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10 CFR 50
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LR-N10-0156

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

Hope Creek Generating Station
Facility Operating License No. NPF-57
NRC Docket No. 50-354

Subject: Response to NRC Request for Additional Information dated April 15, 2010, Related to Scoping and Screening Results, Section 2.3 of the Hope Creek Generating Station License Renewal Application

Reference: Letter from Mr. Donnie Ashley (USNRC) to Mr. Thomas Joyce (PSEG Nuclear, LLC) "REQUEST FOR ADDITIONAL INFORMATION REGARDING SCOPING AND SCREENING RESULTS FOR THE HOPE CREEK GENERATING STATION (TAC NO ME1832)", dated April 15, 2010

In the referenced letter, the NRC requested additional information related to Scoping and Screening Results, Section 2.3 of the Hope Creek Generating Station License Renewal Application (LRA). Enclosed are the responses to this request for additional information.

This letter and its enclosure contain no regulatory commitments.

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

A142
NRR

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

Executed on 5/11/10

Sincerely,

Paul J. Davison

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

Enclosure: Responses to Request for Additional Information

cc: S. Collins, Regional Administrator – USNRC Region I
B. Brady, Project Manager, License Renewal – USNRC
R. Ennis, Project Manager - USNRC
NRC Senior Resident Inspector – Hope Creek
P. Mulligan, Manager IV, NJBNE
L. Marabella, Corporate Commitment Tracking Coordinator
T. Devik, Hope Creek Commitment Tracking Coordinator

Enclosure

Responses to Request for Additional Information related to Scoping and Screening Results, Section 2.3 of the Hope Creek Generating Station License Renewal Application (LRA)

RAI 2.3-01
RAI 2.3.3.2-01
RAI 2.3.3.5-01
RAI 2.3.3.14-01
RAI 2.3.3.14-02
RAI 2.3.3.18-01
RAI 2.3.3.18-02
RAI 2.3.3.18-03
RAI 2.3.3.21-01
RAI 2.3.3.22-01
RAI 2.3.3.22-02
RAI 2.3.3.31-01
RAI 2.3.4.1-01

RAI 2.3-01

Background:

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

Issue:

For the drawing locations identified in the table below, the piping continuations could not be found. In order to assure that all components within the scope of license renewal have been identified, the staff must be able to review the full extent of the license renewal boundary.

License Renewal System	Drawing Number and Location	Continuation Issue
Chilled Water System	LR-M-87-1(SH5) at C-4, C-6, and D-5	Section of (a)(2) piping is continued to drawing LR-M-61-1(SH1). The continuation could not be located.
	LR-M-87-1(SH2) at E-6	Section of (a)(2) piping is continued from drawing LR-M-43-1(SH1). The continuation could not be located.
Closed Cycle Cooling Water	LR-M-13-1(SH1) at D-3 and D-4	Section of 1" (a)(1) piping ends without a continuation note.
Standby Diesel Generators and Auxiliary Systems	LR-M-30-1(SH4) at C-4	Section of (a)(1) piping continues to "to control air supply transmitters" without a drawing location identified.

Request:

Provide additional information to locate the license renewal boundary. If a section of pipe does not continue to a specific drawing number and location, then provide additional information describing the extent of the scoping boundary and verifying that there are no additional components between the continuation and the termination of the scoping boundary in that line. If the scoping classification of a section of piping changes over a continuation, provide additional information to clarify the change in scoping classification.

PSEG Response:

Chilled Water System

The license renewal boundary in question begins at the ¾ inch drain lines shown on LR-M-87-1 (SH5), zones C-4, C-6, and D-5, and continues down into 4 inch collection headers and through a system of 4 inch drain lines, emptying into the AT265 floor drain sump. The 4 inch lines shown at the transition arrows on LR-M-61-1 (SH1), location G-4, represent a downstream portion of the drain system to which the ¾ inch lines drain.

License renewal boundary drawing LR-M-87-1 (SH5) is revised to reference zone G-4 on LR-M-61-1 (SH5) rather than zone F-4.

The origin of the continuation arrow on LR-M-87-1 (SH2) at E-6, referenced as transitioning from LR-M-43-1 (SH1) zone A-5, was inadvertently not shown on the drawing. A 1 inch drain line, HBD-155, should have been shown leaving the "B" Reactor Recirculation Pump on LR-M-43-1 (SH1) with a continuation arrow transitioning to the one shown on LR-M-87-1 (SH2). This drain line services the "B" pump motor air cooler, similar to the 1"-HBD-154 drain line for the "A" Reactor Recirculation Pump motor air cooler on LR-M-43-1 (SH1) zone C-6.

License renewal boundary drawing LR-M-43-1 (SH1) is revised to show the 1" drain leaving the "B" Reactor Recirculation Pump at zone A-5 with a transition arrow to LR-M-87-1 (SH2) zone E-6.

Closed Cycle Cooling Water

The license renewal boundary for the sections of 1 inch piping on LR-M-13-1 (SH1), locations D-3 and D-4, terminate at the end of the pipes. The 1"-HBD-108 and -109 sections of pipe vent directly to containment atmosphere to provide a means to relieve pressure in the 4"-HBB-023 and -024 lines.

Standby Diesel Generators and Auxiliary Systems

The (a)(1) section of piping on LR-M-30-1 (SH4), location C-4, shown continuing "to control air supply transmitters", does not continue to a specific plant drawing. The license renewal boundary for the line continues downstream through an air supply pressure transmitter connected to the engine panel and supplies control air for diesel generator subsystems. These components are for use with air operated engine control components that are considered subcomponent parts of the active engine assembly, and are not subject to aging management review.

There are no additional components subject to aging management review and there are no scoping classification changes associated with the drawing continuation arrows described above.

RAI 2.3.3.2-01

Background

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

Drawing LR-M-13-1 (SH1), locations D-3 and D-5, show 10 CFR 54(a)(1) lines 4"-HBB-024 and 4"-HBB-023 connected to 10 CFR 54 (a)(2) lines 6"-HBD-003 and 4"-HBD-018. The anchors on the 6"-HBD-003 and 4"-HBD-018 lines could not be located.

Request

Provide additional information to locate the anchors for the 6"-HBD-003 and 4"-HBD-018 lines between then end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The 10 CFR 54.4 (a)(1) line 4"-HBB-024 connects to line 4"-HBD-003, which then connects to line 6"-HBD-003 through a 4" x 6" reducer. The anchors between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 4"-HBD-003 line on LR-M-13-1 (SH1), location D-3, are located on the 6"-HBD-003 in-scope pipe shown in red. The first anchor is located between the 6"-HBD-003 tee and 1½"-HBD-003 connection (D-3). The second anchor is located between the 18"-HBD-001 line and the 1"-HBD-003 tee connection (F-3).

The anchors between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 4"-HBD-018 line on LR-M-13-1 (SH1), location D-5, are located on in-scope piping shown in red. The first anchor is located between the 6"-HBD-018 tee and the 6" x 1½" reducer to the 1½"-HBD-018 line (F-5). The second anchor is located between the 2"-HBD-002 and 2"-HBD-081 tee connections on the 18"-HBD-002 line (G-3).

RAI 2.3.3.5-01

Background:

LRA Section 2.1.5.1 states, "Systems and structures that are identified as safety-related in the UFSAR or in design basis documents have been classified as satisfying criteria of 10 CFR 54.4(a)(1) and have been included within the scope of license renewal. Safety-related components in the SAP database were also reviewed and the system or structure associated with the safety-related component was included in scope under the 10 CFR 54.4(a)(1) criterion."

Issue:

License renewal drawing LR-M-90-1 (SH3), locations C-5 and H-5, shows a portion of piping in scope for 10 CFR 54.4(a)(1) up to valves V9990 and V9982. The drawing indicates that downstream of the valves the piping is within scope for 10 CFR 54.4(a)(2) but is still Q-listed and seismic category 1. This appears to be safety-related piping in scope for (a)(2), which would conflict with the scoping procedure described in the application.

Request:

Provide additional information to clarify the scoping classification on the above drawing.

PSEG Response:

License renewal drawing LR-M-90-1 (SH3), locations C-5 and H-5, currently show Q-listed portions of piping downstream of valves V9990 and V9982 in-scope for 10 CFR 54.4(a)(2). As indicated on drawing LR-M-00-0 Sheet 1, the drawing symbol containing the letters "SX" located downstream of the closed valve represents a local sample tap. The tubing downstream of each of these valves is open ended for sample collection. The downstream tubing is only required for sample collection, which is not a 10 CFR 54.4(a)(1) function for the Control Air Chilled Water system. Since this tubing downstream of the closed valves is not required to perform a 10 CFR 54.4(a)(1) function, it is not included in scope for 10 CFR 54.4(a)(1).

A review of plant isometric drawings has determined that the Q-flags should be located on the downstream edge of the respective valves. Valves V9990 and V9982 are within scope for 10 CFR 54.4(a)(1) while all associated downstream piping is within scope for 10 CFR 54.4(a)(2). The Q-flags are incorrectly shown on the plant P&ID. This issue has been entered into and will be addressed by the Hope Creek Corrective Action Process.

RAI 2.3.3.14-01

Background:

LRA section 2.3.3.14, Fuel Pool Cooling and Cleanup System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(1), 10 CFR 54.4(a)(2) and 10 CFR 54.4(a)(3) and have intended functions of providing mechanical closure, direct flow, pressure boundary, leakage boundary, spray, and throttle.

Issue:

Drawing LR-M-53-1 (SH1), locations B-7 and B-8, show starter strainers (TS 182 and TS 181) in 10 CFR 54.4(a)(1) lines 8"-HBC-042 and 8"-HBC-047, respectively, that are not included as a component type in LRA Table 2.3.3-14.

Request:

Provide additional information to explain why these within scope strainers are not included as a component type with their intended function in LRA Table 2.3.3-14.

PSEG Response:

Strainers TS 181 and TS 182, shown on LR-M-53-1 (SH1) locations B-7 and B-8, are temporary startup strainers. Temporary startup strainers are used to protect the pump from construction debris during initial plant startup. Following initial plant startup, the strainers were permanently removed. Since the strainers no longer physically exist in the plant, they were not included as a component type in LRA Table 2.3.3-14.

RAI 2.3.3.14-02

Background

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

LR-M-53-1 (SH1), at the locations listed below, show 10 CFR 54.4(a)(2) pipelines that transfer clean radwaste (CRW) to equipment drain sumps connected to 10 CFR 54.4(a)(1) pipelines:

- Location A-3, pipeline 4"-HBD-036
- Location A-5, pipeline 1"-HBD-144
- Location A-7, pipeline 1"-HBD-055
- Location A-8, pipeline 1"-HBD-046
- Location B-4, pipeline 1"-HBD-143
- Location B-5, pipeline from PSV4674B
- Location B-7, pipeline from V037
- Location B-8, pipeline 1"-HBD-044
- Location C-5, pipeline 1"-HBD-070
- Location D-2, pipeline 1"-HBD-025
- Location E-5, pipeline 2"-HBD-032
- Location E-8, pipeline 4"-HBD-083
- Location B-2, pipeline 10"-HCD-073 to and from the Condensate Storage Tank.

Anchor points on the above lines could not be located.

Request

Provide additional information to locate the anchors for the pipelines listed above between the end of the (a)(2) scoping boundary and the safety-nonsafety interfaces.

PSEG Response:

The referenced 1 inch, 2 inch, and 4 inch pipelines, including piping from PSV 4674B and piping from V037, are nonsafety-related piping that connects to the outlet side of 10 CFR 54.4(a)(1) safety-related vent, drain and relief valves shown in green, and are routed to the plant drain system. In each case, the entire pipeline is included in scope from the safety-nonsafety interface to the end of the pipeline, where it discharges to the local equipment drain provided for this purpose. Equipment drains pass through the room floor and connect to drain headers that eventually empty into equipment drain sumps.

Similar to floor drains, equipment drains are imbedded in the concrete floor. Unlike floor drains, equipment drains typically extend several inches above the floor level and may also include a larger diameter opening to accept multiple drain lines. In a closed equipment drain, a steel plate is seal welded to the drain opening. The drain lines are routed through holes drilled in the plate and the drain lines are seal welded to the plate.

The referenced 1 inch, 2 inch, and 4 inch pipelines are welded to closed equipment drains as described above. For each of the safety-nonsafety interfaces associated with the referenced pipelines, these welded connections constitute the endpoint of the seismic analysis.

The anchor between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for line 10"-HCD-073 on drawing LR-M-53-1 (SH1), location B-2, is located at the Reactor Building wall penetration shown on LR-M-08-0 (SH2), location E-5. This wall penetration is designed as a seismic anchor capable of restraining forces and moments in three orthogonal directions.

RAI 2.3.3.18-01

Background

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

Drawing LR-M-11-1 (SH1), locations H-5 and E-5, show 10 CFR 54(a)(1) lines 2"-HCC-111 and 2"-HCC-112 continued to 10 CFR 54 (a)(2) lines AN-2"-HCD-001.

The anchor for the two AN-2"-HCD-001 lines could not be located.

Request

Provide additional information to locate the anchor for the two AN-2"-HCD-001 lines between the end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the AN-2"-HCD-001 line on drawing LR-M-11-1 (SH1), location H-5, is located on the in-scope pipe shown in red, approximately 12 inches from valve V040 shown in green and in scope for 10 CFR 54 (a)(1).

The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the AN-2"-HCD-001 line on drawing LR-M-11-1 (SH1), location E-5, is located on the in-scope pipe shown in red, approximately 7 inches from valve V043 shown in green and in scope for 10 CFR 54 (a)(1).

RAI 2.3.3.18-02

Background

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

LR-M-90-1 (SH3), location D-6 and E-6, shows 10 CFR 54(a)(1) lines 18"-HCC-187, 18"-HCC-188 and 18"-HCC-189 continued to 10 CFR 54(a)(2) lines 2"-HCD-022, 2"-HBD-133 and 2"-HBD-132.

Drawing LR-M-90-1 (SH2), location D-6, shows 10 CFR 54(a)(1) Head Tank BT 410 connected to 10 CFR 54 (a)(2) line 2"-HCD-024.

The anchor for lines 2"-HCD-022, 2"-HBD-133, 2"-HBD-132 and 2"-HCD-024 could not be located.

Request

Provide additional information to locate the anchors for lines 2"-HCD-022, 2"-HBD-133, 2"-HBD-132 and 2"-HCD-024 between the end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The 18"-HCC-187 line is in scope for 10 CFR 54(a)(1) and is shown in green on drawing LR-M-90-1 (SH1), location D-6. The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the 2"-HCD-022 line on drawing LR-M-90-1 (SH1), location D-6, is located on the in-scope pipe shown in red, between the connection to line 18"-HCC-187 and tee connection for the 2"-HCD-022 bypass line.

The 18"-HCC-189 line is in scope for 10 CFR 54(a)(1) and is shown in green on drawing LR-M-90-1 (SH3), location D-6. The anchor between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 2"-HBD-133 line on drawing LR-M-90-1 (SH3), location D-6, is located on the in-scope pipe shown in red, between the connection to line 18"-HCC-189 and tee connection for the 2"-HBD-133 bypass line.

The 18"-HCC-188 line is in scope for 10 CFR 54(a)(1) and is shown in green on drawing LR-M-90-1(SH3), location E-6. The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the 2"-HBD-132 line on drawing LR-M-90-1 (SH3), location E-6, is located on the in-scope pipe shown in red, between the connection to line 18"-HCC-188 and tee connection for the 2"-HBD-132 bypass line.

The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the 2"-HCD-024 line on drawing LR-M-90-1 (SH2), location D-6, is located

on the in-scope pipe shown in red, between the connection to the 10 CFR 54(a)(1) BT410 head tank and tee connection for the 2"-HCD-024 bypass line.

RAI 2.3.3.18-03

Background

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

Drawing LR-30-1 (SH2), locations G-2, G-3, G-5 and G-7, show 10 CFR 54(a)(1) lines 1"-HBC-098, 1"-HBC-096, 1"-HBC-097 and 1"-HBC-095 continued to 10 CFR 54(a)(2) lines 1"-HCD-232, 1"-HCD-230, 1"-HCD-231 and 1"-HCD-229.

The anchor points for lines 21"-HCD-232, 1"-HCD-230, 1"-HCD-231 and 1"-HCD-229 could not be located.

Request

Provide additional information to locate the anchors for lines 1"-HCD-232, 1"-HCD-230, 1"-HCD-231 and 1"-HCD-229 between the end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The 1"-HBC-098 line is in scope for 10 CFR 54(a)(1) and is shown in green on drawing LR-30-1 (SH2), location G-2. The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the 1"-HCD-232 line on drawing M-30-1 (SH2), location G-2, is located on the in-scope pipe shown in red, between valves SV-6615D and AN-V026.

The 1"-HBC-096 line is in scope for 10 CFR 54(a)(1) and is shown in green on drawing LR-30-1 (SH2), location G-3. The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the 1"-HCD-230 line on drawing M-30-1 (SH2), location G-3, is located on the in-scope pipe shown in red, between valves SV-6615B and AN-V025.

The 1"-HBC-097 line is in scope for 10 CFR 54 (a)(1) and is shown in green on drawing LR-30-1 (SH2), location G-5. The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the 1"-HCD-231 line on drawing M-30-1 (SH2), location G-5, is located on the in-scope pipe shown in red, between valves SV-6615C and AN-V024.

The 1"-HBC-095 line is in scope for 10 CFR 54 (a)(1) and is shown in green on drawing LR-30-1 (SH2), location G-7. The anchor between the end of the (a)(2) scoping boundary and safety-nonsafety interface for the 1"-HCD-229 line on drawing M-30-1 (SH2), location G-7, is located on the in-scope pipe shown in red, between valves SV-6615A and AN-V023.

RAI 2.3.3.21-01

Background

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue:

Drawing LR-M-38-0 (SH1), location B-7, shows line 1"-DBB-006 within scope of license renewal for 10 CFR 54.4(a)(1) attached to tubing that is not in scope. The anchor for line 1"-DBB-006 could not be located.

Request:

Provide additional information to clarify the scoping classification of this line. Provide additional information to locate the anchor for the line 1"-DBB-006 after the safety-nonsafety interface.

PSEG Response:

The 1"-DBB-006 line, shown on boundary drawing LR-M-38-0 (SH1), location B-7, is within scope of license renewal for 10 CFR 54.4(a)(1). There is no anchor for line 1"-DBB-006 located on the tubing after the safety-nonsafety interface. The credited seismic anchor is located on the 1"-DBB-006 line, downstream of the branch connection for valve V047, and approximately 11 inches from the safety-nonsafety interface on the in-scope line shown in green. The ½" nonsafety-related tubing attached at the safety-nonsafety interface is an air sample line that does not have the potential for spatial interaction, is not required for structural support for the safety-related piping, and is therefore not in-scope.

RAI 2.3.3.22-01

Background:

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

License renewal drawing LR-M-61-1 (SH1), locations G-6 and G-7, show a 3" 10 CFR 54.4 (a)(1) line (3"-HBB-014) connected to 10 CFR 54.4 (a)(2) lines (3"-HBD+-013 and 3"-HBD+-017).

The seismic anchor or anchored component for the 10 CFR 54.4 (a)(2) lines (3"-HBD+-013 and 3"-HBD+-017) could not be located.

Request:

Provide additional information to locate the seismic anchors or anchored components for the 3"-HBD+-013 and 3"-HBD+-017 lines between the end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The 3"-HBB-014 line and valves V004 and V006 on either end of this line are in scope for 10 CFR 54.4(a)(1) and shown in green on drawing LR-M-61-1 (SH1), locations G-6 and G-7. The anchor between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 3"-HBD+-013 line on drawing LR-M-61-1 (SH1), location G-7, is located on the in-scope pipe shown in red, between the 2"-HBD+-013 tee connection for valves V004 and V002 and the 1" branch connection for valve V124.

The anchor between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 3"-HBD+-017 line on drawing LR-M-61-1 (SH1), location G-6, is located on the in-scope pipe shown in red, between valves V006 and V1032.

RAI 2.3.3.22-02

Background:

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

License renewal drawing LR-M-61-1 (SH 2), locations G-6 and G-7, show a 3" 10 CFR 54.4(a)(1) line (3"-HBB-023) connected to a 10 CFR 54.4 (a)(2) lines (3"-HBD+-022 and 3"-HBD+-019).

The seismic anchor or anchored component for the 10 CFR 54.4 (a)(2) lines (3"-HBD+-022 and 3"-HBD+-019) could not be located.

Request:

Provide additional information to locate the seismic anchors or anchored components for the 3"-HBD+-022 and 3"-HBD+-019 lines between the end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The 3"-HBB-023 line and valves V045 and V046 on either end of this line are in scope for 10 CFR 54.4(a)(1) and shown in green on drawing LR-M-61-1 (SH2), locations G-6 and G-7. The anchor between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 3"-HBD+-022 line on drawing LR-M-61-1 (SH2), location G-7, is located on the in-scope pipe shown in red, between the 2"-HBD+-022 tee connection for valves V042 and V044 and the 1" branch connection for valve V127.

The anchor between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 3"-HBD+-019 line on drawing LR-M-61-1 (SH2), location G-6, is located on the in-scope pipe shown in red, between valves V046 and V1033.

RAI 2.3.3.31-01

Background

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue

Anchors for nonsafety-related affecting safety-related piping at the following locations could not be located.

- LR-M-53-1 SH 2, location D-5, 6 inch line (EE-6"-HCD-009)
- LR-M-53-1 SH 1, locations C-3 and C-4, 8 inch lines (8"-HBD-002 and 8"-HCD-001)

Request

Provide additional information to locate the anchors for the EE-6"-HCD-009, 8"-HBD-002 and 8"-HCD-001 lines between the end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The anchor between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the EE-6"-HCD-009 line on LR-M-53-1 (SH2), location D-5, is located on the in-scope pipe shown in red, between valve EE-V001 and the EE-1"-HBD-013 tee connection for valve EE-V020.

The anchors between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the 8"-HBD-001 and 8"-HBD-002 lines on LR-M-53-1 (SH1), locations C-3 and C-4, are located at the reactor building wall penetrations, which corresponds to the end of the (a)(2) scoping boundary. These wall penetrations are designed as seismic anchors capable of restraining forces and moments in three orthogonal directions.

RAI 2.3.4.1-01

Background:

LRA Section 2.1.5.2, Nonsafety-Related Affecting Safety-Related – 10 CFR 54.4(a)(2), states in part "...For a nonsafety-related piping system that is connected and provides structural support to a safety-related piping system, the nonsafety-related piping and supports should be included within the scope of license renewal up to and including the first anchor point past the safety-nonsafety interface."

Issue:

Drawing LR-M-51-1 (SH1), location H-6, shows 10 CFR 54.(a)(2) line AP-4"-HCD-022 connected to 10 CFR 54.(a)(1) line AP-4"GBB-030.

The anchors for AP-4"-HCD-022 could not be located.

Request:

Provide additional information to locate the anchors for this line between the end of the (a)(2) scoping boundary and the safety-nonsafety interface.

PSEG Response:

The AP-4"GBB-030 line is in scope for 10 CFR 54.4(a)(1) and shown in green on drawing LR-M-51-1 (SH1), location H-6. The upstream flow path to this line begins with line AP-4"-HCD-022, drawing LR-M-51-1 (SH1), transitioning to LR-M-52-1 (SH1), location H-3, and continuing to LR-M-08-0 (SH2), location F-6, where the 1-4"-HCD-022 line originates as a branch connection from the 1-6"-HCD-022 line.

The anchors between the end of the (a)(2) scoping boundary and the safety-nonsafety interface for the AP-4"-HCD-022 line on drawing LR-M-51-1 (SH1), location H-6, are located further upstream along the flow path on lines 1-6"-HCD-017 and 1-6"-HCD-022, shown on drawing LR-M-08-0 (SH2), location F-6.

One anchor is located on the 1-6"-HCD-022 line between the 1-4"-HCD-022 and the 1-3"-HCD-022 tee connections. A second anchor is located in the opposite direction from the 1-4"-HCD-022 connection, on the 1-6"-HCD-017 line between the 1-2"-HCD-037 tee and 1-3"-HCD-017 tee connection for valve 1-V167.