

August 7, 2009

Mr. Richard L. Anderson, Vice President
Duane Arnold Energy Center
FPL Energy Duane Arnold, LLC
3277 DAEC Road
Palo, Iowa 52324

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
DUANE ARNOLD ENERGY CENTER LICENSE RENEWAL APPLICATION –
SECTION 2.2 AND 2.3 (TAC NO. MD9769)

Dear Mr. Anderson:

By letter dated September 30, 2008, as supplemented by letter dated January 23, 2009, FPL Energy Duane Arnold, LLC, submitted an application for renewal of operating license DPR-49 for the Duane Arnold Energy Center (DAEC). The staff of the U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing this application in accordance with the guidance in NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants." During its review, the staff has identified areas where additional information is needed to complete the review. The staff's requests for additional information are included in the enclosure. Further requests for additional information may be issued in the future.

Items in the enclosure were discussed with Mr. Ken Putnam, of your staff, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me by telephone at 301-415-3137 or by e-mail at Maurice.Heath@nrc.gov.

Sincerely,

/RA/

Maurice L. Heath, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosure:
As stated

cc w/encl: See next page

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DATE	08/07/09	08/03/09	08/07/09	08/07/09

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Letter to Richard L. Anderson from Maurice L. Heath dated August 7, 2009

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SECTION 2.2 AND 2.3 (TAC NO. MD9769)

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**DUANE ARNOLD ENERGY CENTER
LICENSE RENEWAL APPLICATION
REQUEST FOR ADDITIONAL INFORMATION
SECTION 2.2 AND 2.3**

RAI 2.2-01

Background:

License Renewal Application (LRA) Section 2.1 states in part “Each license renewal application must then provide an Integrated Plant Assessment that fulfills the requirements of §54.21, §54.3 Definitions,” defines the Integrated Plant Assessment as:

Integrated Plant Assessment (IPA) is a licensee assessment that demonstrates that a nuclear power plant facility's structures and components requiring aging management review in accordance with [10 CFR] 54.21(a) for license renewal have been identified and”

Issue:

The following Updated Final Safety Analysis Report (UFSAR) systems could not be located in Table 2.2-1 or Table 2.2-2.

UFSAR Section	System
1.3.2.1 1.2 General Service Water System	Turbine Building Cooling Water System
12.3.3.3.3 Technical Support Center Radiation Monitoring System	Technical Support Center Radiation Monitoring System
9.5.8 Diesel-Generator Combustion Air Intake and Exhaust System	Diesel-Generator Combustion Air Intake and Exhaust System

Request:

Provide the reasoning for not including the above systems in Table 2.2-1 or Table 2.2-2.

RAI 2.3-01

Background:

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

Issue:

The following identifies drawings where the staff was unable to identify the license renewal boundary because: (1) continuations were not provided or are incorrect, or (2) the continuation drawing was not provided.

ENCLOSURE

LRA Section/Drawing	Issue
Section 2.3.3.13	
BECH-M146-LR	Location B-4 shows a 4"-JBD-1 line as in scope for license renewal for 10 CFR 54.4 (a)(2). The line is continued to BECH-C140 but the continuation location and drawing are not provided.
Section 2.3.3.15	
BECH-M173-LR	Locations C-5 and E-5 show continuations of 10 CFR 54, 4(a)(1) 2"-KBF-1 piping sections from drawing M133 (E-6). Review of drawings BECH-M133<1, 2, 3, 4, 5>-LR could not locate the continuations to drawing BECH-M173-LR.
	Location A-5 shows a continuation of a 10 CFR 54,4(a)(1) pipe section (pneumatic signal) to drawing BECH-M158-LR (C-2) (to CV5837B). Review of drawing BECH-M158-LR could not locate the continuation at C-2 but a possible continuation was found at location A-5.
Section 2.3.3.22	
BECH-M116-LR	Location (A-5) shows a continuation of 10 CFR 54.4 (a)(2) pipe section (2"-HCC-133) to drawing BECH-M137-LR (C-7). Review of drawings BECH-M137<1>-LR and BECH-M137<2>-LR could not locate the continuation from BECH-M116-LR.
Section 2.3.3.27	
BECH-M158-LR	Location A-6 shows a continuation of a 10 CFR 54.4 (a)(3) pipe section (3"-KBF-1 from Fire Protection System) from drawing BECH-M133<1>-LR (D-5). Review of drawing BECH-M133<1>-LR could not locate the continuation to BECH-M158-LR.
BECH-M161-LR	Location D-5 shows a continuation a pipe section (before valve V61-0116) from the same drawing, however, review of drawing BECH-M161-LR could not locate the continuation.
	Location E-7 shows a continuation of a pipe section (1 1/2"-HBD-163) from drawing BECH-M160<2>-LR. Drawing BECH-M160<2>-LR was not provided with the LRA.
Section 2.3.3.31	
BECH-M106-LR	Location B-5 shows continuation of the line downstream of valve V06-0194 to drawing BECH-M147 (H-6). Location H-6 does not exist on drawing BECH-M147.
BECH-M147-LR	Location E-1 shows continuation of the line downstream of valve V47-0117; however, no continuation location is provided.

Section 2.3.3.32	
BECH-M161-LR	Location B-6 shows a continuation with a notation to see Note #9. Note #9 refers to M527 which was not provided with the LRA.
Section 2.3.4.1	
BECH-M136-LR	Location D-4 shows line 1/2"-HCD-40 downstream of valve V36-0078 with a system boundary interface for systems 37.00 and 68.00. However, the location of the license renewal boundary cannot be determined.
Section 2.3.4.2	
BECH-M103<3>-LR	<p>Location B-6 downstream of valve</p> <ul style="list-style-type: none"> • Location B-6 downstream of valve V03-0158 • Location B-6 downstream of valve V03-0151 • Location B-6 downstream of valve V03-0153 • Location B-6, downstream of valve V03-0155 • Location A-6 downstream of valve V03-0150 • Location B-5 downstream of valve V03-0157 • Location B-5 downstream of valve V03-0161 • Location A-5 downstream of valve V03-0162 • Location B-2 downstream of valve V03-0138
BECH-M104<2>-LR	Location D-6 downstream of HP Heater 1E006A (to CV1158A)
BECH-M104<3>-LR	Location D-6 downstream of valve V04-0050
BECH-M107-LR	Location D-2 downstream of valve V07-0314
	Location E-8 downstream of valve V07-0318
Section 2.3.4.4	
BECH-M114-LR	Location B-2 shows an in-scope line continuation TO MSIV drawing M184 (H-2). However, this continuation cannot be found on BECH-M184-LR.

Request:

Provide additional information to locate the continuations described above.

RAI 2.3.3.4-01

Background:

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

Issue:

License renewal drawing BECH-M142-LR (E-8) upstream of vent V42-0020, shows a component as in scope for license renewal for 10 CFR 54.4(a)(2), whereas a similar component at location E-7 upstream of vent V42-0019 is shown as not in scope for license renewal.

Request:

Provide additional information explaining why the component upstream of vent V42-0019 is not within the scope of license renewal.

RAI 2.3.3.4-02

Background:

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

Issue:

License renewal drawing BECH-M142-LR (C-8) at component AT4254, shows flexible connections as in scope for license renewal for 10 CFR 54.4(a)(2). LRA Table 2.3.3-4 which lists components that require AMR, does not include these flexible connections.

Request:

Provide additional information explaining why flexible connectors are not included in LRA Table 2.3.3-4.

RAI 2.3.3.8-01

Background:

In LRA Section 2.3.3.8 portions of the Drywell Sumps are in-scope based on criteria 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2). License renewal rule 10 CFR 54.21(a) requires applicants to list all component types subject to an AMR.

Issue:

License renewal drawing BECH-M137 <1>-LR (C-6 and F-6) shows flow element venturi casings (FE3708 and FE3707) in-scope for 10 CFR 54.4(a)(2). Flow element venturi casings are not included in LRA Table 2.3.3-8 as a component type.

Request:

Provide additional information explaining why flow element venturi casings are not included as a component type subject to an AMR in LRA Table 2.3.3-8.

RAI 2.3.3.13-01

Background:

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

Issue:

License renewal drawing BECH-M111-LR (E-8) upstream of radiation element RE-4767, shows a 10 CFR 54.4 (a)(2) 3" line as not in scope for license renewal. This line is directly connected to a 12"-JBD-11 line that is within the scope of license renewal.

Request:

Provide additional information explaining why the 3" line is not within the scope of license renewal.

RAI 2.3.3.13-02

Background:

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

Issue:

License renewal drawing BECH-M146-LR (A-2, A-3 and A-4) shows three service water pump casings as in scope for license renewal for 10 CFR 54.4(a)(2). The components XJ4937A, XJ4937B and XJ4937C attached to the pump casings are shown as not in scope for license renewal.

Request:

- Provide additional information explaining the function and component type for XJ4937A, XJ4937B and XJ4937C.
- Provide additional information explaining why these components are not within the scope of license renewal.

RAI 2.3.3.14-01

Background:

LRA Section 2.3.3-14, Hydrogen Water Chemistry System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(2) because the system includes nonsafety-related structures, systems and components (SSC) whose failure could prevent satisfactory

accomplishment of a safety-related function due to spatial proximity. Portions of the system are also within scope of license renewal for 10 CFR 54.4(a)(3) because the system contains components credited in the current licensing basis for Fire Protection (10 CFR 50.48).

Issue:

License renewal drawing BECH- M189<2>-LR (A-3), shows a line from a compressed oxygen bottle penetrating the oxygenated water tank. The water tank is shown within the scope of license renewal per 10 CFR 54.4(a)(2); however, the line from the oxygen bottle is not.

Request:

Provide additional information explaining why the oxygen line and associated penetration are not within the scope of license renewal for 10 CFR 54.4(a)(2).

RAI 2.3.3.14-02

Background:

LRA Section 2.3.3-14, Hydrogen Water Chemistry System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(2) because the system includes nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of a safety related function due to spatial proximity. Portions of the system are also within scope of license renewal for 10 CFR 54.4(a)(3) because the system contains components credited in the current licensing basis for Fire Protection (10 CFR 50.48).

Issue:

License renewal drawing BECH-M189<1> (E-2 and F-2) shows ½" lines, CCD-2, and the associated check valves V89-0052 and V89-0049 within the scope of license renewal for 10 CFR 54.4(a)(2). The license renewal boundary is shown to be at the check valves. The continuation of the CCD-2 lines upstream of the check valves are shown as not within the scope of license renewal.

Request:

Provide additional information explaining why the continuations of the ½"-CCD-2 lines upstream of check valves V89-0052 and V89-0049 are not within the scope of license renewal.

RAI 2.3.3.15-01

Background:

LRA Section 2.3.3.15, Instrument Air System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2) and have intended functions of providing a pressure and leakage boundary.

Issue:

License renewal drawing BECH-M173-LR (B-7) shows valve SV7334B as not in-scope. A similar valve SV7333B is in scope.

Request:

Provide additional information explaining why valve SV7334B is not scope or confirm the staff located continuation is correct.

RAI 2.3.3.16-01

Background:

In LRA Section 2.3.3.8 portions of the Intake and Traveling Screens are in-scope based on criteria 10 CFR 54.4(a)(1), 10 CFR 54.4(a)(2) and 10 CFR 54.4(a)(3). License renewal rule 10 CFR 54.21(a) requires applicants to list all component types subject to an AMR.

Issue:

License renewal drawing BECH-M129-LR (D-2 and D-8) shows strainers (1S-185A & B) in-scope for 10 CFR 54.4(a)(2). Strainers are not included in the list of component types in LRA Table 2.3.3-16.

Request:

Provide additional information explaining why strainers are not included as a component type subject to an AMR in LRA Table 2.3.3-16.

RAI 2.3.3.17-01

Background:

The OE System is within the scope of license renewal based on the criteria of 10 CFR 54.4(a)(1). Portions are in scope as nonsafety-related affecting safety-related components for spatial interaction based on the criteria of 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M105<1>-LR (F-6) shows a section of piping (3"-EBD-5) continued to drawing BECH-149-LR (C-8). LR note 2 states that "a portion of this pipe runs through a room(s) that contains safety-related components and would be in scope for license renewal". However, review of drawing BECH-149-LR (C-8) found that the continuation (3"-EBD-5) is not included in scope of license renewal.

Request:

Provide additional information explaining why the continuation on BECH-149-LR (C-8) is not within the scope of license renewal.

RAI 2.3.3.21-01

Background:

LRA Section 2.3.3-6, Reactor Building and Radwaste Building Sampling System, states that components are within the scope of license renewal per 10 CFR 54.4(a)(2). The system includes nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of a safety-related function due to spatial proximity.

Issue:

License renewal drawing BECH-M138<1>-LR (D-7), shows the discharge line from waste collector pump IP065 to valve V38-0021 as within the scope of license renewal per 10 CFR 54.4(a)(2); however, the $\frac{3}{4}$ inch line, HBC-30 to sample station SC 3805, attached to the discharge line is not in-scope for license renewal.

Request:

Provide additional information explaining why the $\frac{3}{4}$ "-HBC-30 line is not within the scope of license renewal for 10 CFR 54.4(a)(2).

RAI 2.3.3.22-01

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:

License renewal drawing BECH-M147-LR (B-2) shows a continuation of a 10 CFR 54.4 (a)(2) pipe section (to CRW) to drawing BECH-M137<1>-LR (B-3). The continuation on drawing BECH-M137<1>-LR (B-3) is not included in the scope of license renewal.

Request:

Provide additional information to clarify the scoping classification for this pipe section.

RAI 2.3.3.25-01

Background:

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

Issue:

License renewal drawing BECH-M119-LR (B-3 and B-4) and drawing BECH-M120-LR (B-6) show the 12"-GBB-6, 12"-GBB-8, 12"-GBB-7, and 12"-GBB-9 lines as in-scope for license renewal for 10 CFR 54.4 (a)(1) whereas the continuations of these lines on license renewal drawing BECH-M113-LR (E-6 and E-7), are shown as out of scope.

Request:

Provide additional information explaining the difference in-scope classification between drawings BECH-M119-LR, BECH-M120-LR and the continuations on BECH-M113-LR.

RAI 2.3.3.25-02

Background:

LRA Section 2.3.3.25, Residual Heat Removal (RHR) Service Water 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 a pressure boundary, leakage boundary, pressure relief and structural integrity.

Issue:

License renewal drawing BECH-M113-LR (B-5 and B-6), shows a change of scope classification from 10 CFR 54.4 (a)(1) to 10 CFR 54.4 (a)(2) at valves V13-0074 and V13-0076 whereas the corresponding seismic class I break is shown at valves V13-0073 and V13-0075, respectively.

Request:

Provide additional information explaining why seismic class I pipe is in-scope for 10 CFR 54.4(a)(2) versus 10 CFR 54.4(a)(1).

RAI 2.3.3.25-03

Background:

LRA Section 2.3.3.25, RHR Service Water 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 a pressure boundary, leakage boundary, pressure relief and structural integrity.

Issue:

License renewal drawing BECH-M113-LR (C-5 and C-6) shows lines 16"-GBC-3 and 16"-GBC-4 as in-scope for 10 CFR 54.4 (a)(1). Two thermal elements TE1945F and TE1945B are connected to 16"-GBC-3 and 16"-GBC-4 respectively and the connecting lines are shown as out of scope.

Request:

Provide additional information explaining why the lines to the thermal elements are not in-scope.

RAI 2.3.3.26-01

Background:

LRA Section 2.3.3.26, River Water 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 a pressure boundary, leakage boundary, throttle, and structural integrity.

Issue:

LRA drawing BECH- M146-LR (E-6), upstream of valves V46-0045 and V46-0046 depict two functional seismic class I breaks. These functional seismic class I breaks are located on the 10 CFR 54.4(a)(2) portion of the air vents.

Request:

Provide additional information to explain not including the portions of the air vent and piping downstream of the functional seismic class I break as in-scope for 10 CFR 54.4(a)(1).

RAI 2.3.3.26-02

Background:

LRA Section 2.1.2.2.2b., Nonsafety-Related SSCs Directly Connected to Safety-Related SSCs, states in part "For nonsafety-related SSCs directly connected to safety-related SSCs, the in-scope boundary for license renewal extends into the nonsafety-related portion of the piping and supports up to and including the first equivalent anchor beyond the safety/non-safety interface."

Issue:

LRA drawing BECH-M146-LR (F-4), upstream of valve V46-0086 shows a portion of 10 CFR 54.4(a)(2) piping (2"-HBD-79) continued from the floor drain radwaste system (M-139 (D-2)) that connects to 10 CFR 54.4(a)(1) piping at valve CV4909. LR Note 2 indicates that only 2"-HBD-79 is in-scope for that portion within the pump house.

Request:

Provide confirmation that an anchor exists at the pump house boundary or provide the location of the anchor.

RAI 2.3.3.28-01

Background:

LRA Section 2.3.3-28, Solid Radwaste System, states that components are within the scope of license renewal per 10 CFR 54.4(a)(2). The system includes nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of a safety related function due to spatial proximity.

Issue:

License renewal drawing BECH-M182-LR (A-5) shows continuation of 1½"-HBD-60 downstream of valves V82-0113 and V82-0111 as within the scope of license renewal per 10 CFR 54.4(a)(2). The continuation of the line from license renewal drawing BECH-M160<1> (F-2) is shown as not in scope for license renewal.

Request:

Provide additional information explaining the difference in-scope classification for the continuation of the line upstream of valves V82-0113 and V82-0111.

RAI 2.3.3.28-02

Background

LRA Section 2.3.3-28, Solid Radwaste System, states that components are within the scope of license renewal per 10 CFR 54.4(a)(2). The system includes nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of a safety related function due to spatial proximity.

Issue:

License renewal drawing BECH-M139-LR (C-3), shows ½"-HCD-54 as within scope of license renewal per 10 CFR 54.4(a)(2). The license renewal boundary is shown at valve V39-0053 and the continuation of the line is shown as not in scope for license renewal.

Request:

Provide additional information to explain why the ½"-HCD-54 line is not in scope to the Floor Drain Sample Tank.

RAI 2.3.3.28-03

Background:

LRA Section 2.3.3-28, Solid Radwaste System, states that components are within the scope of license renewal per 10 CFR 54.4(a)(2). The system includes nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of a safety-related function due to spatial proximity.

Issue:

License renewal drawing BECH-M139-LR (C-2), shows 1½"-HCD-36 as within the scope of license renewal per 10 CFR 54.4(a)(2). The license renewal boundary is shown at valve V39-0075 and the continuation of the line is shown as not in scope per license renewal.

Request:

Provide additional information to clarify the location of the license renewal boundary.

RAI 2.3.3.29-01

Background:

In LRA Section 2.3.3.29 portions of the Standby Diesel Generator System are in-scope based on criteria 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2). 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:

License renewal drawing BECH-M132<1>-LR shows the following components that are in-scope for license renewal based on 10 CFR 54.4(a)(1) or (a)(2) and are not included in the list of AMR components in LRA Table 2.3.3-29:

- exhaust silencers at locations C-7 and E-7
- vent and flame arrestors at locations C-4, E-4, and A-3
- combustion air filter-silencer at locations B-5 and E-5

Request:

Provide additional information explaining why the exhaust silencers, vent and flame arrestors, combustion air filter-silencers, and fuel injector housings are not included as component types in LRA Table 2.3.3-29.

RAI 2.3.3.29-02

Background:

In LRA Section 2.3.3.29 major portions of the Standby Diesel Generator System are in scope based on criteria 10 CFR 54.4(a)(1). The diesel generator equipment boundary is normally shown in red because it is in scope for 10 CFR 54.4(a)(1).

Issue:

License renewal drawing BECH-M132<1>-LR (C-6 and E-6) shows a black boundary (not in scope for license renewal) for the standby diesel generators in lieu of red (in scope for license renewal based on criteria 10 CFR 54.4(a)(1)). Drawing LR legend note for 10 CFR 54.4(a)(1) or (a)(3) components states "Components in scope per 10 CFR 54.4(a)(1) and/or (a)(3) and subject to AMR per 54.21." The drawing does not provide indication that the diesel generators are in scope for 10 CFR 54.4(a)(1).

Request:

Provide additional information to confirm that the standby diesel generators are in scope for 10 CFR 54.4(a)(1).

RAI 2.3.3.29-03

Background:

In LRA Section 2.3.3.29 portions of the Standby Diesel Generator System are in-scope based on criteria 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2). 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:

The staff typically finds the fuel injector housing and the turbo-charger housing identified in license renewal drawings and included in the table listing component types subject to AMR. The staff finds no reference to either the fuel injector housing or the turbo-charger housing in either the license renewal drawings or the table listing component types subject to AMR.

Request:

Provide additional information explaining why the fuel injector housing and the turbo-charger housing are not included in either the license renewal drawings or the table listing component types subject to AMR.

RAI 2.3.3.32-01

Background:

LRA Section 2.3.3.32, Well Water System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(2) and have an intended function of leakage boundary.

Issue:

License renewal drawing BECH-M142-LR (B-3) shows a 2"-JBD-59 pipe line as out of-scope for license renewal. However, the continuation of this 2" line to M146 (E-3) is in-scope for 10 CFR 54.4(a)(2). Also the continuation from BECH M-144<01> (D-2) is in scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify why this pipe section is not in scope.

RAI 2.3.3.32-02

Background:

LRA Section 2.1.2.2.2b., Nonsafety-Related SSCs Directly Connected to Safety-Related SSCs, states in part "For nonsafety-related SSCs directly connected to safety-related SSCs, the in-scope boundary for license renewal extends into the nonsafety-related portion of the piping and supports up to and including the first equivalent anchor beyond the safety/non-safety interface."

Issue:

License renewal drawing BECH-M113-LR (A8) shows a 10 CFR 54.4(a)(2) line (8"-JBD-34) connected to a 10 CFR 54.4(a)(1) line (8"-HBD-32) at valve V13-0014. The location of the anchor for the nonsafety-related SSCs directly connected to safety-related SSCs could not be located.

Request:

Provide additional information to locate the anchor.

RAI 2.3.3.32-03

Background:

LRA Section 2.3.3.32, Well Water System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(2) and have an intended function of leakage boundary.

Issue:

License renewal drawing BECH-M144<1>-LR (F-8) shows a continuation from M-144<2> (D-4) as not in scope for 10 CFR 54.4(a)(2). However, the continuation of this line from a dot-dash-dot line is in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the license renewal boundary.

RAI 2.3.3.32-04

Background:

LRA Section 2.3.3.32, Well Water System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(2) and have an intended function of leakage boundary.

Issue:

License renewal drawing BECH-M144<1>-LR (A-3) shows the following:

- A pipe section 3"-JDD-3 enclosed within braces ([]) as in-scope for license renewal for 10 CFR 54.4(a)(2).
- The connected line to valve V44-0487 is not in scope.
- The continuation to "To Radwaste Lavatory Facilities" was not provided.

Request:

Provide additional information to:

- Clarify the significance of the braces ([]) for locating a license renewal boundary.
- Clarify why the connected line to valve V44-0487 is not in scope.
- Locate the continuation to "To Radwaste Lavatory Facilities."

RAI 2.3.3.32-05

Background:

LRA Section 2.3.3.32, Well Water System, states that components are within the scope of license renewal for 10 CFR 54.4(a)(2) and have an intended function of leakage boundary.

Issue:

License renewal drawing BECH-M144<1>-LR (E-7)) shows 1½"-JBD-29 from the Evaporator Room Cooling Unit as not in-scope for 10 CFR 54.4(a)(2). However the connected 1½"-JBD-29 pipe section is in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the scoping classification for this section of pipe.

RAI 2.3.4.1-01

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4 (a)(2).

Issue:

License renewal drawing BECH-M106-LR (F-6) does not show lines connecting with instruments PI1475 and PP1472.

Request:

Provide additional information to establish the scope classification for these lines.

RAI 2.3.4.1-02

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M106-LR (E-6) shows an instrumentation line between instruments CIT 1516A and CRS 1415 as not in-scope, in-scope for 10 CFR 54.4 (a)(2) and then not in-scope.

Request:

Provide additional information to establish the scope classification for this line.

RAI 2.3.4.1-03

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M109-LR (D-1 and F-7) shows lines in and out of the Demineralized Water Storage Tank Heaters 1E014 & 1E015 as in-scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of these lines on drawing BECH-M163-LR (E-2) shows these lines as not in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M109-LR and the continuation on BECH-M163-LR.

RAI 2.3.4.1-04

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M109-LR (D-4) shows the line downstream of valve V09-0206 as in-scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of this line on drawing BECH-M131-LR (C-4) shows this line as not in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M109-LR and the continuation on BECH-M131-LR.

RAI 2.3.4.1-05

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M110-LR (B-2) shows the line downstream of valve V10-0098 as in-scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of this line on drawing BECH-M137<1>-LR (F-5) shows this line as not in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M110-LR and the continuation on BECH-M137<1>-LR.

RAI 2.3.4.1-06

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M110-LR (C-3) shows line ½"-HBD-142 upstream of the Neutralizing Tank 1T022 as in-scope for 10 CFR 54.4(a)(2), not in-scope, and then in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to establish the scope classification for this line.

RAI 2.3.4.1-07

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M110-LR shows equipment as abandoned in place, however significant piping is identified as in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the mixing of in-scope versus abandoned in place on license renewal drawing BECH-M110-LR.

RAI 2.3.4.1-08

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Demineralized Water System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M136-LR (F-1) shows line 1½"-HCD-36 downstream of valve V36-0045 as not in-scope for license renewal. The continuation of this line on drawing BECH-M139-LR (D-2) shows this line as in-scope for 10 CFR 54.4 (a)(2).

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M136-LR and the continuation on BECH-M139-LR.

RAI 2.3.4.1-9

Background:

LRA Section 2.3.3.4.1, Condensate and Demineralized Water System, states that components are within the scope of license renewal per 10 CFR 54.4(a)(2) because the system includes nonsafety-related SSCs whose failure could prevent satisfactory accomplishment of a safety-related function due to spatial proximity. Portions of the system are also within scope of license renewal per 10 CFR 54.4(a)(3) because the system contains components credited in the current licensing basis for Fire Protection (10 CFR 50.48).

Issue:

License renewal drawing BECH-M189<1> (A-7) shows two ½" lines, HCD-182, and the associated check valves V89-0072 and V89-0074 within the scope of license renewal per 10 CFR 54.4(a)(2). The license renewal boundary is shown to be at the check valves. The continuations of the lines HCD-182, upstream of the check valves, are shown as not within the scope of license renewal.

Request:

Provide additional information explaining why the ½" lines HCD-182 continuations upstream of check valves V89-0072 and V89-0074 are not within the scope of license renewal.

RAI 2.3.4.2-01

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condensate and Feedwater System is identified as in-scope for 10 CFR 54.4 (a)(2).

Issue:

License renewal drawing BECH-M111-LR (C-6 and D-6) shows Reactor Feed Pump Motor Coolers #1E039A and #1E039B as out of scope for license renewal, however these coolers are attached to General Service Water System piping which is identified as in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the scope status of the Reactor Feed Pump Motor Coolers on license renewal drawing BECH-M111-LR.

RAI 2.3.4.3-01

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:

License renewal drawing BECH-M103<1>-LR (A-2) shows line 1"-EBD-3 in-scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of this 1" line on drawing BECH-M137<1>-LR (C3) shows this line is not in-scope.

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M103<1>-LR and the continuation on BECH-M137<1>-LR.

RAI 2.3.4.3-02

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condenser and Condenser Air Removal System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M103<1>-LR (A-4) shows line 1½"-EBD-3 in-scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of this 1½" line on drawing BECH-M105 (1) (E6) shows this line is not in-scope for 10CFR54.4 (a)(2).

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M103<1>-LR and the continuation on BECH-M105<1>-LR.

RAI 2.3.4.3-03

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condenser and Condenser Air Removal System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M103<1>-LR (D-8) shows the 1"-EBD-8 line in-scope for license renewal for 10 CFR 54.4(a)(2). However, the continuation of this 1" line on drawing BECH-M137(1) (C3) shows this line is not in-scope.

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M103<1>-LR and the continuation on BECH-M137<1>-LR.

RAI 2.3.4.3-04

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Condenser and Condenser Air Removal System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M104<1>-LR (C-5) shows equipment as abandoned in place, however 3" piping is identified as in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the mix of in-scope versus abandoned in place on license renewal drawing BECH-M104<1>-LR.

RAI 2.3.4.4-01

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Main Steam Isolation and Automatic Depressurization System is identified as in-scope for 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M184-LR (F-4) shows MAIN STEAM LINE "A" as out of scope for license renewal. However, drawing BECH-M114-LR shows these four main steam lines as in-scope for 10 CFR 54.4(a)(1) and 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why there is a difference in scope classification between drawing BECH-M114-LR and the continuation on BECH-M184-LR.

RAI 2.3.4.5-01

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Turbine System is identified as in-scope for 10 CFR 54.4 (a)(2).

Issue:

License renewal drawing BECH-M145<1>-LR (E-5) shows the line downstream of valve V45-0268 out of scope for license renewal. However, the continuation of this line on the same drawing at location F-7 shows this line is in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information explaining why there is a difference in scope classification for the line on drawing BECH-M145<1>-LR.

RAI 2.3.4.5-02

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Turbine System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M145<4>-LR (E-7) shows GBV VENT as out of scope for license renewal, however this vent is attached to the Air Detraining Section which is in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the status of the vent line on license renewal drawing BECH-M145<4>-LR (E-7).

RAI 2.3.4.5-03

Background:

LRA Section 2.2, Plant Level Scoping Results states that components required to support system level LRA functions were included in-scope for license renewal. The Turbine System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M111-LR (A-4) shows Exciter Air Cooler 1E059 as out of scope for license renewal, however this cooler is attached to General Service Water System piping which is in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the scope status of the Exciter Air Cooler on license renewal drawing BECH-M111-LR.

RAI 2.3.4.5-04

Background:

LRA Section 2.2, Plant Level Scoping Results states that components required to support system level LRA functions were included in-scope for license renewal. The Turbine System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M111-LR, (C-4 & D-4) shows four Gen. Hydrogen coolers 1E063A, B, C & D as out of scope for license renewal, however these coolers are attached to the General Service Water System piping which is identified as in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the scope status of the Gen. Hydrogen Coolers on license renewal drawing BECH-M111-LR.

RAI 2.3.4.5-05

Background:

LRA Section 2.2, Plant Level Scoping Results, states that components required to support system level LRA functions were included in-scope for license renewal. The Turbine System is identified as in-scope for 10 CFR 54.4(a)(2).

Issue:

License renewal drawing BECH-M145<2>-LR, (G-4) shows Generator Frame as out of scope for license renewal, however this cooler is attached to the Stator Winding Cooling Water System piping which is identified as in-scope for 10 CFR 54.4(a)(2).

Request:

Provide additional information to clarify the scope status of the Generator Frame on license renewal drawing BECH-M145<2>-LR.