

September 16, 2005

LICENSEE: Nuclear Management Company, LLC

FACILITY: Palisades Nuclear Plant

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON
AUGUST 11, 2005, BETWEEN THE U.S. NUCLEAR REGULATORY
COMMISSION (NRC) AND NUCLEAR MANAGEMENT COMPANY, LLC, (NMC)
CONCERNING DRAFT REQUESTS FOR ADDITIONAL INFORMATION
PERTAINING TO THE PALISADES NUCLEAR PLANT LICENSE RENEWAL
APPLICATION

The Nuclear Regulatory Commission (NRC) staff (the staff) and representatives of NMC held a telephone conference on August 11, 2005, to discuss and clarify the staff's draft requests for additional information (D-RAIs) concerning the Palisades Nuclear Plant license renewal application. The conference call was useful in clarifying the intent of the staff's D-RAIs.

Enclosure 1 provides a listing of the meeting participants. Enclosure 2 contains a listing of the D-RAIs discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

/RA Samson Lee For/
Michael J. Morgan, Project Manager
License Renewal Section A
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No.: 50-255

Enclosures: As stated

cc w/encls: See next page

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OFFICE	PM:RLEP	LA:RLEP	SC:RLEP
NAME	MMorgan /RA Samson Lee For)	MJenkins	SLee
DATE	09/16/2005	09/15/2005	09/16/2005

OFFICIAL RECORD COPY

Palisades Nuclear Plant

cc:

Robert A. Fenech, Senior Vice President
Nuclear, Fossil, and Hydro Operations
Consumers Energy Company
1945 Parnall Rd.
Jackson, MI 49201

Arunas T. Udryns, Esquire
Consumers Energy Company
1 Energy Plaza
Jackson, MI 49201

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Supervisor
Covert Township
P.O. Box 35
Covert, MI 49043

Office of the Governor
P.O. Box 30013
Lansing, MI 48909

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
Palisades Plant
27782 Blue Star Memorial Highway
Covert, MI 49043

Michigan Department of Environmental
Quality
Waste and Hazardous Materials Division
Hazardous Waste and Radiological
Protection Section
Nuclear Facilities Unit
Constitution Hall, Lower-Level North
525 West Allegan Street
P.O. Box 30241
Lansing, MI 48909-7741

Michigan Department of Attorney General
Special Litigation Division
525 West Ottawa St.
Sixth Floor, G. Mennen Williams Building
Lansing, MI 48913

Manager, Regulatory Affairs
Nuclear Management Company, LLC
27780 Blue Star Memorial Highway
Covert, MI 49043

Director of Nuclear Assets
Consumers Energy Company
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

John Paul Cowan
Executive Vice President & Chief Nuclear
Officer
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

Jonathan Rogoff, Esquire
Vice President, Counsel & Secretary
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

Douglas E. Cooper
Senior Vice President - Group Operations
Palisades Nuclear Plant
Nuclear Management Company, LLC
27780 Blue Star Memorial Highway
Covert, MI 49043

Paul A. Harden
Site Vice President
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

Robert A. Vincent
Licensing Lead - License Renewal Project
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

Palisades Nuclear Plant

- 2 -

cc:

Darrel G. Turner
License Renewal Project Manager
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

Mr. James Ross
Nuclear Energy Institute
1776 I Street, NW, Suite 400
Washington, DC 20006-3708

Mr. Douglas F. Johnson
Director, Plant Life Cycle Issues
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

Chairperson
Michigan Public Service Commission
PO Box 30221
Lansing, Michigan 48909-7721

DISTRIBUTION: Summary of telephone conference held on August 11, 2005 with NMC,
Dated: September 16, 2005

ADAMS Accession No.: ML052620595

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RLEP RF
M. Morgan (PM)

E-MAIL:

RidsNrrDrip
RidsNrrDe
G. Bagchi
K. Manoly
W. Bateman
J. Calvo
R. Jenkins
J. Fair
RidsNrrDssa
RidsNrrDipm
D. Thatcher
R. Pettis
G. Galletti
C. Li
K. Winsberg (RidsOgcMailCenter)
R. Weisman
M. Mayfield
A. Murphy
S. Smith (srs3)
S. Duraiswamy
Y. L. (Renee) Li
RLEP Staff

P. Lougheed, RIII
J. Ellegood, RIII
M. Garza, RIII
A. Stone, RIII
M. Padovan
L. Raghavan
T. Mensah
OPA

**LIST OF PARTICIPANTS FOR TELEPHONE CONFERENCE CALL
TO DISCUSS THE LICENSE RENEWAL APPLICATION
AUGUST 11, 2005**

Participants

Michael J. Morgan
Juan Ayala
Tanya Ford
Ronald Young
Larry Seamans
Robert Vincent
Malcolm Patterson
Shazia Faridi
Diane Mlynarczyk
Farideh Saba
Steven Pope

Affiliations

U.S. Nuclear Regulatory Commission (NRC)
NRC
NRC
NRC
Nuclear Management Company, LLC (NMC)
NMC
Information Systems Laboratories, Inc. (ISL)
ISL
ISL
ISL
ISL

**DRAFT REQUESTS FOR ADDITIONAL INFORMATION (D-RAI)
PACKAGE 26 - PLANT LEVEL SCOPING
PALISADES NUCLEAR PLANT
LICENSE RENEWAL APPLICATION
AUGUST 11, 2005**

The U.S. Nuclear Regulatory Commission staff (the staff) and representatives of Nuclear Management Company, LLC, (NMC) held a telephone conference call on August 11, 2005, to discuss and clarify the staff's draft requests for additional information (D-RAIs) concerning the Palisades Nuclear Plant license renewal application (LRA). The following D-RAIs were discussed during the telephone conference call.

Section 2.3.3.2 Circulating Water System

D-RAI 2.3.3.2-1

License renewal drawing LR- 653, Sheet 3, shows two pipes, at Locations C-1 and D-1, exiting the dilution pumps. These pipes are initially shown within the scope of license renewal. However, they become outside the scope of license renewal downstream of valves CW-450 and CW-451 (at Locations D-1 and C-2) without any indication of isolation. Explain why these pipes become outside the scope of license renewal downstream of the aforementioned valves.

Discussion: The applicant indicated that the requested information is located in the stated drawing and that the piping leaves the intake structure screen house and is no longer in an area with safety-related components. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.2-2

LRA Section 2.3.3.2 on Page 2-88, identifies the following valves as the boundaries of the portions of the circulating water system within the scope of license renewal: (1) valves MOV-5315 and MO-5316, which lead from dilution pumps P-40 A/B to cooling towers E-30 A/B Makeup/Fill located outside of the intake structure pump house, and (2) valves MOV-5326A (Basin 'A' Cooling Tower Blowdown Line Isolation) and MOV-5326B (Basin 'B' Cooling Tower Blowdown Line Isolation).

However, valves MOV-5315, MOV-5316, MOV-5326A and MOV-5326B are not shown within the scope of license renewal on license renewal drawing LR-653, Sheet 1, at Locations D-2, F-2, D-1 and G-1 respectively. Clarify if these valves are within the scope of license renewal. If not, justify the exclusion of the above-mentioned valves from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.2-3

The following components are shown on license renewal drawing LR- 653, Sheet 1, within the scope of license renewal. However, they are not listed in LRA Table 2.3.3-2 as component

groups subject to an AMR. These components serve a fluid pressure boundary intended function and are passive and long-lived. Clarify if these components are included in the component groups already listed in LRA Table 2.3.3-2. If not, justify the exclusion of these components from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

- a. Expansion joints at Locations C-4, C-7, F-4, and F-7
- b. Annubar flow elements (FE-5360A and FE-5360B) at Locations B-3 and H-3
- c. Flow Indicators (FI-5360A and FI-5360B) at Locations B-2 and H-3
- d. A flow straightening vane at Location C-2
- e. Differential pressure indicators dPI-1312 and dPI-1313 at Locations B-5 and G-5
- f. Metering orifices FE-5327A/B at Locations C/G-1, clarify why the flow elements are shown as outside of the scope of license renewal
- g. CWS side of the condensers and water boxes E-10E and E-10W at Locations F-6 and C-6

Discussion: The applicant indicated that the question will be clear after rewrite. This D-RAI will be sent as a formal RAI after the rewrite/rework.

Section 2.3.3.3 Component Cooling Water System

D-RAI 2.3.3.3-1

License drawing LR-223, Sheet 1B, shows component cooling water going to the component cooling water radiation monitor, RE-0915, to be monitored for activity, at Location D-4. The radiation monitor and the component cooling lines entering and exiting it are shown within the scope of license renewal. However, LRA Tables 2.3.3-3 and 3.3.2-3, do not list radiation monitor as a component group subject to an AMR.

Clarify whether radiation monitors are included in a component group already listed in LRA Table 2.3.3-3. If not, justify the exclusion of radiation monitors from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

In addition, it appears that there is an inconsistency between different systems related to the scoping of the radiation monitoring instrument. The radiation monitor associated with the component cooling water system is included in this system. However, radiation monitors associated with the radwaste system and steam generator blowdown systems are included in the radiation monitoring system. Explain the basis for this inconsistency.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.3-2

License renewal drawing LR-209, Sheet 3, shows component cooling water going to the charging pumps to provide cooling, at Location C-2. FSAR Table 9.6 lists the three charging pumps as components requiring component cooling flow for removing heat. LRA Table 2.3.3-3 identifies the component group "cooler" as being subject to an AMR. However, it does not identify the intended function of heat transfer associated with these coolers.

In order for the staff to complete its review, clarify whether the charging pump air coolers are included in LRA Tables 2.3.3-3 as component groups subject to an AMR. If so, explain why the intended function of heat transfer is not identified for these coolers. If not, justify the exclusion of these charging pump air coolers from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

Discussion: The applicant indicated that the requested information is located in the stated drawing and that these particular coolers are considered as a general component, “piping.” Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.3-3

The following components are shown on the component cooling water system license renewal drawings within the scope of license renewal. However, these components are not listed in LRA Table 2.3.3-3 as component groups subject to an AMR. These components serve the intended function of pressure boundary and are passive and long-lived. Clarify if these components are already included in LRA Table 2.3.3-8 as part of any other component group. If not, justify their exclusion from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

- a. In-line flow elements on LR-209, Sheets 1, 2, and 3
- b. Balancing (restrictive) orifices on LR-209, Sheet 2
- c. Also identify the intended function of the flow elements and flow orifices
- d. Component cooling surge tank (T-3) and component cooling chemical addition tank (T-98) on LR- 209, Sheet 3, at Locations G-3 and D-4 respectively

Discussion: The applicant indicated that the components are already included in the license renewal application table as part of the other component group (“piping” and “accumulators”). Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.3-4

LRA Table 2.3.3-3 of the component cooling water system lists “waste gas compressor cooler” as a component group subject to an AMR. However, waste gas compressor cooler C-54 and its associated components are shown outside the scope of license renewal on license renewal drawing LR-209, Sheet 3, at Location A-2. Identify the drawings of the component cooling water system which show the waste gas compressor cooler within the scope of license renewal or clarify the basis for this discrepancy.

Discussion: The applicant indicated that the license renewal application table refers to WGC C-50A and C-50B on drawing LR- 209-3. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.3-5

LRA Table 2.3.3-3 of the component cooling water system, lists “coolers” and “heat exchangers” as component groups subject to an AMR. However, based on the information provided in LRA Section 2.3.3.3, it is not clear what components are included in the component groups “cooler” or “heat exchangers.”

In order for the staff to complete its review, identify the components that the coolers and heat exchanger component groups comprise.

Discussion: The applicant indicated that the requested information is located in the stated table and the coolers and heat exchangers are considered as components, “heat exchangers”/ “coolers”. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

Section 2.3.3.4 PNP Compressed Air System

D-RAI 2.3.3.4-1

FSAR Section 9.5.1.5.c for the compressed air system states that “The safety positions and position on a loss of air supply for significant safety related or important to safety air-operated valves are listed in FSAR Table 9-9. No failure of valves due to degraded instrument air precludes maintaining the Plant in a safe condition provided the backup systems are available.” FSAR Table 9-9 for valve CV-2191 indicates that the safety position of this valve is open and the position after loss of air is closed with a note also stating that an accumulator is installed to open the valve upon loss of normal air supply.

However, the air supply line and components between valve CV-2191 and the air reservoir are shown outside the scope of license renewal on license renewal drawing LR-202, Sheet 1, at Location H-5. Failure of the air supply line, its associated in-line components, and the air reservoir will cause the valve to close when the safety position of the valve is open. Therefore the air supply line and components between valve CV-2191 and the air reservoir should be within the scope of license renewal.

Provide the basis for excluding the above-mentioned components from the scope of license renewal and being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1), respectively.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.4-2

Compressed air license renewal drawings show portions of the air line connecting to the control valve/damper operators as within the scope of license renewal. However, the following portions of the control valve/damper operators are shown outside the scope of license renewal. Explain how the valves/dampers perform their functions with a failure (loss of air) in the portions that are excluded from the scope of license renewal:

- a. The air supply line and solenoid valve to valve CV-2165 on LR-202, Sheet 1A (Location F-5).
- b. The air supply lines and solenoid valves connecting to valves CV-0517, CV-0515, CV-0523, CV-0519, CV-0518 and CV-0520 on LR-205, Sheet 1.
- c. The air supply line beyond the solenoid valve to CV-0522A which is shown with red tick marks on LR-205, Sheet 2 (Location G-3).
- d. The air supply line connecting to valve CV-0736 up to POC-0736 on LR-207, Sheet 2 (Location C-4).

- e. The air supply line connecting to valve CV-1061 up to POC-1061 on LR-210, Sheet 2 (Location G-3).
- f. The air supply line connecting to valve CV-1113 up to valve CA-10314 on LR-211, Sheet 3 (Locations G-8, H-8).
- g. Portions of the air lines connecting to POC-0731, POC-0732, CV-0731, CV-0732 and CV-0729 and not highlighted in red on license renewal drawing LR-212, Sheet 2, at Locations D-2 and E-2.
- h. F-354 and the air supply line beyond SV-1768, F-353 and F-355 and the connecting air supply lines on LR-218, Sheet 6. Also, F-352 and F-351 and the connecting air supply lines on LR-218, Sheet 6A.
- i. The air supply lines and associated components on both sides of valves CV-0735, CV-1221 and CV-0734 on LR-212, Sheet 2 (Locations F-8, G-8 and H-6), and valves MV-PC-161, MV-PC-162 and MV-PC-163 on LR-219, Sheet 1B (Locations D-5, D-6).
- j. The air line between valves (CA-187 and CA-10190) shown as outside the scope of license renewal on LR-212, Sheet 3 (Location F-1), and similarly on LR-212, Sheet 4, at Locations C-3 and D-3, and LR-212, Sheet 5 at Location E-7.

Discussion: The applicant indicated that the question will be clear after rewrite. This D-RAI will be sent as a formal RAI after the rewrite/rework.

D-RAI 2.3.3.4-3

License renewal drawing LR-212, Sheet 1, shows drain traps at several locations within the scope of license renewal. However, LRA Table 2.3.3-4 of the compressed air system does not list drain traps as a component group subject to an AMR. These drain traps serve the intended function of pressure boundary and are passive and long-lived. Clarify whether drain traps are already included in LRA Table 2.3.3-4 as part of the component group “steam traps.” If not, justify their exclusion from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

In addition, the component group “traps (steam)” is listed in LRA Table 2.3.3-4 as a component group subject to an AMR. However, steam traps were not found on any license renewal drawings listed for the compressed air system. Provide drawings or other documents that present the location of the compressed air system steam traps that are within the scope of license renewal in accordance with 10 CFR 54.4(a).

Discussion: The applicant indicated that the requested information is located in the stated drawing and that the traps are listed in the table and are considered a general component, “traps (steam).” This includes drain traps. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.4-4

License renewal drawing LR-212, Sheet 3 (Locations D-7, F-5), shows air lines within the scope of license renewal. However, the continuing portions of these lines are shown outside the scope of license renewal. Explain how the portions that are within the scope of license renewal will be isolated from the portions that are not within the scope of license renewal without a valve or other component to isolate them.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.4-5

LRA Section 2.3.3.4 states that some SSCs for the compressed air system are within the scope of license renewal due to fire protection in accordance with 10 CFR 54.4(a)(3). However, based on the information provided in the LRA and the compressed air license renewal drawings, the staff is not able to determine which compressed air system components are within the scope of license renewal due to fire protection regulated event.

Provide drawings or another type of document that present the location of the components of the compressed air system which are within the scope of license renewal in accordance with 10 CFR 54.4(a)(3) fire protection criteria.

Discussion: The applicant clarified that the location of the components which are within the scope of license renewal in accordance with 10 CFR 54.4(a)(3) are shown on the Appendix R color-coded P&IDs. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.4-6

The following components are shown on the compressed air license renewal drawings within the scope of license renewal. However, they are not listed in LRA Table 2.3.3-4 as component groups subject to an AMR. These components serve a fluid pressure boundary intended function and are passive and long-lived. Clarify if these components are already included in LRA Table 2.3.3-4 as part of any other component group. If not, justify the exclusion of these components from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

- a. A silencer (S-966) on LR-225, Sheet 1 (Location A-6).
- b. A mechanical lubricator ML-3036 on LR-225, Sheet 1A (Location F-7).
- c. Also, explain why the supply air lines on both sides of the mechanical lubricator (Item b) are outside the scope of license renewal.
- d. Orifices on LR-225, Sheet 1 (Locations E-6, E-7), also provide all intended functions that these orifices serve.
- e. Level gages on LR-212, Sheet 1, at Locations B-7 and G-7.
- f. Air receivers T-8A/B/C at Locations B/D/F-6.
- g. Breathers on LR-21, Sheet 1A, at B-8 and F-8.
- h. Pressure and temperature instruments (element, indicator, switch, and transmitter) on LR-21, Sheet 1A.

Discussion: The applicant indicated that the question will be clear after rewrite. This D-RAI will be sent as a formal RAI after the rewrite/rework.

D-RAI 2.3.3.4-7

License renewal drawing LR-212, Sheet 1A, shows piping and instrumentation diagrams for air compressors C-2A and C-2C.

- a. First and second stages of air compressor C-2A and C-2C are shown as outside the scope of license renewal. Also, a note on the drawing states, "Per NEI 95-10, air compressors are excluded from the scope of license renewal. Therefore all components located inside C-2A and C-2C are excluded from license renewal scope." However, compressors are listed in LRA Table 2.3.3-4 as subject to an AMR. Explain the contradiction between the LRA table and the license renewal drawing.
- b. Fans for the air compressors C-2A and C-2C are shown as within the scope of license renewal and listed in LRA Table 2.3.3-4 with the fluid pressure boundary intended function. Explain how these air compressor fans serve a fluid pressure boundary.
- c. The positive displacement pumps for air compressors C-2A and C-2C are shown as within the scope of license renewal. The component type pumps is listed in LRA Table 2.3.3-4 as subject to an AMR with a fluid pressure boundary intended function. Explain how the pumps with an internal fluid of oil are within the scope of license renewal and the oil sump and oil manifold which also maintain fluid pressure boundary and are passive, are excluded from the scope of license renewal in accordance with 10 CFR 54.4(a).
- d. The oil cooler and aftercooler tube and shell sides for air compressors C-2A and C-2C are shown as within the scope of license renewal. The tube side of each intercooler for air compressors C-2A and C-2A is shown as within the scope of license renewal. However, the shell side of the intercoolers are shown outside the scope of license renewal. Explain why the shell side of the compressor intercoolers is exclude from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.4-8

LRA Table 2.3.3-4 of the compressed air system lists blowers as a component group subject to an AMR with the intended function of fluid pressure boundary in accordance with 10 CFR 54.21(a)(1). However, the staff could not identify any blowers within the scope of license renewal on the license renewal drawings for the compressed air system. Provide drawings or other documents that present the location of the compressed air system blowers that are within the scope of license renewal in accordance with 10 CFR 54.4(a).

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.4-9

License renewal drawing LR-212, Sheet 1, shows four boxes within the scope of license renewal. These boxes connect to solenoid valves (SVs) SV-1208, SV-1207, SV-1209 and SV-1205 by air lines, at Locations G-3 and G-4. However, the symbol for these boxes is not identified on the Palisades P&ID legend drawing (Drawing-200).

Identify the component represented by this symbol and its intended function. Also, clarify whether this component is listed in LRA Table 2.3.3-4 as a component group subject to an

AMR. If not, justify its exclusion from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

Discussion: The applicant clarified that this is a four-way valve and that each valve is represented by the “SV” that is connected to the top of the valve. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

Section 2.3.3.6 Emergency Power System

D-RAI 2.3.3.6-1

LRA Section 2.3.3.6 in the System Function Listing “EDG-05” (Page 2-109) states that each emergency generating system is equipped with a local alarm station and local instrumentation to allow supervision and monitoring of the system during different modes of operation and testing. The system provides sufficient alarms and indications to alert or inform the operator of system conditions, including those which are abnormal, adverse or potentially adverse to proper system operation. The alarms are safety-related and needed to support operation of the diesel generator. This emergency power system function is within the boundary of license renewal.

However, license renewal drawing LR-214, Sheet 1, shows annunciator alarms at several locations outside the scope of license renewal. Clarify whether these alarms are within the scope of license renewal. If not, justify the exclusion of the above-mentioned annunciator alarms from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a)(1).

Discussion: The applicant indicated that the alarms do not support a license renewal intended function; therefore, they were excluded from the scope of license renewal. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.6-2

The following components are shown on the emergency power system license renewal drawings within the scope of license renewal. However, these components are not listed in LRA Table 2.3.3-6 as component groups subject to an AMR. These components serve the intended function of pressure boundary and are passive and long-lived. Clarify if these components are already included in LRA Table 2.3.3-6 as part of any other component group. If not, justify their exclusion from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

- a. Turbocharger housing on LR-214, Sheet 1, at Location H-1
- b. Drain traps on LR-214, Sheet 1, at Locations C-6 and C-8
- c. Governor housing on LR-214, Sheet 1, at Location C-5
- d. Crankcase exhaust on LR-214, Sheet 1, at Location B-2
- e. Flexible connections on LR-214, Sheet 1, at several locations

Discussion: The applicant indicated that the requested information is located in above drawings and the items presented are in the stated tables as “piping” and “accumulators.” Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.6-3

The following components are identified in LRA Section 2.3.3.6 or LRA Table 2.3.3-6 of the emergency power system within the scope of license renewal and as a component group subject to an AMR. However, the staff could not identify these components within the scope license renewal on the license renewal drawings for the emergency power system. Provide drawings or other documents that present the location of these emergency power system components that are within the scope of license renewal and subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1), respectively.

- a. Several tanks on license renewal drawing LR-214, Sheet 1, are shown within the scope of license renewal. As an example, these include starting air tanks T31A, at Location D-8, and EDG day tank T-25A at Location G-4/5. Clarify if tanks are included under the component group accumulator and note the location of accumulators on the drawings. LRA Table 2.3.3-6 lists accumulators as a component group subject to an AMR.
- b. LRA Table 2.3.3-6 lists “traps (steam)” as a component group. Drain traps were found on license renewal drawing LR-214, Sheet 1 (Locations C-6 and C-8). No steam traps were found by the staff on the drawings for this system.
- c. LRA Table 2.3.3-6 lists oil pans under the component group, “miscellaneous mechanical.” Oil pans are also identified in LRA Section 2.3.3.6 as a component that is subject to an AMR. However, oil pans are not located on the drawings for this system.
- d. Fans and blowers are listed in LRA Table 2.3.3-6. Fans are also identified in LRA Section 2.3.3.6 as a component that is subject to an AMR. However, fans and blowers are not located on the drawings.

Discussion: The applicant indicated that tanks are part of the component group accumulators. They also indicated that traps are a commodity that will include the traps for the EPS. The oil pan is a commodity that was added to make sure that all the components were captured for the EPS system. The applicant finally indicated that the blowers, that make-up the commodity “fans and blowers”, are the turbochargers. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

Section 2.3.3.8 Fuel Oil System

D-RAI 2.3.3.8-1

License renewal drawing LR-907 (Location E-1) shows a section of pipe from downstream of valve FO-0119 to upstream of the branch line to valve FO-0559 as outside the scope of license renewal. This includes branch lines to valves FO-0557 and FO-0558. However, all components upstream of valve FO-0119 and downstream of the branch line to valve FO-559 are shown within the scope of license renewal. Justify the exclusion of the section of pipe downstream of valve FO-0119 from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Discussion: The applicant indicated that the requested information is located in the stated drawing and that the piping is out of scope because the piping is located in areas that are out of scope (and these areas cannot be represented on the P&ID). Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.8-2

License renewal drawing LR-215, Sheet 1 (Location E-8), shows level switches, LS-1507, and LS-1506 as within the scope of license renewal, but the pipes and valves leading to these switches are not shown within the scope of license renewal. Justify the exclusion of these piping and valves from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Discussion: The applicant indicated that the requested information is located in the stated drawing and that the piping and valves are out of scope because these components are located in areas that are out of scope (and these areas cannot be represented on the P&ID). Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.8-3

The following components are not listed in LRA Table 2.3.3-8 as being subject to an AMR, but are shown as within the scope of license renewal on the license renewal drawings for the fuel oil system. These components are passive and long-lived. Justify the exclusion of these components from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

- a. Flame arresters on license renewal drawing LR-214, Sheet 1 at Locations F-8 and G-8 and on LR-216, Sheet 1 at Locations F-7 and D-6
- b. Also, justify the exclusion of the flame arresters on license renewal drawing LR-215, Sheet 1 (for T-28 at Location E-7) and on LR-655, Sheet 1 (for T-39 at Location F-7) from the scope of license renewal
- c. Flexible connections on LR-216, Sheet 1 at several locations to the engine coolers

Discussion: The applicant indicated that the requested information is located in the stated table and that the items listed are considered “piping.” Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.8-4

A number of tanks (T-10A on license renewal drawing LR-214, Sheet 1; T-28 on license renewal drawing LR-215, Sheet 1; T-24 and T-40 on license renewal drawing LR-216, Sheet 1; T-39 on license renewal drawing LR-655, Sheet 1; and T-926 on license renewal drawing LR-907) are shown as within the scope of license renewal. LRA Table 2.3.3-8 does not list tanks as a component group subject to an AMR. While, accumulators are listed in LRA Table 2.3.3-8 as a component group within the scope of license renewal for the fuel oil system, accumulators are not found on the license renewal drawings. Clarify if tanks are considered under the component group accumulator. If not, justify the exclusion of these tanks from being subject to an AMR, and note the location of the accumulators on the drawings.

Discussion: The applicant indicated that the requested information is located in the stated drawings and that the tanks are listed in the associated tables as “accumulators.” Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.8-5

The LRA Section 2.3.3.8 describes system function FOS-04 as, “The system contains an alternate pumping system to supply fuel oil to the day tanks (T-25A/B) from T-926 for Appendix R safe shutdown for fire protection.” It further explains that the system consists of a portable diaphragm pump and a rubber hose installed between T-926 and T-25A/B. Justify why system function FOS-04 is not indicated in its associated table as within the scope of license renewal in accordance with the requirements of the 10 CFR 54.4(a)(3) criterion for fire protection, since this alternate system is needed for Appendix R safe shutdown.

Discussion: The applicant indicated that the requested information is an alternative means of supplying fuel - note portable pump and rubber hoses - and, as such, is not necessarily to be considered in scope for renewal purposes. It is not necessarily need for safe shutdown. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.8-6

License renewal drawing LR-214, Sheet 1, shows hand switches, HS1415, HS1418 and HS1452, HS1453 (Locations H-5 and G-5) which shown within the scope of license renewal, but the leads (cables) to them are shown outside the scope of license renewal. According to LRA Section 2.1.2.2, the electrical systems contained in the mechanical system were usually left in their respective systems. Justify the exclusion of these cables from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Discussion: The applicant indicated that the requested information is located in the stated drawing and that the cabling is evaluated as a commodity. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

Section 2.3.3.10 Miscellaneous Gas System

D-RAI 2.3.3.10-1

The following components are shown on the license renewal drawings for the miscellaneous gas system within the scope of license renewal. However, LRA Table 2.3.3-10 of the miscellaneous gas system does not list these component groups subject to an AMR. These components serve a pressure boundary intended function and are passive and long-lived. Clarify if these components are already included in LRA Table 2.3.3-10 as part of any other component group. If not, justify the exclusion of these components from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

- a. Expansion coils and rupture disc on license renewal drawing LR-222, Sheet 1, at Location G-7
- b. Hoses on LR-222, Sheet 1, at Locations B-1 and C-1
- c. Mechanical lubricator on LR-222, Sheet 2, at Location D-7
- d. Containment sampling pumps on LR-224, Sheet 2, at Locations C-6 and G-5
- e. Moisture separators on LR-224, Sheet 2, at Locations C-57, F-5
- f. Analyzers on LR-224, Sheet 2, at Locations C-4 and G-4

- g. Restricting orifices on LR-224, Sheet 2, at Locations C-4 and G-4. Also, clarify the intended function that these restricting orifices serve
- h. Heat trace control panels on LR-224, Sheet 2, at Locations C-7 and G-7

Discussion: The applicant indicated that the question will be clear after rewrite. This D-RAI will be sent as a formal RAI after the rewrite/rework.

D-RAI 2.3.3.10-2

License renewal drawing LR-222, Sheet 1 (Location B-1), shows the nitrogen supply lines to the spent fuel pool gate within the scope of license renewal. However, the symbol for the spent fuel pool gate and the inner and outer seals are shown as outside the scope of license renewal. Explain why the spent fuel pool gate seals are outside the scope of license renewal while the nitrogen gas, which is required to inflate the seals to perform its intended function, is within the scope of license renewal.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.10-3

On license renewal drawing LR-222, Sheets 2 and 3, almost all of the drawing is shown as within the scope of license renewal except the nitrogen bottles and air containers. These nitrogen bottles and air bottles are required to supply nitrogen and air backup to the safety-related systems. Explain why the nitrogen and air supply bottles are not within the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Similarly, hydrogen bottles on license renewal drawing LR-222, Sheet 1A (Location E-8), and their associated piping and components to line HB-21-1 are shown as outside the scope of license renewal. Line HB-21-1 from upstream of valve 1-130-WE-88 to the continuation flag to the volume control tank is shown as within the scope of license renewal for the chemical and volume control system. It appears that these hydrogen bottles supply backup hydrogen to the volume control tank T-54, shown on license renewal drawing LR-202, Sheet 1A, at Location F-7. Justify the exclusion of the above nitrogen bottles from the scope of license renewal and from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1), respectively.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.10-4

LRA Section 2.3.3.10 describes MGS-12 as a miscellaneous gas system function that provides containment isolation boundary for north and south containment electrical penetrations. It further explains that this part of the system provides an inert atmosphere to minimize the potential for corrosion by providing a dry nitrogen blanket to prevent condensed moisture buildup in the penetration canisters. However, MGS-12 is depicted on its associated table as outside the scope license renewal, since no license renewal criterion is marked for this function. Also, the electrical penetrations on license renewal drawing LR-222, Sheet 3, are shown as outside the scope of license renewal. Explain why the electrical penetrations are outside the

scope of license renewal, while the nitrogen supply lines to them are within the scope of license renewal. Also explain the reason that MGS-12 is not marked as a system function that supports a license renewal criterion.

Discussion: The applicant indicated that the requested information is located in the stated drawing and that MGS-12 will be included in scope. Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.10-5

License renewal drawing, LR-224, Sheet 1 (Location C-7), shows pump P-2402 as within the scope of license renewal for the miscellaneous gas system. However, the license renewal drawing indicates that the pump is part of a portion of the system which is no longer in service. Identify the license renewal criterion that this pump supports, while it is no longer in service. Also, explain why the pipes leading to this pump are not within the scope of license renewal. In addition, pumps are not listed in LRA Table 2.3.3-10 as a component group subject to an AMR. Justify the exclusion of pump P-2402 from being subject to an AMR in accordance with the requirements of 10 CFR 54.121(a)(1).

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.10-6

License renewal drawing LR-224, Sheet 2 (Locations B-6 and D-6), shows the lines beyond two closed valves continuing on to license renewal drawing LR-219, Sheet 2 as within the scope of license renewal. On license renewal drawing LR-219, Sheet 2, the continuation of the lines from drawing LR-224, Sheet 2, are also shown within the scope of license renewal. However, before entering the post accident sampling monitoring panel C103-1, these lines are shown outside the scope of license renewal. Explain why these lines are not within the scope of license renewal prior to entering the post accident sampling monitoring panel C103-1.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.10-7

LRA Table 2.3.3-10 lists accumulators and tanks as component groups subject to an AMR with a fluid pressure boundary intended function. Clarify whether nitrogen bottles on license renewal drawing LR-222, Sheet 1 (Locations B-2, E-7, and E-8), or reagent gas and calibration gas bottles on LR-224, Sheet 2, are included in the accumulators/tanks component groups. If these bottles are excluded from being subject to an AMR because they are considered as consumable components, then provide the frequency or condition of their replacement. Also, identify waste gas system accumulators/tanks that are within the scope of license renewal and are subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1), respectively.

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

Section 2.3.3.11 Radwaste System

D-RAI 2.3.3.11-6

License renewal drawing LR-224, Sheet 1, shows a section of piping at Location A-8 continuing to the equipment drain tank on license renewal drawing LR-210. However, license drawing LR-224, Sheet 1, does not list the sheet number for drawing LR-210, to which this section of piping continues. Also, this section of piping cannot be found on license renewal drawing LR-210, Sheet 1, which shows the equipment drain tank (T-80) at Location C-6.

Identify where this section of piping is located on the license renewal drawings for the radwaste system or provide another drawing which shows the continuation of this piping to the equipment drain tank.

Discussion: The applicant indicated that the requested information is located in the stated drawing and that the piping is out of scope because the piping is located in areas that are out of scope (and these areas cannot be represented on the P&ID). Therefore, this question is WITHDRAWN and will not be sent as a formal RAI.

D-RAI 2.3.3.11-7

License renewal drawing LR-210, Sheet 1B, shows the clean resin transfer tank (T-61) at Location D-1 as within the scope of license renewal in accordance with 10 CFR 54.4(a). However, the lines from the clean resin transfer tank to the purification and deborating ion exchangers and to the spent fuel demineralizer, at Location B-1, are excluded from the scope of license renewal. Justify the exclusion of the above mentioned lines (including flow gauge FG-1054) from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.

D-RAI 2.3.3.11-8

License renewal drawing, LR-650, Sheet 1B, shows clean waste transfer pumps P-94 and P-97B, at Location C/ D-6, within the scope of license renewal. However, the lines from these clean waste transfer pumps to the continuation license renewal drawing LR-650, Sheet 1, are shown outside the scope of license renewal. Justify the exclusion of the above mentioned lines, including the restricting orifices R0-5026 and RO-5027, from the scope of license renewal in accordance with the requirements of 10 CFR 54.4(a).

Discussion: The applicant indicated that the question is clear. This D-RAI will be sent as a formal RAI.