 (line 1-2MS-56), respectively.

 Drawing LR-39218, locations F-6, G-5, and G-6, pipe sections 10-MS-27, 12-MS-3, 12-MS-4, respectively, continuations to drawing LR-39233

NSPM Response: The continuation of LR-39218, locations F-6, G-5 and G-6, lines 10-MS-27, 12-MS-3 and 12-MS-4, are shown on LR-39233, location F-1, at valve TD-4-2 (line 10-MS-27) and location B-3, at valves TD-10-1 and TD-10-5 (lines 12-MS-3 and 12-MS-4).

 Drawing LR-39219, locations F-6, G-5, and G-6, pipe sections 10-2MS-27, 12-2MS-3, 12-2MS-4, respectively, continuations to drawing LR-39234.

NSPM Response: The continuation of drawing LR-39219, locations F-6, G-5 and G-6, lines 10-2MS-27, 12-2MS-3 and 12-2MS-4, are shown on LR-39234, location E-1, at valve 2TD-4-2 (line 10-2MS-27) and location B-3, at valves 2TD-10-1 and 2TD-10-5 (lines 12-2MS-3 and 12-2MS-4).

 Drawing LR-39218, location D-7, pipe sections 6-MS-31 continuations to drawing LR-39233 and drawing LR-39219, location D-7, pipe sections 6-2MS-31 continuation to drawing LR-39234.

NSPM Response: The continuation of drawings LR-39218 and LR-39219, location D-7, Drain to Trap, is shown on LR-39233, location C-2, at valve TD-11-1, and LR-39234, location C-2, at valve 2TD-11-1, respectively.

 Drawing LR-39218, locations E-6 and E-7, pipe sections 3-MS-30, and upstream pipe sections after the valves TD-6-11, TD-6-12 1" "Drains to Trap" continuations to drawing LR-39233 and drawing LR-39219, locations E-6 and E-7, pipe sections 3-2MS-30, and upstream pipe sections after the valves 2TD-6-11, 2TD-6-12 continuations to drawing LR-39234.

NSPM Response: The continuation of drawings LR-39218 and LR-39219, locations E-6 and E-7, Drains to Trap, is shown on LR-39233, location C-3, at valves TD-11-16, TD-6-11 and TD-6-12 and LR-39234, location C-3, at valves 2TD-11-16, 2TD-6-11 and 2TD-6-12.

 Drawing LR-39218, location D-7, pipe sections 3/4-MS-31 continuation to drawing LR-39233, 4-MS-31 continuation to drawing LR-39230 and drawing LR-39219, location D-7, pipe sections 3/4-MS-31 continuation to drawing LR-39234, 4-2MS-31 continuation to drawing LR-39230.

NSPM Response: The continuation of drawings LR-39218 and LR-39219, location D-7, line 3/4-MS-31 and 3/4-2MS-31 Drain to Trap, is shown on LR-39233 and LR-39234, location C-2, at valves TD-25-2 / TD-25-3 and 2TD-25-2 / 2TD-25-3, respectively. The continuation of LR-39218 and LR-39219, location D-7, line 4-MS-31 and 4-2MS-31, is shown on LR-39230, location F-3, at line 8-AR-7 and E-10 at line 8-2AR-7, respectively.

Drawing LR-39218, locations E-8 and H-8, pipe sections 1/2 -MS-59, 12-MS-35 respectively, continuations to LR-39233 and drawing LR-39219, locations E-8 and H-8, pipe sections 1/2 -2MS-32, 12-2MS-35 respectively, continuations to LR-39234.

NSPM Response: The continuation of drawings LR-39218 and LR-39219, location E-8, 1/2-MS-59 and 1/2-2MS-32, Drain to Trap, are shown on LR-39233 and LR-39234, location C-9, at valve TD-16-1 and 2TD-16-1 respectively.

The continuation of LR-39218 and LR-39219, location H-8, 12-MS-35 and 12-2MS-35, Drain to Trap, are shown on LR-39233 and LR-39234, location B-2, at valve TD-11-9 and 2TD-11-9, respectively.

Drawing LR-39218, location E-10, pipe section with no identification number (1" Drain to Trap) and G-11, pipe section with no identification number (1-1/2" Drain to Trap) continuations to drawing LR-39233 and drawing LR-39219, location E-10, pipe section with no identification number (1" Drain to Trap) and G-11, pipe section with no identification number (1-1/2" Drain to Trap) continuations to LR-39234.

NSPM Response: The continuation of drawings LR-39218 and LR-39219, location E-10, 1" Drain to Trap, is shown on LR-39233 and LR-39234, location C-9, at valve TD-6-40 and 2TD-6-42, respectively, to Trap 14. On drawing LR-39233 and LR-39234, location C-9, the two

horizontal incoming drain lines routed to Traps 14 & 32 (14 & 29 on Unit 2) are shown incorrectly; these lines are not actually cross connected.

The continuation of LR-39218 and LR-39219, location G-11, 1 1/2" Drain to Trap, is shown on LR-39233 and LR-39234, location B-12, at valve TD-10-12, TD-13-5, TD-13-6 and 2TD-10-12, 2TD-13-5, 2TD-13-6, respectively.

 Drawings LR-39218, LR-39219, location G-1, shows a continuation of 3/4-MS-57 and 3/4-2MS-44 pipe (drain to trap) to drawings LR-39233 and LR-39234, respectively, without the pipe identification numbers.

NSPM Response: The continuation of drawings LR-39218 and LR-39219, location G-1, 3/4-MS-57 and 3/4-2MS-44, Drain to Trap, are shown on LR-39233 and LR-39234, location E-11, at valves TD-15-2 / TD-15-4 and 2TD-15-2 / 2TD-15-4, respectively.

Drawings LR-39218, LR-39219, locations C-6 and C-7, show a continuation of heater drain piping without identification numbers to drawings LR-39226 and LR-39227, respectively. Note that there are other similar instances on these drawings (from Moisture Separator Reheaters 2A, 1B, 2B at grid locations C-8, C-9 and C-11, respectively).

NSPM Response: The continuation of drawings LR-39218 and LR-39219, locations C-6 and C-7 (etc.), Moisture Separator and Reheater (MSR) Drains, are shown on LR-39226 (lines 8-HD-1,2,3,4 and 8-HD-13,14,15,16) and LR-39227 (line 8-2HD-1,2,3,4 and 8-2HD-13,14,15,16), locations A-5 through A-11. On drawing LR-39218 and LR-39219, locations C-6 and C-7, the continuation for the horizontal line extending from the reheater lower channel head is incorrect; this vent line is continued on LR-39224, locations B-5 through B-11 and LR-39225, locations G-5 through G-2. The "typical" drawing continuation at the 1A MSR is applicable to all four MSRs.

 Drawings LR-39218 and LR-39219, location C-7, show a continuation of crossover piping without identification numbers to and from drawings LR-39224 and LR-39225, respectively. Note that there are other similar instances on these drawings (to and from Moisture Separator Reheaters 2A, 1B, 2B at grid locations C-8, C-9 and C-10, respectively).

NSPM Response: The continuation of drawings LR-39218 and LR-39219, location C-7 (etc.), Cross Over Piping, is shown on LR-39224, locations B-6 through B-10 and LR-39225, locations G-5 through G-2. The "typical" drawing continuation at the 1A Moisture Separator Reheater (MSR) is applicable to all four MSRs.

 Drawings LR-39218 and LR-39219, location F-6, show a continuation of) pipe sections 1-1/2-MS-40, 1-1/2-MS-41 and 2-2MS-40, 2-2MS-41 from stop valves of drawings LR-39233 and LR-39234, respectively.

NSPM Response: The continuations of drawing LR-39218, location F-6, Drains From Stop Valves, are shown on LR-39233, location A-4, Turb Stop Valve Drains and on LR-XH-2-15, location A-5, Connection 24.

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The continuations of LR-39219, location F-6, Drains From Stop Valves, are actually connected on LR-39234, location A-4, similar to the Unit 1 drawing; the connections are not explicitly shown. The continuation is also shown on LR-XH-1002-43, locations B-5 and B-6, Connection 24.

 Drawings LR-39218 and LR-39219, locations B-4 and B-1, show continuations of piping without identification numbers to valves RS-18-3, RS-18-1, 2MS-18-3, and 2MS-18-1 from drawing LR-39247 (1" vent and N2 purge connection).

NSPM Response: The continuations of drawing LR-39218, locations B-4 and B-1, Vent and Nitrogen Purge Connections, are shown on LR-39247, locations C-8 and C-9, To Steam Generator MS Relief Header. The removable spools are not installed during plant operation.

The continuations of LR-39219, locations B-4 and B-1, Vent and Nitrogen Purge Connections, are shown on LR-39247, location B-12, To Steam Generator MS Relief Header. The removable spools are not installed during plant operation.

 Drawing LR-88740, locations H-8 through H-10, show a section of piping 2-SB-50.

NSPM Response: On drawing LR-88740, locations H-8 through H-10, the continuation of line 2-SB-50 is shown on LR-88740, location C-10.

 Drawing LR-88740, location H-8, shows a continuation of i2-WL-53 pipe to drain (to aerated waste via floor drain).

NSPM Response: On drawing LR-88740, location H-8, line 2-WL-53 Drain to Aerated Waste Via Floor Drain ends as an open pipe adjacent to a floor drain. There is no drawing continuation. Auxiliary Building floor drains are shown on LR-39248.

• Drawing LR-39250, location A-3, shows a continuation of 3/4-2WL-17 pipe to grab sample connection.

NSPM Response: On drawing LR-39250, location A-3, Grab Sample Connection, the piping ends downstream of valve 2WL-52-4 as a local sample point; there is no drawing continuation.

 Drawing LR-39250, location D-7, shows a continuation of 8-2SB-37 pipe to drawing LR-39225, location D-11.

NSPM Response: On drawing LR-39250, location D-7, the continuation drawing location D-11 is incorrect. The continuation of LR-39250, location D-7, line 8-2SB-37 to FWH Number 23A, is shown on LR-39225, location E-2, line 8-2SB-37 From SGB Flash Tank #21.

 Drawing LR-39250, locations E-10 through E-11, show continuation of pipes 3-2WL-10C, 3-2WL-25, and another 3-2WL-25 to drawings LR-XH-1001-7, LR-39248, and LR-XH-1-40, respectively.

NSPM Response: The continuation of drawing LR-39250, location E-10, line 3-2WL-10C to the Refueling Storage Tank #21, is shown on LR-XH-1001-7, location B-8, From RC Drain Tank Filter.

2.3.4.7

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2.3.4.8

The continuation of LR-39250, location E-10, line 3-2WL-25 to Waste Hold-Up tank, is shown on LR-39248, location E-7, From RC Drain Filter Unit #2.

The continuation of LR-39250, location E-11, line 3-2WL-25 to CVCS Hold-Up Tanks is shown on LR-XH-1-40, location A-2, Unit No. 2 Reactor Coolant Drain Tank Pumps Discharge.

 Drawing LR-39230, locations D-6 and D-7, show a continuation of pipes (without identification numbers) to drawing LR-39600 #121 and #122 auxiliary building special exhausts, respectively.

NSPM Response: The continuation of drawing LR-39230, locations D-6 and D-7, To Auxiliary Building Special Exhaust, is shown on LR-39600, locations D-8 and C-9, respectively. On drawing LR-39230, locations D-6 and D-7, the scoping criteria break for the lines to the Auxiliary Building Special Exhaust are incorrect; the continuation should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(2). The correct criteria break location is shown on LR-39600 at locations D-9 and C-9 and occurs at the flexible connection in accordance with LR-39600 LR Note 4.

 Drawings LR-39233 for unit 1 and LR-39234 for unit 2, location F-1, show sections of piping (10" pipe sections) continued from (moisture separator reheater supply lines) drawings LR-39218 and LR-39219, respectively.

NSPM Response: The continuation of drawings LR-39233 and LR-39234, location F-1, Moisture Separator Reheater Supply Line at valve TD-4-2 and 2TD-4-2, is shown on LR-39218 and LR-39219, location F-6, 1 ¹/₂" Drain to Trap at line 10-MS-27 and 10-2MS-27.

 Drawings LR-39233 for unit 1 and LR-39234 for unit 2, locations E-4 and E-5, show sections of pipes continued to (heater drain tank #11 and #21) drawings LR-39224 and LR-39225, respectively.

NSPM Response: The continuation of drawing LR-39233, location E-4, To Heater Drain Tank, is shown on LR-39224, locations C-7 and C-10 at valve M-29-2 and M-29-1. These lines continue again on LR-39224, location E-2, Continued From Moisture Separator.

The continuation of LR-39234, location E-4, To Heater Drain Tank, is shown on LR-39225, locations F-2 and F-4, at valve 2MD-29-2 and 2M-29-1. These lines continue again on LR-39225, location C-7, Continued From Moisture Separator.

 License renewal drawings LR-39233 for unit 1 and LR-39234 for unit 2, locations C-1and C-2, show sections of pipes (16" and 24") continued to (Bleed steam to H.P. heaters) drawings LR-39224 and LR-39225, respectively.

NSPM Response: The continuation of drawing LR-39233, locations C-1 and C-2, Bleed Steam To HP Heaters, is shown on LR-39224, location E-4, Drains to Traps, adjacent to CV-31105 and CV-31106.

The continuation of LR-39234, locations C-1 and C-2, Bleed Steam To

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HP Heaters, is shown on LR-39225, location D-6, Drains to Traps, adjacent to CV-31110 and CV-31111.

 Drawings LR-39233 for unit 1 and LR-39234 for unit 2, location B-9, show a section of pipe (no identification number) continued from an unspecified drawing.

NSPM Response: The continuation of drawings LR-39233 and LR-39234, location B-9, drain to Trap 32 (Trap 29 on Unit 2), is shown on LR-39218 and LR-39219, location E-9, 1 ¹/₄" Drain To Trap upstream of valve MS-30-1 (1" Drain to Trap on Unit 2 upstream of valve 2MS-30-1). On drawing LR-39233 and LR-39234, location C-9, the two horizontal incoming drain lines routed to Traps 14 & 32 (14 & 29 on Unit 2) are shown incorrectly; these lines are not actually cross connected.

 Drawings LR-39233 for unit 1 and LR-39234 for unit 2, location B-12, show sections of pipe continued from (main steam bypass) drawings , LR-39218 and LR-39219, respectively.

NSPM Response: The continuation of LR-39233 and LR-39234, location B-12, Main Steam Bypass, is shown on LR-39218 and LR-39219, location G-11, 1 1/2" Drain To Trap from line 12-MS-36 and 12-2MS-36, respectively.

- Drawings LR-39231-1 for unit 1 and LR-39231-2 for unit 2, location C-7, show a section of pipe continued to drawing LR-39230, location E-5.
 - NSPM Response: The continuation of LR-39231-1 and LR-39231-2, location C-7, is shown on LR-39230, location E-5, Generator Oil Loop Seal Tank to the Generator Bearing Seal Oil Vapor Extractor. The "typical" detail shown on LR-39230 is applicable to both Units.

REQUEST

Provide additional information to locate the license renewal boundaries.

NSPM Response to RAI 2.3-01

The responses have been integrated into the listing of individual items above.

RAI 2.3-02

BACKGROUND:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to identify and list all components subject to an AMR. The staff confirms inclusion of all components subject to AMR by reviewing the component types within the license renewal boundary.

ISSUE:

During the scoping and screening review process the continuation from one drawing to another was potentially identified but not definitively established.

2.3.3.2 Drawing LR-XH-1-40, locations D-2, D-4 and D-5, show 10 CFR 54.4(a)(1) drain lines from the holdup tanks to valves 2VC-11-68, (no valve numbers located from tanks 11 and 121). These drain lines are continued to "DH." These three lines are believed to be continued on drawing LR-39248, location F-8.

NSPM Response: The continuation of LR-XH-1-40, locations D-2, D-4 and D-5, to Drain Header (DH), are shown on LR-39248, location F-7, line 4-WL-123 from CVCS Holdup Tanks.

2.3.3.8 Drawing LR-39255-1, location A-3, states that the drawing continuation pipe section 6-CL-124 continues "To Cooling Water Return" on drawing LR-39216-3. It was found that the more likely continuation location was G-3 on drawing LR-39217-2, on pipe section 6-CL-64, instead of pipe section 6-CL-124.

NSPM Response: The continuation of LR-39255-1, location A-3, to LR-39216-3 is correct; it is shown at location G-3, From D2 Diesel Generator. The continuation is also shown on LR-39217-2 at location G-3, From D2 Diesel Generator, however the line number 6-CL-64 is incorrect on the drawing; the correct line number is 6-CL-124.

2.3.3.10 Drawing LR-39232, location B-4, indicates that the drawing continuation for two pipelines as 3-FO-3 that continue to LRA drawing LR-39255-1 per note stating "To Diesel Generator and Fuel Oil System – See Drawing LR-39255-1." It appears that the correct continuation for these lines could be 3-FO-1 and 3-FO-2 located drawing LR-39255-1 locations E-8 and A-8, respectively.

NSPM Response: The continuation of LR-39232, location B-4, line 3-FO-3, To Diesel Generator and Fuel Oil System, is shown on LR-39255-1, locations E-8 and A-8, lines 3-FO-1 and 3-FO-2, Drain Line to Diesel Generator Oil Storage Tanks.

2.3.4.2 Drawings LR-39224, locations B-7 and B-10, and LR-39225, locations F-4 and F-2, shows 2" lines that are continued to 2" "drain to trap" on drawing LR-39233, but location of the continuation was not provided. The review of the drawing LR-39233 found a continuation of the in scope 2" piping at locations E-10 and G-10.

NSPM Response: The continuations of LR-39224, locations B-7 and B-10, 2" Drain to Trap, are shown on LR-39233, location F-4, Moisture Separator Relief

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Valve Header drain to traps at valves TD-5-10 and TD-5-11.

The continuations of LR-39225, locations F-2 and F-4, 2" Drain to Trap, are shown on LR-39234, location F-4, Moisture Separator Relief Valve Header drain to traps at valves 2TD-5-10 and 2TD-5-11.

2.3.4.8 Drawings LR-XH-2-16 and LR-XH-1002-44, locations D-5, show a section of pipe continued from main steam. Review of main steam system drawings LR-39218 and LR-39219 showed continuations to drawings LR-XH-2-16 and LR-XH-1002-44, respectively, at location E-7. However, the continuations were not confirmed because of the absence of pipe identification numbers.

NSPM Response: The continuation of LR-XH-2-16, location D-5, From Main Steam, is shown on LR-39218, location E-7, line 3-MS-30 to the Gland Steam Pressure Regulating Station. Pressure regulating valve CV-31083 is shown on both drawings.

The continuation of LR-XH-1002-44, location D-5, From Main Steam, is shown on LR-39219, location E-7, line 3-2MS-30 to the Gland Steam Pressure Regulating Station. Pressure regulating valve CV-31120 is shown on both drawings.

REQUEST:

Confirm that the continuation locations described are correct or provide the correct continuation locations.

NSPM Response to RAI 2.3-02

The responses have been integrated into the listing of individual items above.

RAI 2.3-03

BACKGROUND:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to identify and list all components subject to an AMR. The staff confirms inclusion of all components subject to AMR by reviewing the component types within the license renewal boundary.

ISSUE:

License renewal drawings show a continuation without the submission of the continuation drawings.

 Drawing LR-39245-2, location A-11, "Reactor Make-up Water Supply See NF-39242".

NSPM Response: On Drawing LR-39245-2, location A-11, the continuation drawing is incorrect; the correct drawing is LR-39242, location E-2.

- 2.3.3.17 Drawing LR-39244:
 - Location B-1, downstream of valve SA-32-5 to Instrument Air Service (drawing NF-39785-1 not provided)
 - Location C-2, downstream of valve SA-33-7 to Instrument Air Service (drawing NF-39772-3 not provided)
 - Location C-2, downstream of valve SA-33-7 to Turb. Bldg. Louver Dampers and Admin Bldg (drawing NF-39772-2 not provided)
 - Location A-3, downstream of valve SA-39-2 to Unit 1 Screenhouse Instrument Air Service (drawings NF-39772-1 and 2 not provided)
 - Location D-5, downstream of valve SA-89-1 to Instrument Air Service (drawing NF-39772-1 not provided)
 - Location C-5, downstream of valve SA-23-2 to Instrument Air Service Heating Boiler Area (drawing NF-39787 not provided)
 - Location C-6, downstream of valve CV-31188 to Time Pattern Transmitter and Instrument Air Services (drawing NF-39772-2 not provided)
 - Location C-8, downstream of valve CV-31368 to Time Pattern Transmitter and Instrument Air Services (drawing NF-39774-3 not provided)
 - Location A-11, downstream of valve 2SA-39-2 to Unit 2 Screenhouse Instrument Air Services (drawing NF-39774-1 and 2 not provided)

NSPM Response: These continuations from Drawing LR-39244 extend up to and include normally closed isolation valves or installed end devices, such as actuators, controllers, control panels, and instruments, that provide a pressure boundary for the system. The interconnected piping/fittings, valves and in-line components are within the scope of License Renewal and subject to AMR. Piping/fittings, valves and other in-line components are included in Table 2.3.3-17. The end devices are typically active components and are not subject to AMR; where the end device is a passive

component, such as a tank, it is also subject to AMR and included in Table 2.3.3-17.

2.3.3.20

Drawing LR-39248, location C-3, 1.5" piping from hot instr. lab (drawing NF-39678 not provided)

NSPM Response: The continuation from Drawing LR-39248, location C-3, 1 ¹/₂" From Hot Instrument Lab, extends to the sink drain within the Hot Instrument Lab. The interconnected piping/fittings are within the scope of License Renewal and subject to AMR. Piping/fittings are included in Table 2.3.3-20.

 Drawing LR-39248, location E-5, piping from GA (drawing LR-XH-1-125 not provided)

NSPM Response: The continuation from Drawing LR-39248, location E-5, From Gas Analyzer (GA), extends to the Gas Analyzer cabinet. A cabinet wall should be shown at the continuation arrow with a scoping change shown at the cabinet. The interconnected piping/fittings up to the cabinet are within the scope of License Renewal and subject to AMR. Piping/fittings are included in Table 2.3.3-20.

 Drawing LR-39248, location C-3, upstream of WL-83-4, 2" piping from main steam relief hdr drns (drawing NF-39339-5) not provided

NSPM Response: The continuation from Drawing LR-39248, location C-3, Main Steam Relief Header Drains, upstream of WL-83-4, extends to low point drains on each Main Steam Safety Relief and Power Operated Relief valve tail pipe (tail pipes are shown on LR-39218). The interconnected piping/fittings up to the tail pipes are within the scope of License Renewal and subject to AMR. Piping/fittings are included in Table 2.3.3-20.

 Drawing LR-39248, location C-9, upstream of 2WL-57-29, 2" piping from main steam relief hdr drns 21 SG (drawing LR-39339-5 not provided)

NSPM Response: The continuation from Drawing LR-39248, location C-9, Main Steam Relief Header Drains, upstream of 2WL-57-29, extends to low point drains on each Main Steam Safety Relief and Power Operated Relief valve tail pipe (tail pipes are shown on LR-39219). The interconnected piping/fittings up to the tail pipes are within the scope of License Renewal and subject to AMR. Piping/fittings are included in Table 2.3.3-20.

 Drawing LR-39248, location C-6, 3 continuations from leak detector (drawing NF-39338-1 not provided)

NSPM Response: The continuations from Drawing LR-39248, location C-6, three lines From Leak Detection, extends to the Spent Fuel Pool wall. From there they are embedded in concrete and routed to the manipulator crane rail troughs and fuel transfer tube valve box drains. A wall should be shown at the continuation arrows with a scoping change shown at the wall. The piping embedded in the concrete does not have potential for spatial interaction and is not within the scope of License Renewal. The interconnected piping/fittings up to the wall are within the scope of License Renewal and subject to AMR. Piping/fittings are included in Table 2.3.3-20.

 Drawing LR-39248, location E-10, 2" piping from leak detector (drawing NF-39338-1 not provided)

NSPM Response: The continuation from Drawing LR-39248, location E-10, From Leak Detection, extends to a collection tray that collects waste from the Spent Fuel Pool Leakage sub-system. The interconnected piping/fittings and tray are within the scope of License Renewal and subject to AMR; the tray is evaluated with the piping/fittings and are included in Table 2.3.3-20.

 Drawing LR-39249, location C-5, 2" piping to unit 1 composite sampler tech manual (drawing XH-69-8 not provided)

NSPM Response: The continuation from Drawing LR-39249, location C-5, To Unit 1 Composite Sampler, extends through the Composite Sampler to the Turbine Building sump. The interconnected piping/fittings are within the scope of License Renewal and subject to AMR; piping/fittings are included in Table 2.3.3-20. The Composite Sampler is an active component and is not subject to AMR.

 Drawing LR-39250, location B-2, 2" piping to unit 2 composite sampler tech manual (drawing XH-69-8 not provided)

NSPM Response: The continuation from Drawing LR-39250, location B-2, To Unit 2 Composite Sampler, extends through the Composite Sampler to the Turbine Building sump. The interconnected piping/fittings are within the scope of License Renewal and subject to AMR; piping/fittings are included in Table 2.3.3-20. The Composite Sampler is an active component and is not subject to AMR.

 Drawing LR-88740, location B-7, 6" piping to DC79L-517 SH. 2 (drawing not provided)

NSPM Response: On Drawing LR-88740, location B-7, the continuation to DC79L-517 is incorrect. The line extends through an inline strainer and trap to the Turbine Building sump. Strainer housings, traps and pipe/fittings are included in Table 2.3.4-8.

 Drawings LR-39218, LR-39219, location H-3, show a continuation of pipes (to waste) with identification numbers 1/2-MS-49 and 1/2-2MS-49 (drawings NF-98894 or NF-100034 not provided)

> NSPM Response: The continuations from Drawings LR-39218 and LR-39219, location H-3, line 1/2-MS-49 and 1/2-2MS-49, Drain to Waste, extend into the concrete floor and from there are embedded in concrete to the Turbine Building Sump. The scoping criteria for these lines are incorrect; these gland stem drains are not part of the steam supply pressure boundary or the seismic boundary and therefore should be shown as in scope for License Renewal per 10 CFR 54.4(a)(2). The system boundary break, between the Main Steam (MS) and Waste Disposal (WD) System, and the scoping criteria change should both be shown at the tee connection to line 3-MS-6 and 3-2MS-6.

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- 2.3.4.7
- Drawing LR-88740, location B-7, shows a continuation of pipe (without identification number) (drawing DC79L-517not provided)

NSPM Response: On Drawing LR-88740, location B-7, the continuation to DC79L-517 is incorrect. The line extends through an inline strainer and trap to the Turbine Building sump. Strainer housings, traps and piping/fittings are included in Table 2.3.4-8.

 Drawing LR-39250, location B-1, shows a continuation 2-2WL-501 pipe to unit-2 composite sampler (drawing X-HIAW-69-8 not provided)

NSPM Response: The continuation from LR-39250, location B-1, To Unit 2 Composite Sampler, extends through the Composite Sampler to the Turbine Building sump. The interconnected piping/fittings are within the scope of License Renewal and subject to AMR; piping/fittings are included in Table 2.3.3-20. The Composite Sampler is an active component and is not subject to AMR.

2.3.4.8

License renewal drawings LR-39231-1 for unit 1 and LR-39231-2 for unit 2, location B-2, show a section of pipe continued to (EH control) (drawing 721-J-105-15 not provided)

NSPM Response: The continuation from LR-39231-1 and LR-39231-2, location B-2, To EH Control Auto Stop, extends up to and includes normally closed isolation valves or installed end devices, such as actuators, trip devises, overspeed trip levers, test levers and instruments, that provide a pressure boundary for the system. The interconnected piping/fittings, valves and in-line components are within the scope of License Renewal and subject to AMR; piping/fittings, valves and other in-line components are included in Table 2.3.4-8. The end devices are active components and are not subject to AMR.

 License renewal drawings LR-39231-1 for unit 1 and LR-39231-2 for unit 2, location G-4 and G-2, respectively show a section of pipe continued from (drawing LR-39669 not provided)

NSPM Response: On Drawings LR-39231-1 and LR-39231-2, location G-4 and G-2 respectively, Clean Hot Water Supply, the continuations are shown on LR-39241-1, location C-3, DW-32-1 to Turbine Oil Purifier (TOP) #11 and DW-47-1 to TOP #21.

REQUEST:

Provide additional missing drawings and locations to locate the license renewal boundary on the continuation drawings.

NSPM Response to RAI 2.3-03

The responses have been integrated into the listing of individual items above.

RAI 2.3.3.2-01

Background:

LRA Section 2.1.2.4.2, "Scoping Criteria 2 – Non-Safety Related Affecting Safety Related" states in part "Non-safety related SSCs directly connected to safety related SSCs (typically piping systems) up to and including the first seismic or equivalent anchor past the safety/non-safety interface are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue:

Drawings LR-XH-1001-5 and LR-XH-1-39, location E-5, show three 10 CFR 54.4(a)(1) 3/4" drain lines from the seal water heat exchangers to valves 2VC-29-1, 2VC-29-2, 2VC-29-3, and VC-29-1, VC-29-2, VC-29-3 in scope for 10 CFR 54.4(a)(1). Downstream of these valves is in scope for 10 CFR 54.4(a)(2). A Quality Assurance (QA) Type designation is not provided to justify the 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2) boundary.

These three drain lines combine and are continued to LR-39248 (D-8) and (D-5). A seismic anchor or seismic endpoint could not be located between the sump tank #121 and valves 2VC-29-1, 2VC-29-2, 2VC-29-3, and VC-29-1, VC-29-2, VC-29-3.

Request:

- 1. Confirm that a QA Type boundary exists downstream of valves 2VC-29-1, 2VC-29-2, 2VC-29-3, and VC-29-1, VC-29-2, VC-29-3 from QAI (SR) to QAII or QAIII (NSR) or justify the 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2) boundary is in accordance with 10 CFR 54.4.
- 2. Provide justification for not including a seismic anchor downstream of valves 2VC-29-1, 2VC-29-2, 2VC-29-3, and VC-29-1, VC-29-2, VC-29-3 and before sump tank #121.

NSPM Response to RAI 2.3.3.2-01

Part 1

On Drawings LR-XH-1001-5 and LR-XH-1-39, location E-5, a Quality Assurance (QA) Type boundary exists at valves 2VC-29-1, 2VC-29-2, 2VC-29-3, and VC-29-1, VC-29-2, VC-29-3 from QAI (Safety Related) to QAIII (Non-Safety Related). The drain piping downstream of the normally closed valves 2VC-29-1, 2VC-2-2, 2VC-29-3, and VC-29-1, VC-29-2, VC-29-3 is not required for the Chemical and Volume Control System to accomplish its 10 CFR 54.4(a)(1) function and therefore is not within the scope of License Renewal per 10 CFR 54.4(a)(1). A License Renewal system boundary break

between the Chemical and Volume Control (VC) system and the Waste Disposal (WD) System should be shown on the downstream side of these values.

<u>Part 2</u>

The analysis of record shows that the seismic endpoints for the Seal Water Heat Exchanger drains are at the point the combined 2" lines become embedded in the Mezzanine Floor Elevation 715'-0" floor slab. The embedded pipe, up to the point each line exits the concrete below the slab, is within the scope of License Renewal per 10 CFR 54.4(a)(2). Seismic anchors should be shown on Drawing LR-39248, locations D-5 and D-8, where the lines are depicted passing through the Mezzanine Floor at elevation 715'-0".

RAI 2.3.3.2-02

Background:

LRA Section 2.1.2.4.2, "Scoping Criteria 2 – Non-Safety Related Affecting Safety Related" states in part "Non-safety related SSCs directly connected to safety related SSCs (typically piping systems) up to and including the first seismic or equivalent anchor past the safety/non-safety interface are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

<u>Issue:</u>

Drawings LR-XH-1001-5 and LR-XH-1-39, location E-6, show 10 CFR 54.4(a)(1) 2-2-VC-183 and 2-VC-186 drain lines from the VCTs respectively to valves 2VC-11-60, and VC-11-60 in scope for 10 CFR 54.4(a)(1). Downstream of these valves is in scope for 10 CFR 54.4(a)(2). A QA Type designation is not provided to justify the 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2) boundary.

These drain lines are continued to drawing LR-39248, locations E-8 and E-5. A seismic anchor or seismic endpoint could not be located between the sump tank #121 and valves 2-2-VC-183 and 2-VC-186.

Request:

- Confirm that a QA Type boundary exists downstream of valves 2-2-VC-183 and 2-VC-186 from QAI (SR) to QAII or QAIII (NSR), or justify the 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2) boundary is in accordance with 10 CFR 54.4.
- 2. Provide justification for not including a seismic anchor downstream of valves 2-2-VC-183 and 2-VC-186 and before sump tank #121.

NSPM Response to RAI 2.3.3.2-02

Part 1

On Drawings LR-XH-1001-5 and LR-XH-1-39, location E-6, a Quality Assurance (QA) Type boundary exists at valves 2VC-11-60 and VC-11-60 from QAI (Safety Related) to QAIII (Non-Safety Related). The drain piping downstream of the normally closed valves 2VC-11-60 and VC-11-60 is not required for the Chemical and Volume Control System to accomplish its 10 CFR 54.4(a)(1) function and therefore is not in scope for 10 CFR 54.4(a)(1). A License Renewal system boundary break between the Chemical and Volume Control (VC) system and the Waste Disposal (WD) System should be shown on the downstream side of these valves.

<u>Part 2</u>

The analysis of record shows the seismic endpoints for the Volume Control Tank (VCT) drains are at the point the lines become embedded in the Ground Floor Elevation 695'-0" slab. The embedded pipe, beginning at the Ground Floor Elevation 695'-0" slab (shown on Drawing LR-39248 locations E-8 and E-5) and continuing until it exits the concrete just upstream of valve WL-51-1 (shown on Drawing LR-39248 location G-7), is within the scope of License Renewal per 10 CFR 54.4(a)(2) as a seismic anchor. A seismic anchor should be shown on drawing LR-39248, location G-7, upstream of valve WL-51-1, where the drawing currently depicts a wall.

RAI 2.3.3.2-03

Background:

LRA Section 2.1.2.4.2, "Scoping Criteria 2 – Non-Safety Related Affecting Safety Related" states in part "Non-safety related SSCs directly connected to safety related SSCs (typically piping systems) up to and including the first seismic or equivalent anchor past the safety/non-safety interface are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue:

Drawing LR-XH-1-40, locations D-2, D-4 and D-5, show 10 CFR 54.4(a)(1) drain lines from the holdup tanks to valves 2VC-11-68, (no valve numbers located from tanks 11 and 121). Downstream of these valves is in scope for 10 CFR 54.4(a)(2). A seismic anchor or seismic endpoint could not be located downstream of valve 2VC-11-68.

Request:

1. Provide justification for not including a seismic anchor downstream of the holdup tank drain valves 2VC-11-68 and those without valve numbers from tanks 11 and 121.

NSPM Response to RAI 2.3.3.2-03

On drawing LR-XH-1-40 at locations D-2, D-4 and D-5, on the drain lines from the hold up tanks to the drain header (DH), a License Renewal system boundary break between the Chemical and Volume Control (VC) system and the Waste Disposal (WD) System should be shown on the downstream side of the drain valves. The continuation of these lines is shown on LR-39248, location F-7, From CVCS Holdup Tanks.

The analysis of record shows that the seismic endpoints for the CVCS Holdup Tank drains are at the point where the lines become embedded in the Ground Floor Elevation 695'-0" slab. The embedded pipe, beginning upstream of the 2" connections to line 4-WL-123 (shown on drawing LR-39248, location F-7) and continuing until the common line exits the concrete just upstream of valve WL-51-1 (shown on drawing LR-39248, location G-7), is within the scope of License Renewal per 10 CFR 54.4(a)(2) as a seismic anchor. A seismic anchor should be shown on drawing LR-39248, location G-7, upstream of valve WL-51-1, where the drawing currently depicts a wall.

RAI 2.3.3.2-04

Background:

In LRA Section 2.3.3.4, portions of the VC System are within scope based on criteria 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2).

Issue:

Drawing LR-XH-1001-4, location E-7, shows pipe section ³/₄-CS-151R (at Seal 3) from RCP Loop A that is not in scope for license renewal. The similar pipe section for RCP B is in scope for 10 CFR 54.4(a)(2).

Request:

Provide justification for not including pipe section ³/₄-CS-151R from RCP Loop A in scope for license renewal.

NSPM Response to RAI 2.3.3.2-04

On drawing LR-XH-1001-4, at location E-7, line 3/4-CS-151R at Reactor Coolant Pump Loop A Seal 3 should be shown as within the scope of License Renewal for 10 CFR 54.4(a)(2).

RAI 2.3.3.2-05

Background:

In LRA Section 2.3.3.4, portions of the VC system are within scope based on criteria 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2).

Issue:

Drawing LR-XH-1-41 from valves VC-11-120 and 2VC-11-120 through the boric acid transfer pumps and tanks and to the RWST are in scope for 10 CFR 54.4(a)(2). These lines are safety related as QA Class IB.

Request:

Provide justification for not including these components in scope for 10 CFR 54.4(a)(1).

NSPM Response to RAI 2.3.3.2-05

The boric acid storage tanks and associated components are designated as Safety Related based on plant preference. NEI 95-10 acknowledges that some components may be designated as Safety Related, but not meet the definition of the Rule. Section 3.1.1 states:

It is conceivable that, because of plant unique considerations and preferences, applicants may have previously elected to designate some systems, structures and components as safety related that do not perform any of the requirements of 54.4(a)(1). Therefore, a system, structure or component may not meet the requirements of 54.4(a)(1) although it is designated as safety related for plant specific reasons.

License Amendments 156/147 dated April 16, 2001, removed the boric acid storage tanks (BASTs) from the Technical Specifications for the Safety Injection System because the high concentration boric acid in the BASTs is unnecessary for accident mitigation. Therefore the BASTs are not required to accomplish the functions described in 54.4(a)(1) and are not within the scope of License Renewal for 10 CFR 54.4(a)(1). The tanks are included within the scope of License Renewal for 10 CFR 54.4(a)(2).

RAI 2.3.3.3-01

Background:

License renewal rule 10 CFR 54.21(a)(3) requires for those components within the scope of license renewal to demonstrate that the effects of aging will be adequately managed so that the intended function(s) will be maintained.

LRA Table 2.3.3-3, "Component Cooling System," provides the list of component cooling system component types and intended functions.

Issue:

Restricting orifices located at license renewal drawing locations G-2, D-1, E-8, and D-11 on LR-39245-1 and B-8, E-8, B-1, and E-1 on drawing LR-39246-1 are in scope for license renewal criterion 10 CFR 54.4(a)(1). In addition to the intended function of pressure boundary restricting orifices can also provide the intended function of flow restriction.

<u>Request:</u>

Provide additional information to explain why LRA Table 2.3.3-3 does not provide the intended function of flow restriction for restricting orifices.

NSPM Response to RAI 2.3.3.3-01

The restricting orifices shown on Drawings LR-39245-1, locations G-2, D-1, E-8 and D-11, and LR-39246-1, locations B-8, E-8, B-1 and E-1, in addition to the intended function of pressure boundary, have a "throttle" function for flow indication and alarm. However, for these restricting orifices, the "throttle" function (i.e. flow indication and alarm) is not an Intended Function. Therefore, Table 2.3.3-3 does not include a "throttle" intended function for Restricting Orifices.

RAI 2.3.3.3-02

Background:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to identify and list all components subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

lssue:

Drawing LR-39245-2, location C-1, shows a 3-CC-9 pipeline that is in scope for criterion 10 CFR 54.4(a)(1) that has a continuation note stating "From Unit 1 Component Cooling

Heat Exchanger See LR-39245-1". Drawing LR-39245-1, location F-7, also shows a 3-CC-9 pipeline that is in scope for criterion 10 CFR 54.4(a)(1) that has a continuation note stating "To #11 Seal Water Heat Exchanger See LR-39245-2".

Request:

Provide additional information to clarify why there are two 3-CC-9 pipelines.

NSPM Response to RAI 2.3.3.3-02

The line number 3-CC-9 shown on Drawing LR-39245-1, location F-7, is incorrect. The line number should be 3-CC-35. The continuation of LR-39245-1, location F-7, To #11 Seal Water Heat Exchanger is shown on Drawing LR-39245-2, location H-5, From Unit 1 Component Cooling Heat Exchanger. The continuation of Drawing LR-39245-2, location C-1, From Unit 1 Component Cooling Heat Exchanger, is shown on LR-39245-1, location E-3, To Steam Generator Blowdown Sample Panel.

RAI 2.3.3.4-01

Background:

In LRA Section 2.3.3.4, portions of the Containment Hydrogen Control (HC) System are within scope based on criteria 10 CFR 54.4(a)(1), 10 CFR 54.4(a)(2) and 10 CFR 54.4(a)(3).

Issue:

Drawing LR-39251, location E-4, identifies Emergency Air supply lines 3/4-2HC-18 and line 3/4-2HC-9; location E-6, Emergency Air supply lines 3/4-HC-18 and line 3/4-HC-9; location D-3, Emergency Instrument Air supply line (no line number); and location D-6, Emergency Instrument Air supply line (no line numbers). While we understand the Instrument Air (IA) and Station Air (SA) systems can be cross-tied and back up one another on decreasing air pressure, there is no discussion in LRA Section 2.3.3.4 or the USAR Section 10.3.10 regarding emergency air or emergency instrument air supplies to the HC System.

Request:

- 1. Clarify what is meant by Emergency Air and Emergency Instrument Air supply in the context of its relationship to the HC System.
- 2. On drawing LR-39251, locations D-6 and D-3, provide line numbers for the four (4) Emergency Instrument Air lines and adequate information so that they can be traced to the appropriate location in the Instrument Air System drawing LR-39244.

NSPM Response to RAI 2.3.3.4-01

Part 1

The original function of the air supplies to containment was to provide air, which when added to containment, would compress the hydrogen and thus dilute its concentration. The penetrations were equipped with normally closed isolation valves, throttle valves and field connections for use of oil-free compressors (i.e., an Emergency Air Supply on loss of the plant instrument air supply). Field connections were also provided for an Emergency Instrument Air Supply for control of the valves within the Hydrogen Control System. License Amendments 164/154 dated June 8, 2004, eliminated the requirements that necessitated the need for a hydrogen control function, and the associated description of the system was removed from the USAR. As described in LRA Section 2.3.3.4, Function HC-02, the system is currently used to control positive pressure within the containment vessel. This is not an Intended Function.

Part 2

The four (4) Emergency Instrument Air lines do not continue on Instrument Air System Drawing LR-39244; these lines terminate at local field connections similar to the Emergency Air Supply field connections. They may be used to connect to an external air supply for control of the valves within the Hydrogen Control System on loss of the plant instrument air supply. As described above, this is not an Intended Function.

RAI 2.3.3.6-01

Background:

LRA Table 2.3.3.6, "Cooling Water System," states that heat-exchanger tubes in the CL system are within the scope of license renewal and provide a pressure boundary function.

Issue:

License renewal drawing LR-86172-4, locations B-4 and B-8, show the inlet and outlet piping to the CRDM heat exchangers within the scope of license removal per 10 CFR 54.4(a)(2); however, CRDM cooling coil assemblies 117-141 and 217-141 are shown as not within the scope of license renewal. Failure of these coils could have an effect on the intended pressure boundary functions.

Request:

Explain why the CRDM cooling coil assemblies are not within the scope of license renewal per 10 CFR 54.4(a).

NSPM Response to RAI 2.3.3.6-01

The CRDM cooling coil assemblies are within the scope of License Renewal per 10 CFR 54.4(a)(2). On Drawing LR-86172-4, locations B-4 and B-8, the boxes around "11 CRDM HX.", etc., to which the inlet and outlet piping are connected, represent the individual heat exchanger cooling coils, including the heat exchanger channel head and tubes, and are highlighted as within the scope of License Renewal per 10 CFR 54.4(a)(2). The un-highlighted box containing the assembly description should also be highlighted as within the scope of License Renewal per 10 CFR 54.4(a)(2). The un-highlighted box containing the assembly description should also be highlighted as within the scope of License Renewal per 10 CFR 54.4(a)(2). The CRDM cooling coils are evaluated in LRA Section 2.3.3.6, Cooling Water, Function CL-NSAS, and are evaluated as Heat Exchanger Components and Heat Exchanger Tubes in Table 2.3.3-6.

RAI 2.3.3.6-02

Background:

The LRA states that the CL System is within the scope of license renewal based on the criteria of 10 CFR 54.4(a)(1), 10 CFR 54.4(a)(2), and 10 CFR 54.4(a)(3).

<u>Issue:</u>

Drawing LR-86172-4, location D-3, shows #13 Fan Coil Unit (FCU) for Unit 1 within the scope of license renewal per 10 CFR 54.4(a)(1). LR-86172-4, location D-2, shows FCU (#14) as not within the scope of license renewal.

<u>Request:</u>

Explain why #14 FCU is not within the scope of license renewal per 10 CFR 54.4(a).

NSPM Response to RAI 2.3.3.6-02

On Drawing LR-86172-4, location D-2, the highlighting of #14 Fan Coil Unit (FCU) is incorrect. #14 FCU should be highlighted as within the scope of License Renewal per 10 CFR 54.4(a)(1). A License Renewal Boundary Break should also be shown. The Fan Coil Units are evaluated in LRA Section 2.3.3.14, Primary Containment Ventilation (ZC) System.

RAI 2.3.3.6-03

Background:

The LRA states that the CL System is within the scope of license renewal based on the criteria of 10 CFR 54.4(a)(1), 10 CFR 54.4(a)(2), and 10 CFR 54.4(a)(3).

Issue:

Drawing LR-39216-2, location D-2, and Drawing LR-39217-1, location C11, show portions of 30" standpipes as within the scope of license renewal per 10 CFR 54.4(a)(2) and portions within the scope of license renewal per 10 CFR 54.4(a)(3). The transition from 10 CFR 54.4(a)(2) to 10 CFR 54.4(a)(3) criteria occurs in the middle of the pipe.

<u>Request:</u>

Clarify the criteria for being within the scope of license renewal for these standpipes or explain why portions of this piping have different criteria.

NSPM Response to RAI 2.3.3.6-03

On Drawings LR-39216-2, location D-2, and LR-39217-1, location C-11, the highlighting of the 30" Standpipes, 30-CL-123 and 30-2CL-57 respectively, is incorrect. The Standpipe 10 CFR 54.4 (a)(3) scoping boundary should extend to the downstream flange of valves CL-34-1 and 2CL-34-1. The 10 CFR 54.4(a)(3) Cooling Water (CL) System discharge flow path is through the Standpipes to the Emergency Dumps, lines 24-CL-66 and 24-2CL-57, for Units 1 and 2 respectively. Isolation of CL-34-1 and 2CL-34-1 does not isolate the required flow path and therefore, this boundary is appropriate.

RAI 2.3.3.6-04

Background:

The LRA states that the CL System is within the scope of license renewal based on the criteria of 10 CFR 54.4(a)(1), 10 CFR 54.4(a)(2), and 10 CFR 54.4(a)(3).

Issue:

Drawing LR-39223, location A-7, shows pipe section 2-CL-112 (after valve AF-25-6) as in scope for license renewal per 10 CFR 54.4 (a)(3) or 10 CFR 54.4 (a)(1). However, portions of the same pipe section (2-CL-112) before the valve AF-25-6 and after the grid location A-5 are included in scope for license renewal per 10 CFR 54.4 (a)(2). Note similar line 2-CL-111 on LR-39222 is in scope for 10 CFR 54.4 (a)(2).

Request:

Provide additional information explaining why the different criterion was used for the piping (2-CL-112).

NSPM Response to RAI 2.3.3.6-04

On Drawing LR-39223, location A-7, line 2-CL-112 between valve 2AF-25-6 and grid location A-5 is incorrectly highlighted as within the scope of LR per 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3). The line should be highlighted as within the scope of License Renewal per 10 CFR 54.4(a)(2).

RAI 2.3.3.8-01

Background:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to identify and list all components subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

Issue:

Drawings LR-11824, LR-118243, LR-118244, and LR-118245, locations C-4 and C-9, show diesel engine radiators that are in scope for license renewal based on 10 CFR 54.4(a)(1). The radiators are not shown in LRA Table 2.3.3-8 as components subject to an aging-management review.

Request:

Provide additional information explaining why the radiator is not included in LRA Table 2.3.3-8 as a component type subject to an AMR.

NSPM Response to RAI 2.3.3.8-01

The D5 and D6 Diesel Engine Radiators are evaluated as Heat Exchanger Components and Heat Exchanger Tubes and are included in LRA Table 2.3.3-8.

RAI 2.3.3.8-02

Background:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to list all components subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

<u>lssue</u>:

Drawings LR-118248 and LR-118249, location B-6, show diesel fuel oil day tanks, which have flame arrestors that provide a pressure boundary that are in scope for

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license renewal based on criterion 10 CFR 54.4(a)(1). The flame arrestors (flame arrestor housing for pressure boundary and flame arrestor element for flame arresting) are not shown in LRA Table 2.3.3-8 as components subject to an aging-management review.

Request:

Provide additional information explaining why the flame arrestor housing and element are not included in LRA Table 2.3.3-8 as component types subject to an AMR.

NSPM Response to RAI 2.3.3.8-02

On Drawings LR-118248 and LR-118249, location B-6, a License Renewal system boundary break between the Diesel Generator and Support (DG) System and the Fuel Oil (FO) System should be shown at the point that the 2" Vent and Flame Arrestor connects to the Fuel Oil Day Tank. The Flame Arrestors are evaluated in LRA Section 2.3.3.10, Fuel Oil System, and are included as Flame Arrestors in Table 2.3.3-10. These components should include the Intended Function of "Fire Barrier." In addition, the aging management evaluation for the Flame Arrestors' internal surfaces was omitted from LRA Table 3.3.2-10 (Note: In LRA Table 3.3.2-10, the Outdoor Air – Not Sheltered environment for Flame Arrestors is an External environment). Accordingly, the following changes are hereby made to the LRA.

In LRA Table 2.3.3-10, Fuel Oil System, on Page 2.3-77, the intended function "Fire Barrier" is added to the Flame Arrestors component line item.

In LRA Section 3.3.2.1.10, Fuel Oil System, on Page 3.3-18, the following new bullet is added to the list of Environments:

Outdoor Air – Sheltered (Ext)

In LRA Table 3.3.2-10, on Page 3.3-221, the following new lines are added:

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG - 1801 Volume 2 Line Item	Table 1 Item	Notes
	Pressure Boundary		Outdoor Air – Sheltered (Int)	None	None			G, 313
	Pressure Boundary	Aluminum	Plant Indoor Air - Uncontrolled (Int)		None	V.F-2	3.2.1-50	A
Flame Arrestors	Fire Barrier		Outdoor Air - Sheltered (Ext)	None	None			G, 313
Flame Arrestors	Fire Barrier		Plant Indoor Air - Uncontrolled (Ext)	None	None	V.F-2	3.2.1-50	A

RAI 2.3.3.8-03

Background:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to list all components subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

Issue:

Drawings LR-118250 and LR-118251, locations D-3, and D-9, show diesel starting air pipelines with oiler components in scope for license renewal based on 10 CFR 54.4(a)(1). The oilers are not shown in LRA Table 2.3.3-8 as components subject to an aging management review.

Request:

Provide additional information explaining why the oilers are not included in LRA Table 2.3.3-8 as a component type subject to an AMR.

NSPM Response to RAI 2.3.3.8-03

The oilers shown on Drawings LR-118250 and LR-118251, locations D-3 and D-9, are inline piping components. They are evaluated as Piping/Fittings and are included in Table 2.3.3-8.

RAI 2.3.3.8-04

Background:

LRA Section 2.3.3-8, "Diesel Generators and Support System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1) ,10 CFR 54.4(a)(2) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

Issue:

Drawing LR-39255-1, location D-9, shows a 2" vent at the top of the D-1 and D-2 fuel oil day tanks, respectively that are in scope for criterion 10 CFR 54.4(a)(1). The 2" vents at the top of the D-1 and D-2 fuel oil day tanks do not have a proper symbol for a vent. The symbol provided is a box which could be a flame arrestor. The D-5 and D-6 fuel oil day tanks shown on drawings LR-118248 and LR-118249, respectively, location B-6, are also shown in scope for 10 CFR 54.4(a)(1) and appear to have the proper symbol and description for a 2" vent and flame arrestor.

Request:

Provide additional information that clarifies whether the symbols at the top of the D-1 and D-2 fuel oil day tanks are a 2" vent and flame arrestor. If not, what do the symbols represent?

NSPM Response to RAI 2.3.3.8-04

On Drawing LR-39255-1, locations A-9 and D-9, the box symbol on the D-1 and D-2 fuel oil day tanks represents a T-style outlet vent. The T-style outlet vent material and function are similar to the other fuel oil tank vent and flash arrestor assemblies. They are evaluated as Flash Arrestors and are included in Table 2.3.3-10.

RAI 2.3.3.12-01

Background:

LRA Section 2.1.2.4.2, "Scoping Criteria 2 – Non-Safety Related Affecting Safety Related" states in part "Non-safety related SSCs directly connected to safety related SSCs (typically piping systems) up to and including the first seismic or equivalent anchor past the safety/non-safety interface are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

<u>lssue</u>:

Drawing LR-39247, location C-9, shows one seismic anchor for the 1" nitrogen line supplying the Unit 2 containment where the line forms a T junction. There is only one seismic anchor noted.

Request:

Provide justification for not including a seismic anchor downstream of the T junction.

NSPM Response to RAI 2.3.3.12-01

On drawing LR-39247, location C-9, a seismic endpoint should be shown on the branch line opposite the seismic anchor. Plant evaluations have demonstrated that the branch line is not required to provide support for, nor does it have an adverse impact on, the inscope portion of the system during a Design Basis Earthquake.

RAI 2.3.3.12-02

Background:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to identify and list all components subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

lssue:

Drawing LR-39247, locations G-2 and G-5, identifies several flexible connectors for the hydraulic desurgers as being in scope for 10 CFR 54.4(a)(2), and a note on the drawing states the boundary ends at the flexible connection. LRA Table 2.3.3.12 does not include flexible connectors as a component type requiring an AMR.

Request:

Provide justification for not including flexible connectors as a component type requiring an AMR in LRA Table 2.3.3-12.

NSPM Response to RAI 2.3.3.12-02

On Drawing LR-39247, locations G-2 and G-5, the hydraulic desurger nitrogen supply flexible connections are stainless steel instrument tubing expansion loops. These are evaluated as piping/fitting components and are included in LRA Table 2.3.3-12.

RAI 2.3.3.13-01

Background:

In LRA Section 2.1.2.1, "Scoping Process Overview," it is stated that components required to support system level LRA functions were included in scope for license renewal. The Plant Sampling System is identified as in scope for 10 CFR 54.4(a)(2).

Issue:

Drawing LR-XH-248-1-3, location D2, shows Hot Lab pump HP2 discharge pressure indicator, PI-H3 as not in scope for license renewal. Similar to PI-H3 is PI-C3 which is in scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why pressure indicator PI-H3 is not in scope.

NSPM Response to RAI 2.3.3.13-01

On Drawing LR-XH-248-1-3, location D-2, Hot Lab pump HP2 discharge pressure indicator PI-H3 should be highlighted to show it within the scope of License Renewal per 10 CFR 54.4(a)(2).

RAI 2.3.3.16-01

Background:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to list all components subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

Review of LRA Section 2.3.3.16 indicated that the fuel-transfer tube and blind flange are included as part of the SF System. In the System Function Listing subsection, the fuel-transfer tube is listed under Code SF-05, which applies to SCs relied upon to perform a Primary Containment Boundary Function. The fuel-transfer tube and blank flange with double O-Ring seal constitute the containment boundary. Therefore, the fuel-transfer tube meets the criterion for 10 CFR 54.4(a)(1). The fuel-transfer tube also meets the Code SF-SB requirement because it performs a containment isolation function that demonstrates compliance with 10 CFR 50.63, Station Blackout. Therefore, the fuel transfer tube is also in scope for license renewal per 10 CFR 54.4(a)(3).

<u>lssue:</u>

Although the fuel-transfer tube is in scope for license renewal per 10 CFR 54.4(a)(1) and (a)(3), there was little information describing the fuel-transfer tube or the license renewal boundary in the LRA. A drawing was not provided. The fuel-transfer tube and blind flange are also not included in LRA Table 2.3.3-16.

<u>Request:</u>

- 1. Provide reference to a LRA drawing showing the fuel-transfer tube and license renewal boundaries.
- 2. Justify why the fuel-transfer tube and blank flange are not component types requiring an AMR in LRA Table 2.3.3-16, "Spent Fuel Pool Cooling System."

NSPM Response to RAI 2.3.3.16-01

<u>Part 1</u>

The fuel transfer tubes are shown on PINGP USAR Figure 12.3-6; the fuel transfer tubes are not shown on the plant P&ID drawings or the License Renewal Boundary

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Drawings. The portions of the Spent Fuel Cooling System subject to an AMR are described in LRA Section 2.3.3.16 and include the fuel transfer tube. The fuel transfer tube, blind flange and fuel transfer tube gate valve are within the scope of License Renewal.

Part 2

The fuel transfer tube and blind flange are evaluated as Piping/Fittings and are included in LRA Table 2.3.3-16. The fuel transfer tube gate valve is evaluated as a valve and is included in Table 2.3.3-16.

RAI 2.3.3.17-01

Background:

LRA Section 2.3.3.17, "Station and Instrument Air System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

Issue:

Similar piping is in scope for different criteria. Drawing LR-39253-3, location F-7, shows several lines from air compressor (#125) as in scope for license renewal for 10 CFR 54.4(a)(3). Drawing LR-39253-3, location C-7, also shows that similar lines from the air compressor (#124) are in scope for license renewal for 10 CFR 54.4 (a)(2). LRA Section 2.3.3-17, "Station and Instrument Air System," does not indicate that any portion of the station and instrument air system is in scope for 10 CFR 54.4 (a)(2).

Request:

- 1. Provide additional information explaining why there is a difference of scope classification between the lines out of air compressors #124 and #125 when both the compressors have essentially the same piping size, function, and destination that enables both units to meet the requirements of 10 CFR 54.4 (a).
- 2. If the sections of pipe currently in scope for 10 CFR 54.4 (a)(2) on license renewal drawing LR-39253-3 remain in scope for 10 CFR 54.4 (a)(2), explain why LRA Section 2.3.3.17 does not address components in scope for 10 CFR 54.4 (a)(2).

NSPM Response to RAI 2.3.3.17-01

<u>Part 1</u>

#125 Station Air Compressor is required to be available as a backup for Fire Protection Safe Shutdown in compliance with 10 CFR 50, Appendix R. Therefore, the Cooling

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Water supply and return lines to #125 Station Air compressor and Aftercooler are within the scope of License Renewal for 10 CFR 54.4(a)(3). The #124 Station Air Compressor is not required for Fire Projection Safe Shutdown. Therefore, the Cooling Water supply and return lines to #124 Station Air Compressor and Aftercooler are within the scope of License Renewal for 10 CFR 54.4(a)(2). Continued functionality of the Cooling Water System following a pipe break has been demonstrated using hydraulic analysis techniques (see USAR Section 10.4.1.2.4), and therefore, only the dedicated flow path to #125 Station Air Compressor is in scope for 54.4(a)(3).

<u>Part 2</u>

On drawing LR-39253-3, location F-7 and C-7, the lines that are shown in scope due to different scoping criteria are the station air compressor and aftercooler Cooling Water (CL) System supply and return lines. These lines are evaluated in the LRA Section 2.3.3.6, Cooing Water System. The boundary breaks are depicted in the typical detail sketches at locations H-2 and F-1. These Cooling Water lines are addressed in LRA Section 2.3.3.6, which includes components within the scope of License Renewal for both 10 CFR 54.4(a)(2) and 10 CFR 54.4(a)(3) (see function CL-NSAS and CL-FP).

The #124 and #125 Station Air Compressor components that perform a station air pressure boundary function are in scope for 54.4(a)(3) to maintain the compressed air Fire Protection Safe Shutdown pressure boundary. LRA Section 2.3.3.17 addresses Station and Instrument Air components in scope for 10 CFR 54.4(a)(3) (see function SA-FP).

RAI 2.3.3.17-02

Background:

LRA Section 2.3.3.17, "Station and Instrument Air System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

lssue:

Drawing LR-39253-3, location A-8, shows the 2-2CL-50 line in scope for license renewal for 10 CFR 54.4(a)(3). However, the continuation of this 2" line on drawing LR-39217-1, location F-3, shows this line is in scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why there is a difference of scope classification between the main drawing LR-39253-3 and the continuation on drawing LR-39217-1.

NSPM Response to RAI 2.3.3.17-02

On drawing LR-39217-1, location F-3, the scoping classification of line 2-2CL-50 from Station Air Compressor #124 and #125 is shown incorrectly. The line should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(3) up to its connection to line 24-2CL-56, location A-3. LRA Section 2.3.3.6 addresses Cooling Water (CL) System components within the scope of License Renewal for 10 CFR 54.4(a)(3) (see function CL-FP).

RAI 2.3.3.17-03

Background:

LRA Section 2.3.3.17, "Station and Instrument Air System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

Issue:

Drawing LR-39244, location C-1, downstream of SA-85-2, shows 1/2" lines and the associated control valves as not in scope for license renewal. These lines are directly connected to the safety valve and the upstream 3/4" line that are within the scope of license renewal.

Request:

Provide additional information explaining why these sections of pipe and components are not within the scope of license renewal and justify the boundary locations with respect to the applicable requirements of 10 CFR 54.4(a).

NSPM Response to RAI 2.3.3.17-03

On drawing LR-39244, location C-1, the scoping classifications of the ½" lines downstream of SA-85-2 are shown incorrectly. The lines should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(3) up to the control valve tags. Component tags are not highlighted on the boundary drawings. Piping/Fittings are included in the components shown in LRA Table 2.3.3-17. Valve actuators are active and do not require an aging management review.

RAI 2.3.3.17-04

Background:

LRA Section 2.3.3.17, "Station and Instrument Air System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

lssue:

Drawing LR-39244, location C-1, downstream of SA-115-1, shows a 3/8" line and the associated control valve CV 31148 as not in scope for license renewal. This line is directly connected to the 1" line that is within the scope of license renewal.

Request:

Provide additional information explaining why the sections of pipe and components are not within the scope of license renewal and justify the boundary locations with respect to the applicable requirements of 10 CFR 54.4(a).

NSPM Response to RAI 2.3.3.17-04

On drawing LR-39244, location C-1, the scoping classification of the 3/8" line to CV-31148 downstream of SA-115-1, is shown incorrectly. The line should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(3) up to the control valve tag. Component tags are not highlighted on the boundary drawings. Piping/fittings are included in the components shown in LRA Table 2.3.3-17. Valve actuators are active and do not require an aging management review.

RAI 2.3.3.17-05

Background:

LRA Section 2.3.3.17, "Station and Instrument Air System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

lssue:

Drawing LR-39243, location F-8 through F-10, upstream of 2SA-2-71, shows a 3" line as not in scope for license renewal. This line is directly connected to the upstream 3" line and the downstream 3" line, both of which are within the scope of license renewal for 10 CFR 54.4 (a)(3).

Request:

Provide additional information explaining why this section of pipe is not within the scope of license renewal and justify the boundary locations with respect to the applicable requirements of 10 CFR 54.4(a).

NSPM Response to RAI 2.3.3.17-05

On drawing LR-39243, locations F-8 through F-10, the scoping classification of the 3" station air line is shown incorrectly. The line should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(3). Piping/fittings are included in the components shown in LRA Table 2.3.3-17.

RAI 2.3.3.17-06

Background:

LRA Section 2.3.3.17, "Station and Instrument Air System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

<u>lssue</u>:

Drawing LR-39243, location D-9, shows a 1/2" line and valve 2SA-19-2 as not in scope for license renewal. This line is directly connected to the 1" line that is within the scope of license renewal for 10 CFR 54.4(a)(3).

Request:

Provide additional information explaining why this section of pipe is not within the scope of license renewal and justify the boundary locations with respect to the applicable requirements of 10 CFR 54.4 (a).

NSPM Response to RAI 2.3.3.17-06

On drawing LR-39243, location D-9, scoping of the ½" line and valve 2SA-19-2 is shown incorrectly. The line and valve should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(3). Piping/Fittings and Valves are included in the components shown in LRA Table 2.3.3-17.

RAI 2.3.3.20-01

Background:

LRA Section 2.1.2.4.2, "Scoping Criteria 2 – Non-Safety Related Affecting Safety Related" states in part "Non-safety related SSCs directly connected to safety related SSCs (typically piping systems) up to and including the first seismic or equivalent anchor past the safety/non-safety interface are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

<u>lssue</u>:

Drawing LR-XH-1-123, locations C-5 and C-7, shows two seismic endpoints on 3/8" reactor coolant drain tank piping exiting containment as not in scope. The valves, 1-9159B and 2-9159B, that the seismic endpoints are connected to, are shown as within the scope of license renewal for 10 CFR 54.4(a)(1).

Request:

Provide justification for not including the seismic endpoint downstream of valves 1-9159B and 2-9159B within the scope of license renewal.

NSPM Response to RAI 2.3.3.20-01

On Drawing LR-XH-1-123, locations C-5 and C-7, at valves 1-9159B and 2-9159B, the seismic endpoints represent points where the piping within the scope of License Renewal is decoupled from the downstream piping (i.e. the downstream piping does not support loads or transfer loads). In this case, the smaller branch lines (3/8" tubing), do not provide support for the pressure boundary valves and the scoping boundary ends at each valve. The seismic endpoint symbol does not represent a component and is correctly shown as not within the scope of License Renewal.

RAI 2.3.3.20-02

Background:

LRA Section 2.3.3.20, "Waste Disposal System," of the LRA provides the system description as well as a listing of functions associated with the system. Portions of the WD system are in scope for license renewal per 10 CFR 54.4(a)(2).

<u>lssue:</u>

Drawing LR-XH-1-123, locations A-2 and A-10, shows the 3/8-WL-1 and 3/8-2WL-1 lines in scope for license renewal for 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3). However,

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the continuation of this line on drawings LR-XH-1-7, location D-8, and LR-XH-1001-3, location D-8, shows this line is in scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why there is a difference of scope classification between the main drawing LR-XH-1-123 and the continuations on drawings LR-XH-1-7 and LR-XH-1001-3.

NSPM Response to RAI 2.3.3.20-02

On Drawing LR-XH-1-123, locations A-2 and A-10, the Reactor Flange Leakoff lines should be highlighted to show the lines within the scope of License Renewal per 10 CFR 54.4(a)(2). This is as shown on Drawings LR-XH-1-7, location D-8, and LR-XH-1001-3, location D-8.

RAI 2.3.3.20-03

Background:

LRA Section 2.3.3.20, "Waste Disposal System," of the LRA provides the system description as well as a listing of functions associated with the system. Portions of the WD system are in scope for license renewal per 10 CFR 54.4(a)(2).

Issue:

Drawing LR-39248, location E-8, shows piping 2-WG-68 from the gas decay tank condensate drain pump as in scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of this line on drawing LR-XH-1-124, location E-12, 1" piping 1-WG-68 shows this line as not in scope for the license renewal.

Request:

Provide additional information explaining why there is a difference of scope classification between the main drawing LR-39248 and the continuation on drawing LR-XH-1-124.

NSPM Response to RAI 2.3.3.20-03

The pit entry wall is shown on drawing LR-XH-1-124, location E-12, at the Gas Decay Tank Condensate Drain Pump discharge line, 1-WG-68. This wall provides the scoping break between the portion within the scope of License Renewal, shown on LR-39248, location E-8, and the portion not within the scope of License Renewal, shown on LR-XH-1-124, location E-12.

RAI 2.3.3.20-04

Background:

LRA Section 2.3.3.20, "Waste Disposal System," of the LRA provides the system description as well as a listing of functions associated with the system. The WD system contains non-safety-related components that maintain mechanical and structural integrity to provide structural support to attached safety-related piping or to prevent spatial interactions that could cause failure of safety-related components.

Issue:

Drawing LR-39248, location D-7, shows 3/8" tubing from valve 2CV-38-4 as in scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of this line on drawing LR-XH-1-1001-5, location F-2, shows valve 2CV-38-4 line as in scope for the license renewal 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3).

Request:

Provide additional information explaining why there is a difference of scope classification between the main drawing LR-39248 and the continuations on drawing LR-1-1001-5.

NSPM Response to RAI 2.3.3.20-04

On Drawing LR-XH-1001-5, location F-2, the scoping classifications for CV-31211 stem leak-off line and valve 2VC-38-4 are shown incorrectly. The stem leak-off line and valve 2CV-38-4 do not perform a 10 CFR 54.4(a)(1) or (a)(3) pressure boundary function and should be shown as within the scope of License Renewal per 10 CFR 54.4(a)(2).

RAI 2.3.3.20-06

Background:

LRA Section 2.3.3.20, "Waste Disposal System," of the LRA provides the system description as well as a listing of functions associated with the system. The WD system contains non-safety-related components that maintain mechanical and structural integrity to provide structural support to attached safety-related piping or to prevent spatial interactions that could cause failure of safety-related components.

lssue:

Drawing LR-XH-1-124 shows nine gas decay tanks (#121, #122, #123, #124, #125, #126, #127, #128, and #129) as not in scope for license renewal. However, at multiple

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tank isolation valve locations, it shows that the tanks are classified as QA IC rather than QA IIIC.

Request:

Provide additional information explaining why these safety related (QA Class IC) gas decay tanks and associated components are not within the scope of license renewal for 10 CFR 54.21(a)(1).

NSPM Response to RAI 2.3.3.20-06

A rupture of the waste gas decay tanks does not result in offsite exposures comparable to (i.e. greater than or equal to 10% of) those referred to in 10 CFR 100.11, and therefore, the tanks are not within the scope of License Renewal per 10 CFR 54.4(a)(1). For a discussion related to the definition of the term "comparable" and the basis for the 10% criterion, see the response to RAI 2.1-1 contained in the NSPM letter to the NRC dated December 5, 2008.

The waste gas decay tanks are designated as safety related based on a PINGP-unique criterion of 1% of 10 CFR 100 limits contained in the PINGP USAR and plant procedures. NEI 95-10 acknowledges that some components may be designated as safety related, but not meet the definition of the Rule. Section 3.1.1 of NEI 95-10 states:

It is conceivable that, because of plant unique considerations and preferences, applicants may have previously elected to designate some systems, structures and components as safety related that do not perform any of the requirements of 54.4(a)(1). Therefore, a system, structure or component may not meet the requirements of 54.4(a)(1) although it is designated as safety related for plant specific reasons.

As shown in USAR Section 14.5.3.2, a rupture of a waste gas decay tank does not result in offsite exposures comparable to (i.e. greater than or equal to 10% of) those referred to in 10 CFR 100, and therefore, the tanks are not within the scope of License Renewal for 10 CFR 54.4(a)(1).

RAI 2.3.4.2-01

Background:

License renewal rule 10 CFR 54.21(a)(1) requires applicants to list all components subject to an AMR. The staff confirms inclusion of all components subject to an AMR by reviewing component types within the license renewal boundary.

Issue:

- Drawing LR-39224, locations B-2 and C-2, show the #14A and #14B FW Heaters in scope for criterion 10 CFR 54.4(a)(2). However, FW Heaters #15A and #15B, locations D-2 and E-2, are shown as not in scope for license renewal. The corresponding Unit 2 FW Heaters #25A and #25B are shown as in scope on drawing LR-39225.
- 2. FW Heaters are not included in LRA Table 2.3.4-2 Bleed Steam System, as a component type subject to an AMR.

Request:

- 1. Provide additional information clarifying why FW Heaters #15A and #15B are not within the scope of license renewal and justify the boundary locations with respect to the applicable requirements of 10 CFR 54.4(a).
- 2. Justify why the FW Heaters are not included in LRA Table 2.3.4-2 Bleed Steam System, as a component type subject to an AMR.

NSPM Response to RAI 2.3.4.2-01

Part 1

On Drawing LR-39224, locations D-2 and E-2, the FW Heater #15A and #15B shells and channel heads are correctly shown as within the scope of License Renewal per 10 CFR 54.4(a)(2). The FW Heater #15A and 15B tubes are also correctly shown as not within the scope of License Renewal as they are contained within the shell, and their failure does not impact any Safety Related components.

On Drawings LR-39224 and LR-39225, the feedwater heater and reheater tube and tubesheet scoping is generally shown incorrectly. For feedwater heaters #11A/B, #12A/B, #13A/B, #14A/B, #15A/B and #21A/B, #22A/B, #23A/B, #24A/B, #25A/B, and reheaters 1A, 1B, 2A, 2B on both Units, the tubes and tubesheets should be shown as not within the scope of License Renewal as they are contained within the shell, and their failure could not impact any safety related components. Drawings LR-39218 and LR-39219 also show reheater 1A, 1B, 2A, 2B tube and tubesheet scoping incorrectly. These feedwater heater and reheater tubes and tubesheets are shown correctly on Drawings LR-39220, LR-39221, LR-39222, LR-39223, LR-39226 and LR-39227.

Part 2

Feedwater heaters #15A/B and #25A/B are evaluated as part of the Feedwater (FW) System. System boundary break flags are shown on Drawings LR-39224 and LR-39225 to identify the applicable system. Heat Exchanger Components are included in the components shown in LRA Table 2.3.4-5, Feedwater System.

Feedwater heaters #11A/B, #12A/B, #13A/B, #14A/B and #21A/B, #22A/B, #23A/B, and #24A/B are evaluated as part of the Condensate (CD) System. System boundary break flags are shown on Drawings LR-39224 and LR-39225 to identify the applicable system. Heat Exchanger Components are included in the components shown in LRA Table 2.3.4-4, Condensate System.

Reheaters 1A, 1B, 2A, and 2B on both Units are evaluated as part of the Turbine Generator and Support (TB) System. System boundary break flags are shown on Drawings LR-39224 and LR-39225 to identify the applicable system. Heat Exchanger Components are included in the components shown in LRA Table 2.3.4-8.

RAI 2.3.4.3-01

Background:

LRA Section 2.3.4.3, "Circulating Water System," states that piping and fittings are within the scope of license renewal per 10 CFR 54.4(a)(1),10 CFR 54.4(a)(2) and 10 CFR 54.4(a)(3) and have an intended function of providing a pressure boundary.

Issue:

Drawing LR-39215-1, locations E-2, E-3, E-5, and E-6, show the #1A, #1B, #2A, and #2B Condensers in scope for criterion 10 CFR 54.4 (a)(2). However, the same condensers shown at locations B-7, B-8, B-10, and B-11, are shown as not in scope for license renewal.

Request:

Provide additional information detailing why the condensers shown at locations B-7, B-8, B-10, and B-11 are not within the scope of license renewal and if not in scope justify the boundary locations with respect to the applicable requirements of 10 CFR 54.4 (a).

NSPM Response to RAI 2.3.4.3-01

On Drawing LR-39215-1, locations B-7, B-8, B-10 and B-11, the condenser scoping classifications are shown incorrectly. The condensers should be highlighted to show them within the scope of License Renewal per 10 CFR 54.4(a)(2).