

PrairielslandNPEm Resource

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REQUEST FOR ADDITIONAL INFORMATION
BY THE CONTAINMENT AND VENTILATION BRANCH
OFFICE OF NUCLEAR REACTOR REGULATION
LICENSE RENEWAL APPLICATION FOR
PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS 1 AND 2
DOCKET NOS: 50-282 and 50-306
(TAC Nos. MD8513, MD8514)

2.3.2.1 Containment Spray System (CS)

The following RAIs were generated as part of the scoping and screening review of the CS System for the Prairie Island Nuclear Generating Plant License Renewal Application (LRA).

RAI 2.3.2.1-01

Background

For systems in-scope of license renewal, Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue

License Renewal (LR) Drawing No. LR-39237 Rev 3: In drawing coordinates D-5, valve CS-25-2 along with its pipe and end cap are shown as out-of-scope for license renewal. The piping which includes this valve is attached to piping which is in-scope in accordance with 10 CFR 54.4(a)(1).

Request

Provide justification for the exclusion of this valve, pipe and end cap from the scope of license renewal. If these items are in-scope of license renewal, in accordance with 10 CFR 54.4(a), and subject to an aging management review in accordance with 10 CFR 54.21(a)(1), update the LRA by providing the applicable information in the appropriate LRA sections, tables, and drawings.

RAI 2.3.2.1-02

Background

For systems in-scope of license renewal, Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue

LR Drawing No. LR-39237 Rev 3: In drawing coordinates D-4, at the downstream side of spray pump ES-19623 after the 4x6-inch reducer is a threaded end cap shown out-of-scope for license renewal. This end cap is attached to piping which is in-scope in accordance with 10 CFR 54.4(a)(1).

Request

Provide justification for the exclusion of this end cap from the scope of license renewal. If this end cap is in-scope of license renewal, in accordance with 10 CFR 54.4(a), and subject to an aging management review in accordance with 10 CFR 54.21(a)(1), update the LRA by providing the applicable information in the appropriate LRA sections, tables, and drawings.

2.3.3.1 Auxiliary and Radwaste Area Ventilation Systems (ZA)

The following RAI was generated as part of the scoping and screening review of the ZA Systems for the Prairie Island Nuclear Generating Plant LRA.

RAI 2.3.3.1-01

Background

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue

LR Drawing LR39600: At drawing coordinates D-3, the block labeled "Main Steam Penetration Area" has a supply air duct (4825 CFM) that is shown as out-of-scope. This duct is a branch from a duct that is shown as in-scope for 10 CFR 54.4(a)(2). Also in the same area for the

block labeled “General Area, Col’s G,11 & 12, El. 695’-0””, the exhaust duct from this area is shown as out-of-scope. The supply duct to this area is shown as in-scope for 10 CFR 54.4(a)(2). The out-of-scope duct also exhausts to the Machine Shop. The Machine Shop is indicated as being shown on this drawing at location B-4. The Machine Shop detail was not found at location B-4. However, all areas identified at location B-4 are shown with ductwork as being in-scope for 10 CFR 54.4(a)(2). No discussion of these areas was identified in the application.

Request

- 1.0 Confirm that these sections of duct indicated above are out-of-scope.
- 2.0 Provide justification for not including a seismic or equivalent anchor as indicated in LRA Section 2.1.2.4.2.

RAI 2.3.3.1-02

Background

LRA Section 2.1.2.4.2, “Scoping Criterion 2 - Non-Safety Related Affecting Safety Related”, states in part “Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2).”

Issue

LR Drawing LR39600: At drawing coordinates D-4, in the block labeled “Aux. Bldg. Sump Area, Waste Hold-up Tank Area,” the supply duct for this area is shown as out-of-scope. This supply duct is a branch off of a duct that is shown as in-scope for 10 CFR 54.4(a)(2).

Request

- 1.0 Confirm that these sections of duct indicated above are out-of-scope.
- 2.0 Provide justification for not including a seismic or equivalent anchor as specified in LRA Section 2.1.2.4.2.

RAI 2.3.3.1-03

Background

LRA Section 2.1.2.4.2, “Scoping Criterion 2 - Non-Safety Related Affecting Safety Related”, states in part “Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2).”

Issue

LR Drawing LR39600: At drawing coordinates D-6, inlet duct for filter 121, Hot Chem Lab Filter, the exhaust duct to this filter is shown as in-scope for 10 CFR 54.4(a)(2) with the exception for a section of duct that has two dampers, HFD-14 and VFD-12, and flow element 27199. These two dampers are shown as in-scope for 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3). The section of duct in which these two dampers are located is shown as out-of-scope. No discussion was identified in LRA section 2.3.3.1.

Request

- 1.0 Confirm that this section of duct is out-of-scope while the dampers in this section and the ductwork/filter housing on either side of this section are in-scope.
- 2.0 Provide justification for not including a seismic or equivalent anchor as specified in LRA Section 2.1.2.4.2.

RAI 2.3.3.1-04

Background

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue

LR Drawing LR39600: At drawing coordinates D-7, inlet duct for filter 121, Sample Room Filter Train A, the exhaust duct to this filter is shown as in-scope for 10 CFR 54.4(a)(2) with the exception for a section of duct that has two dampers, HFD-18 and VFD-16, and flow element 27200. These two dampers are shown as in-scope for 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3). The section of duct in which these two dampers are located is shown as out-of-scope. No discussion was identified in LRA section 2.3.3.1.

Request

- 1.0 Confirm that this section of duct is out-of-scope while the dampers in this section and the ductwork/filter housing on either side of this section are in-scope.
- 2.0 Provide justification for not including a seismic or equivalent anchor as specified in LRA Section 2.1.2.4.2.

RAI 2.3.3.1-05

Background

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue

LR Drawing LR39600: At drawing coordinates D-7, inlet duct for filter 122, Sample Room Filter Train B, the exhaust duct to this filter is shown as in-scope for 10 CFR 54.4(a)(2) with the exception for a section of duct that has two dampers, HFD-19 and VFD-17, and flow element 27201. These two dampers are shown as in-scope for 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3). The section of duct in which these two dampers are located is shown as out-of-scope. No discussion was identified in LRA section 2.3.3.1.

Request

- 1.0 Confirm that this section of duct is out-of-scope while the dampers in this section and the ductwork/filter housing on either side of this section are in-scope.
- 2.0 Provide justification for not including a seismic or equivalent anchor as specified in LRA Section 2.1.2.4.2.

RAI 2.3.3.1-06

Background

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue

LR Drawing LR39600: At drawing coordinates B-2 and D-2, Unit 1 11&12 Auxiliary Building Make-up Air Units, and Unit 2 21&22 Auxiliary Building Make-up Air Units, are shown as out-of-scope. Dampers CD-34037, CD-34038, CD-34039, CD-34040, CD-34041, CD-34042, CD-34043, and CD-34044 are shown as in-scope for 10 CFR 54.4(a)(2). LRA Section 2.3.3.1 and 2.3.3.18 indicate that the intended function for dampers/housings is a pressure boundary.

Request

1.0 Provide a discussion how the dampers/housings for CD-34037 through CD-34040 can function as an effective pressure boundary if the fan housings and duct work downstream from these dampers is not intact.

2.0 Confirm that the air handling unit housing and the duct work between the dampers is not in-scope as a pressure boundary.

3.0 Provide justification for not including a seismic or equivalent anchor as specified in LRA Section 2.1.2.4.2.

2.3.3.4 Containment Hydrogen Control System (HC)

The following RAI was generated as part of the scoping and screening review of the HC System for the Prairie Island Nuclear Generating Plant LRA.

RAI 2.3.3.4-01

Background

For systems in-scope of license renewal, Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue

LR Drawing No. LR-39251, Rev. 2: Control valves CV-31923 (in zone G-7), CV-31929 (in zone F-7), CV-31924 (in zone G-3), and CV-31930 (in zone F-3) shows pneumatic tubing of the positioner of instrument actuated operator as out-of-scope for license renewal.

Request

Provide justification for the exclusion of this valve positioner pneumatic tubing from the scope of license renewal. If this tubing is in the scope of license renewal, in accordance with 10 CFR 54.4(a), and subject to an aging management review in accordance with 10 CFR 54.21(a)(1), update the LRA by providing the applicable information in the LRA sections and tables as appropriate.

2.3.3.5 Control Room and Miscellaneous Area Ventilation System (ZN)

The following RAIs were generated as part of the scoping and screening review of the ZN System for the Prairie Island Nuclear Generating Plant LRA.

RAI 2.3.3.5-01

Background

The ZN System is shared by Units 1 and 2 and consists of two ventilation trains each consisting of an air handler, filters, cooling coils, clean-up fan and the necessary ducts, dampers and instrumentation. The system is designed to maintain the control room at a suitable temperature condition for personnel habitability and equipment operability and to isolate the outside atmosphere and re-circulate a portion of the control room atmosphere through PAC filters to maintain the dose to the control room operators less than requirements. This system is listed as QA type 1C.

Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue

LR Drawing LR39603-1: At drawing coordinates H-1, the section of outside air duct upstream of damper DC-34180 is marked as out-of-scope. The ductwork either side of this section is marked as in-scope for 10 CFR 54.4(a)(1).

Request

1.0 Provide justification for exclusion of this section of ductwork from being in-scope for 10 CFR 54.4(a)(1).

RAI 2.3.3.5-02

Background:

The ZN System is shared by Units 1 and 2 and consists of two ventilation trains each consisting of an air handler, filters, cooling coils, clean-up fan and the necessary ducts, dampers and instrumentation. The system is designed to maintain the control room at a suitable temperature condition for personnel habitability and equipment operability and to isolate the outside atmosphere and re-circulate a portion of the control room atmosphere through PAC filters to maintain the dose to the control room operators less than requirements. This system is listed as QA type 1C.

Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue

LR Drawing LR39603-1: At drawing coordinates H-4, damper HFD-23 is shown as out-of-scope. All other dampers in this system are shown as being in-scope.

Request

1.0 Provide confirmation that this damper is not in-scope for 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3).

RAI 2.3.3.5-03

Background:

The ZN System is shared by Units 1 and 2 and consists of two ventilation trains each consisting of an air handler, filters, cooling coils, clean-up fan and the necessary ducts, dampers and instrumentation. The system is designed to maintain the control room at a suitable temperature condition for personnel habitability and equipment operability and to isolate the outside atmosphere and re-circulate a portion of the control room atmosphere through PAC filters to maintain the dose to the control room operators less than requirements. This system is listed as QA type 1C.

Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue:

LR Drawing LR39603-1: Control Room Air Handling Unit 1 and Unit 2.

It is not clear if the control room ventilation equipment is within the same protected ventilation zone as the control room. If the equipment rooms where the ventilation equipment is located has the potential to become contaminated in the event of an accident that includes a radiological release there is the potential to draw that radiological contamination into the control room ventilation system.

Request:

1.0 Are there any condensate drains on the air handling units that would be considered to be in-scope as barriers to prevent drawing contaminated air into the air handling units?

2.0 If so, are these covered under a different section of the LRA?

RAI 2.3.3.5-04

Background:

The ZN System is shared by Units 1 and 2 and consists of two ventilation trains each consisting of an air handler, filters, cooling coils, clean-up fan and the necessary ducts, dampers and instrumentation. The system is designed to maintain the control room at a suitable temperature condition for personnel habitability and equipment operability and to isolate the outside atmosphere and re-circulate a portion of the control room atmosphere through PAC filters to maintain the dose to the control room operators less than requirements. This system is listed as QA type 1C.

Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue:

LR Drawing LR39603-1: Control rooms often are provided with a bathroom and kitchenette, or other similar room within the control room envelope (CRE) boundary. The ventilation systems serving these areas may or may not be considered as part of the safety related control room ventilation system. These ventilation systems normally cross the CRE. No discussion was identified regarding such ventilation systems were provided, and if so, that they were considered as part of the scoping.

Request

1.0 Are a bathroom and/or a kitchenette, or similar room located within the control room envelope whose exhaust system penetrates the control room envelope?

2.0 If so, are there sections of the exhaust system that could be considered as in-scope as a barrier for steam exclusion or as part of the control room envelope?

RAI 2.3.3.5-05

Background

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue

LR Drawing LR39601: At drawing coordinates E-5, Battery Room 21 has an exhaust duct that is marked as out-of-scope. This duct contains a damper (HFD-54) that is marked as in-scope for 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(3) and is connected to a duct that is marked as in-scope for 10 CFR 54.4(a)(2).

Request

- 1.0 Confirm that the duct is not in-scope for 10 CFR 54.4(a)(2).
- 2.0 Provide justification for not including a seismic or equivalent anchor as indicated in LRA Section 2.1.2.4.2.

RAI 2.3.3.5-06

Background:

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue:

LR Drawing LR39601: At drawing coordinates H-5, the 121 battery room recycle fan is shown as out-of-scope. The ducts and cooling coil on this branch are shown as in-scope for 10 CFR 54.4(a)(2).

Request

- 1.0 Confirm that the fan housing is not in-scope for 10 CFR 54.4(a)(2).
- 2.0 Provide justification for not including a seismic or equivalent anchor as indicated in LRA Section 2.1.2.4.2.

RAI 2.3.3.5-07

Background:

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue:

LR Drawing LR39601: At drawing coordinates E-5, the 122 battery room recycle fan is shown as out-of-scope. The ducts and cooling coil on this branch are shown as in-scope for 10 CFR 54.4(a)(2).

Request

- 1.0 Confirm that the fan housing is not in-scope for 10 CFR 54.4(a)(2).
- 2.0 Provide justification for not including a seismic or equivalent anchor as indicated in LRA Section 2.1.2.4.2.

RAI 2.3.3.5-08

Background:

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue:

LR Drawing LR39601: At drawing coordinates H-5, the 121 battery room recycle fan is shown as out-of-scope. At drawing coordinates E-5, the 122 battery room recycle fan is shown as out-of-scope. The ducts and cooling coil on this branch are shown as in-scope for 10 CFR 54.4(a)(2).

Request:

- 1.0 Confirm that the fan housings are not in-scope for 10 CFR 54.4(a)(2).
- 2.0 Provide justification for not including seismic or equivalent anchors as indicated in LRA Section 2.1.2.4.2.

2.3.3.7 Diesel Generator and Screenhouse Ventilation System (ZG)

The following RAIs were generated as part of the scoping and screening review of the ZG System for the Prairie Island Nuclear Generating Plant LRA.

RAI 2.3.3.7-01

Background:

LRA Section 2.1.2.4.2, "Scoping Criterion 2 - Non-Safety Related Affecting Safety Related", states in part "Non-safety related SSCs that are not directly connected to safety related SSCs, or are connected downstream of the first seismic or equivalent anchor past the safety/non-safety interface, but have a potential spatial interaction such that their failure could adversely impact the performance of a safety related SSC intended function, are within the scope of License Renewal for 10 CFR 54.4(a)(2)."

Issue:

LR Drawing LR39601: At drawing coordinates C-5 and at D-5, the 122 Diesel Outside Exhaust fan and the 121 Diesel Outside Exhaust fan are shown as out-of-scope. The rest of the diesel room ventilation system is shown as in-scope. LRA Section 2.3.3.7 states that "components subject to an AMR begin at the Diesel Generator Rooms inlet damper, through the supply fans, and exits via exhaust fans and include the dampers, fans and duct."

Request:

1.0 Confirm that the fan housing is not in-scope for 10 CFR 54.4(a)(2).

2.3.3.14 Primary Containment Ventilation System (ZC)

The following RAIs were generated as part of the scoping and screening review of the ZC System for the Prairie Island Nuclear Generating Plant LRA.

RAI 2.3.3.14-01

Background

For systems in-scope of license renewal, Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue

LR Drawing No. LR-39602-1, Rev. 2: Containment dome air recirculation fans 13 and 14, both located in drawing coordinates G-6, are shown as out-of-scope for license renewal. The remaining portions of the containment air recirculation subsystem are shown as in-scope in accordance with 10 CFR 54.4(a)(1).

Request

Provide justification for the exclusion of these fan housings from the scope of license renewal. If these fan housings are in the scope of license renewal, in accordance with 10 CFR 54.4(a), and subject to an aging management review in accordance with 10 CFR 54.21(a)(1), update the LRA by providing the applicable information in the appropriate LRA sections and tables.

RAI 2.3.3.14-02

Background

Spent fuel pool emergency ventilation is not described in either Prairie Island Nuclear Generating Plant Updated Final Safety Analysis Report (UFSAR) or in Section 2.3.3.14 of LRA.

Issue

LR Drawing No. LR-39602-2 Rev. 2: A note in drawing coordinates E-3 states "From spent fuel pool emergency ventilation".

Request

Please describe this system. If it is meant to be "From spent fuel pool special ventilation," please clarify.

RAI 2.3.3.14-03

Background

For systems in-scope of license renewal, Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

Issue

LR Drawing No. LR-39602-1 Rev. 2: In drawing coordinates D-2, the in service purge exhaust fan housing ES-46311 is shown out-of-scope for license renewal. This fan housing belongs to spent fuel pool special ventilation subsystem which is required to exhaust the air in the event of high radiation and also during a fuel handling accident. The remaining portions of this subsystem are shown as in-scope in accordance with 10 CFR 54.4(a)(1).

Request

Provide justification for the exclusion of this fan housing from the scope of license renewal. If this fan housing is in-scope of license renewal, in accordance with 10 CFR 54.4(a), and subject to an aging management review in accordance with 10 CFR 54.21(a)(1), update the LRA by providing the applicable information in the appropriate LRA sections, tables, and drawings.

RAI 2.3-1 (General)

Background:

Title 10 Part 54.4 states, in part, that:

(a) Plant systems, structures, and components within the scope of this part are:

(1) Safety related systems, structures, and components which are those relied upon to remain functional during and following design basis events (as defined in 10 CFR Part 50.49(b)(1)) to ensure the following functions:

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 of this chapter, as applicable.

(2) All nonsafety-related systems, structures, and components whose failure could prevent satisfactory accomplishment of any of the functions identified in paragraphs (a)(1)(i), (ii), or (iii) of this section.

Issue:

Vaneaxial and propeller fans can be subject to blade failure. These blades have the potential to become missiles that could impact equipment identified in 10 CFR 54.5(a)(1). Some facilities credit fan housings for vaneaxial or propeller fans as barriers for these missiles.

Request:

1.0 Are there any vaneaxial or propeller fans in containment, diesel rooms, screenhouse, or auxiliary building whose housing are relied upon as a barrier from fan blade missiles and are not classified as in-scope? If so, please discuss why these fan housings should not be in-scope for 10 CFR 54.4(a)(2)?