



September 3, 2009

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10 CFR 54

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

Duane Arnold Energy Center
Docket 50-331
License No. DPR-49

Response to Request for Additional Information Regarding Section 2.3 of the Duane Arnold Energy Center License Renewal Application

- References:
1. Letter, Richard L. Anderson (FPL Energy Duane Arnold, LLC) to Document Control Desk (USNRC), "Duane Arnold Energy Center Application for Renewed Operating License (TSCR-109)," dated September 30, 2008, NG-08-0713 (ML082980623)
 2. Letter, Richard L. Anderson (FPL Energy Duane Arnold, LLC) to Document Control Desk (USNRC), "License Renewal Application, Supplement 1: Changes Resulting from Issues Raised in the Review Status of the License Renewal Application for the Duane Arnold Energy Center," dated January 23, 2009, NG-09-0059 (ML090280418)
 3. Letter, Maurice L. Heath (USNRC) to Richard L. Anderson (FPL Energy Duane Arnold, LLC), "Request for Additional Information for the Review of the Duane Arnold Energy Center License Renewal Application – Section 2.3 (TAC No. MD9769)," dated August 7, 2009 (ML092120539)

By Reference 1, FPL Energy Duane Arnold, LLC submitted an application for a renewed Operating License (LRA) for the Duane Arnold Energy Center. Reference 2 provided Supplement 1 to the application. By Reference 3 the U.S. Nuclear Regulatory Commission (NRC) Staff requested additional information regarding Section 2.3 of the LRA. This letter provides the NextEra Energy Duane Arnold, LLC, (f/k/a FPL Energy Duane Arnold, LLC) response to the Staff's request for additional information (RAI).

Enclosure 1 to this letter provides a table of equivalent terms to correlate selected component types listed in the tables of LRA Sections 2.3.1, 2.3.2, 2.3.3, and 2.3.4 with their equivalent component types as they appear in the 3.x.2 tables of LRA Sections

3.1, 3.2, 3.3, and 3.4. In some cases, the wording of the component type descriptions differed between LRA Sections 2 and 3. The component type descriptions that are essentially the same in LRA Sections 2 and 3 are not listed. This correlation table applies to all tables in LRA Sections 2.3.1, 2.3.2, 2.3.3 and 2.3.4, and all 3.x.2 tables in LRA Sections 3.1, 3.2, 3.3, and 3.4.

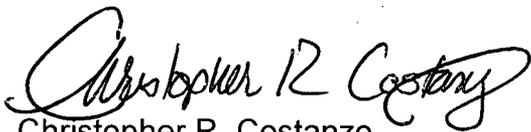
Enclosure 2 contains the specific responses to each of the Staff's RAIs.

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

If you have any questions or require additional information, please contact Mr. Kenneth Putnam at (319) 851-7238.

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

Executed on September 3, 2009.



Christopher R. Costanzo
Vice President, Duane Arnold Energy Center
NextEra Energy Duane Arnold, LLC

- Enclosures:
1. Correlation of Equivalent Component Type Descriptions in Tables of LRA Sections 2 and 3
 2. DAEC Response to NRC Requests for Additional Information Regarding LRA Section 2.3

cc: Administrator, Region III, USNRC
Project Manager, DAEC, USNRC
Senior Resident Inspector, DAEC, USNRC
License Renewal Project Manager, USNRC
License Renewal Inspection Team lead, Region III, USNRC
M. Rasmusson (State of Iowa)

Enclosure 1 to NG-09-0644
Correlation of Equivalent Component Type Descriptions
in Tables of LRA Sections 2 and 3

The following information is provided to assist NRC reviewers to correlate each component type listed in the tables of LRA Sections 2.3.1, 2.3.2, 2.3.3, and 2.3.4 with the equivalent component type in the 3.x.2 tables of LRA Sections 3.1, 3.2, 3.3, and 3.4.

The component types listed in the tables of LRA Section 2.3 were the common component categories that were used in the license renewal database to group the components that are in scope for License Renewal. The Component Type column is generally consistent with the component types that are shown on the license renewal drawings. The component types listed in the 3.x.2 tables of Sections 3.1, 3.2, 3.3, and 3.4 are the descriptions of component types used in the plant equipment database. In most cases the differences in terminology are not significant. In some cases, however, there are differences in terminology that can give the appearance that the component types are not consistent.

To assist the reviewer in correlating the component type terminology of the Section 2 tables with the 3.x.2 tables, the equivalent terms are defined below. If the same or a similar term is used in both the Section 2 tables and the 3.x.2 tables, the term is not listed.

It should be noted that some of the general terms used in the Section 2 tables, particularly for instrumentation, are correlated with multiple component type terminology in the 3.x.2 tables. For the purposes of aging management review and aging management program assignments, the multiple corresponding terms in the 3.x.2 tables are generally interchangeable, with the exception that Class 1 components are typically listed separately from similar non-Class 1 components. In these cases, the Class 1 component types can be clearly distinguished from similar non-Class 1 components.

It should also be noted that the listing of specific components in a component type description in a 3.x.2 table does not suggest that every listed component is applicable in every case. The list of components in the component type name only makes clear that the 3.x.2 table line item for the component type encompasses all the listed components, if applicable.

Finally, in reviewing the specific components shown on the license renewal drawings, it is helpful to refer to drawings BECH-M100, BECH-M101, BECH-M102 and BECH-M179 for standard component identification symbols and abbreviations. These drawings have been provided in the DAEC license renewal drawing set for reviewer use.

Enclosure 1 to NG-09-0644
Correlation of Equivalent Component Type Descriptions
in Tables of LRA Sections 2 and 3

Component Type Listed in Tables of LRA Section 2.3	Equivalent Component Type Description in 3.x.2 Tables of LRA Sections 3.1, 3.2, 3.3, and 3.4	Typical Portion of In-scope Component that is Subject to AMR¹
Accumulator or Pressure Vessel	Accumulator, pulsation damper, low pressure tank or Pressure Vessel [Terms should be considered interchangeable for license renewal]	Housing (Pressure boundary)
Blower	Blower, compressor, fan, vacuum pump	Housing/Casing (Pressure boundary)
Control rod drive mechanism (CRD housing)	Control rod drive mechanism	Housing (Pressure boundary)
Damper casing	Valve, damper	Housing/casing (Pressure boundary)
Demineralizer	Demineralizer ion exchanger	Housing (Pressure boundary)
Drip pans	Drip pans or Drain pans [Terms should be considered interchangeable for license renewal]	Pan
Expansion joint	Expansion joint	Pressure boundary
Fasteners	Pump and valve closure bolting or Fastener, bolting, washers, nuts [Terms should be considered interchangeable for license renewal]	Fasteners, bolting, washers, nuts
Filters	Filter, screens, strainer	Housing (Pressure boundary)
Flow controller	Instrumentation, controller (flow indicating controllers)	Pressure boundary
Flow element or elements	Flow elements or Flow element Class 1 [Terms should be considered interchangeable for license renewal except for Class 1 designation]	Pressure boundary

¹ Specific portions of components subject to AMR may vary for SSC in scope for 10 CFR 54.4(a)(2). It may also vary with intended function.

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Correlation of Equivalent Component Type Descriptions
in Tables of LRA Sections 2 and 3

Component Type Listed in Tables of LRA Section 2.3	Equivalent Component Type Description in 3.x.2 Tables of LRA Sections 3.1, 3.2, 3.3, and 3.4	Typical Portion of In-scope Component that is Subject to AMR¹
Flow orifice	Flow orifice or Flow orifice Class 1 [Terms should be considered interchangeable for license renewal except for Class 1 designation]	Pressure boundary
Heat Exchanger	Heat exchanger, condenser, cooler, fan coil	Housing (shell, channel head, tubesheet, and Tubes), Fins, cooling coil, heating coil (Pressure boundary) For (a)(2), shell only applies (Leakage Boundary)
Heater housing	Electrical heater, heat trace or Electrical resistance heater, heat trace [Terms should be considered interchangeable for license renewal]	Housing (Pressure boundary)
Instrumentation (e.g., Flow element, etc.) (Note that a single line item may list one or more specific instrument types, such as flow elements, flow alarms, flow gauges, flow indicators, sight glass, flow orifice, level gauge, level element, level indicator, level controller, pressure transducer, sensing element, temperature element, electrodes)	Instrumentation (e.g., Flow element, etc.) or Instrumentation, transmitter/ element (e.g., Flow element, etc.) or Instrumentation, indication/ recorder (e.g., Flow gauge, etc.) (Note that a line item may list one or more specific instrument types, such as flow elements, flow alarms, flow gauges, level gauges, flow indicator, sight glass, flow orifice, level gauge, level element, level indicator, level controller, pressure transducer, sensing element, temperature element, electrodes) [Terms should be considered interchangeable for license renewal]	Pressure boundary

Enclosure 1 to NG-09-0644
Correlation of Equivalent Component Type Descriptions
in Tables of LRA Sections 2 and 3

Component Type Listed in Tables of LRA Section 2.3	Equivalent Component Type Description in 3.x.2 Tables of LRA Sections 3.1, 3.2, 3.3, and 3.4	Typical Portion of In-scope Component that is Subject to AMR¹
Manifold	Manifold instrument supply	Valve body (Pressure boundary)
Piping	Pipe, pipe fittings, hoses, tubes, rupture disc or Pipe Class 1, pipe fittings, tubing or Piping, piping components and piping elements [Terms should be considered interchangeable for license renewal except for Class 1 designation]	Pressure boundary; includes Damper housing, Fan Housing, piping, fittings, flow elements, strainers, thermowells, orifices, sight glasses, pressure boundary instrumentation
Pump casings	Pumps, positive pressure devices (except Blowers); or Pump Class 1 [Terms should be considered interchangeable for license renewal except for Class 1 designation]	Casing
Sample Point	Mechanical function, coupling, gear box, governor	Pipe (Pressure boundary)
Separators	Separators, degasifiers	Housing (Pressure boundary)
Structures, buildings	Structures, buildings (traveling screen unit)	Tray in traveling screen
Valve body	Valve, damper; or Valve Class 1 [Terms should be considered interchangeable for license renewal except for Class 1 designation]	Valve body Damper Housing (Pressure boundary)
Valve operator, (Pilot operator)	Valve operator, damper operator	Valve body (Pressure boundary)

Enclosure 2 to NG-09-0644
DAEC Response to NRC Requests for Additional Information
Regarding LRA Section 2.3

RAI 2.3.2.6-1

Duane Arnold Energy Center (DAEC) Standby Gas Treatment System described in license renewal application (LRA) Section 2.3.2.6 and on LRA Drawings BECH-M122-LR, BECH-M124-LR, BECH-M143(1)-LR, BECH-M158-LR, BECH-164-LR, BECH-M165-LR, BECH-M172-LR, BECH-M176 (1)-LR, BECH-176(2)-LR, and BECH-M182-LR, and LRA Table 2.3.2-6, Standby Gas Treatment System, does not contain all the component types of the Standby Gas Treatment System highlighted on the drawings. For example, while the table lists component types for drip pans, fasteners, filters, piping, valve body, etc., it does not list bolting, washers and nuts, screens and strainer, damper, damper housing, fire damper housing, valve (also valve body not listed in LRA Table 3.2.2-6), nor exhaust fan housing.

Additionally, LRA Table 3.2.2-6, "Summary of Aging Management Review Results- Standby Gas Treatment System," does not list the component types for damper housings, fire damper housings, nor exhaust fan housings.

Clarify whether these component types and all other applicable components of the system, including duct sealants, wall sealants, pressure boundary sealants, etc., are within the scope of license renewal in accordance with 10 CFR 54.4(a), and subject to an aging management review (AMR) in accordance with 10 CFR 54.21(a)(1). If these component types are in the scope of license renewal, update the LRA by providing the applicable information in the appropriate LRA tables. If these component types are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.

DAEC Response to RAI 2.3.2.6-1

For clarity, the component type descriptions in Tables 2.3.2-6 and 3.2.2-6 should have been consistent. A table is provided as Enclosure 1 to this letter which can be used to correlate selected component types in Table 2.3.2-6 with their equivalent component types in Table 3.2.2-6. The table includes component types for which the Section 3 component description is worded somewhat differently from the component type listed in Section 2.

The following specific responses explain how the Table 3.2.2-6 component type descriptions correlate with the component types listed in Table 2.3.2-6.

Response to Table 2.3.2-6 Examples

1. The component type Fastener in Table 2.3.2-6 is equivalent to the component type Fasteners, bolting, washers, nuts shown in the line items of Table 3.2.2-6.
2. The component type Filters in Table 2.3.2-6 is equivalent to component type Filter, screens, strainer shown in the line items of Table 3.2.2-6.

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Regarding LRA Section 2.3

3. Damper housing, fan housing, and exhaust fan housing are not shown as separate line items in Table 2.3.2-6 since they are included in the component type Piping in Table 2.3.2-6 and the equivalent component type Pipe, pipe fittings, hoses, tubes, rupture disks in Table 3.2.2-6.
4. The component types Valve body in Table 2.3.2-6; and Valve, damper in Table 3.2.2-6; include valves, dampers and valve bodies.
5. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.

Based on the above explanation, no revisions to Table 2.3.2-6 are proposed. All of the above components except Fire damper housings are included, as applicable, in Table 3.2.2-6 and are subject to aging management review.

Response to Table 3.2.2-6 Examples

1. Fan housings (including exhaust fan housings) and damper housings are not shown as separate line items in Table 3.2.2-6 since the components are included in the component group Pipe, pipe fittings, hoses, tubes, rupture disk.
2. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
3. Duct Sealants and pressure boundary sealants are not relied on to maintain leakage below established limits. The system pressure boundary is a pressure envelope for a space. Therefore, aging of the sealing materials does not jeopardize the accomplishment of the system intended functions.
4. Wall Sealants are evaluated in the civil/structural area as elastomers in Sections 2.4 and 3.5 of the license renewal application.

Based on the above explanation, no revisions to Table 3.2.2-6 are proposed.

RAI 2.3.3.6-1

DAEC Building Heating, Ventilation, and Air Conditioning described in LRA Section 2.3.3.6 and on LRA Drawings BECH-M161-LR, BECH-M169(1)-LR, BECH-M169(2)-LR, BECH-M169(3)-LR, BECH-M170-LR, and BECH-M173-LR, and LRA Table 2.3.3-6, "Control Building Heating, Ventilation, and Air Conditioning," does not contain all the component types of the Control Building Heating, Ventilation and Air Conditioning as highlighted on the drawings. For example, while the table lists component types for pressure vessel, blower, drip pans, ductwork, heater housing, fasteners, filters, piping,

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valve body, etc., it does not list component types for accumulator, pulsation damper, low pressure tank, housings for pulsation damper, blower/fan, and vacuum pump, drain pans, electrical heater housing, bolting, washers and nuts, filter housing, screens and strainers, housings for condenser, cooler, heating and cooling coils, pipe fittings, hoses, tubes, rupture disk, housings for positive pressure devices, fire damper housings, nor damper housing.

Additionally, LRA Table 3.3.2-6, "Summary of Aging Management Review Results- Control Building Heating, Ventilation, and Air Conditioning," does not list the component types for housings for pulsation damper and blower/fan, casing for vacuum pump, drip pans, electrical heater housing, filter housing, housings for condenser, cooler, heating and cooling coils, housings for positive pressure devices, fire damper housings, nor damper housings.

Clarify whether these component types, and all other applicable component types of the system, including duct sealants, wall sealants, pressure boundary sealants, etc., are within the scope of license renewal in accordance with 10 CFR 54.4(a), and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If these component types are in the scope of license renewal, update the LRA by providing the applicable information in the appropriate LRA tables. If these component types are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.

DAEC Response to RAI 2.3.3.6-1

For clarity, the component type descriptions in Tables 2.3.3-6 and 3.3.2-6 should have been consistent. A table is provided as Enclosure 1 to this letter which can be used to correlate selected component types in Table 2.3.3-6 with their equivalent component types listed in Table 3.3.2-6. The table includes component types for which the Section 3 component description is worded somewhat differently from the component type listed in Section 2.

The following specific responses explain how the Table 3.3.2-6 component types correlate with the component types listed in Table 2.3.3-6.

Response to Table 2.3.3-6 Examples

1. The component type Pressure vessel in Table 2.3.3-6 is equivalent to Accumulator, pulsation damper, low pressure tank in Table 3.3.2-6. The pressure vessel components are shown as tag numbers 1T and 1VET on the license renewal drawings.
2. The component type Blower in Table 2.3.3-6 is equivalent to Blower, compressor, fan, vacuum pump in Table 3.3.2-6. The housings are what bring the components into scope for aging management review.

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3. The component type Drip pans in Table 2.3.3-6 is equivalent to drain pans in Table 3.3.2-6.
4. The component type Heater housing in Table 2.3.3-6 is equivalent to Electrical resistance heater, heat trace line in Table 3.3.2-6.
5. The component type Fasteners in Table 2.3.3-6 is equivalent to the component type Fasteners, bolting, washers, nuts shown in the line items of Table 3.3.2-6.
6. The component type Filters in Table 2.3.3-6 is equivalent to Filter, screens and strainer in Table 3.3.2-6.
7. Housings for condenser, cooler, heating and cooling coils are included in component type Heat Exchanger in Table 2.3.3-6 and the equivalent component type Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-6.
8. The component type Piping in Table 2.3.3-6 is equivalent to Pipe, pipe fittings, hoses, tubes, rupture disk in Table 3.3.2-6.
9. Housing for positive pressure device is included in component type Pump casings in Table 2.3.3-6 and the equivalent component type Pumps, positive pressure devices (except blowers) in Table 3.3.2-6.
10. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
11. Damper housings are included in component type Valve body in Table 2.3.3-6 and the equivalent component type Valve, damper in table 3.3.2-6.

Based on the above explanation, no revisions to Table 2.3.3-6 are proposed. All of the above components except Fire damper housings are included, as applicable, in Table 3.3.2-6 and are subject to aging management review.

Response to Table 3.3.2-6 Examples

1. Housings for pulsation dampers are not shown as separate line items in Table 3.3.2-6 since the components are included in component group Accumulator, pulsation damper, low pressure tank.
2. Housings for blower/fan and casing for vacuum pump are not shown as separate line items in Table 3.3.2-6 since these components are included in the component group, Blower, compressor, fan, vacuum pump.
3. The component type Drip pan in Table 2.3.3-6 is equivalent to drain pans in Table 3.3.2-6.

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4. Electrical heater housing is not shown as a separate line item since it is included in component group Electrical resistance heater, heat trace in Table 3.3.2-6.
5. Filter housing is not shown as a separate line item since it is included in component group Filter, screens, strainer Table 3.3.2-6.
6. Housings for condenser, cooler, heating and cooling coils are not shown as a separate line item since they are included in component group Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-6.
7. Housings for positive pressure devices are not shown as a separate line item since they are included in component group Pumps, positive pressure devices (except blowers) in Table 3.3.2-6.
8. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
9. Damper housings are not shown as a separate line item since they are included in component group Valve, damper in Table 3.3.2-6.
10. Duct Sealants and pressure boundary sealants are not relied on to maintain leakage below established limits. The system pressure boundary is a pressure envelope for a space. Therefore, aging of the sealing materials does not jeopardize the accomplishment of the system intended functions.
11. Wall Sealants are evaluated in the civil/structural area as elastomers in Section 2.4 and 3.5 of the Application.

Based on the above explanation, no revisions to Table 3.3.2-6 are proposed.

RAI 2.3.3.18-1

DAEC Plant Ventilation described in LRA Section 2.3.3.18 and on LRA Drawings BECH-M159-LR, BECH-M160(1)-LR, BECH-M163-LR, BECH-M164-LR, BECH-M170-LR, BECH-M175-LR, BECH-M177-LR, and LRA Table 2.3.3-18, "Plant Ventilation," does not contain all the component types of the Plant Ventilation highlighted on the drawings. For example, while the table lists component types, damper casings (housings), ductwork, fasteners, filters, pump casings, valve body, etc., it does not list component types for blower and fan housings, casings for compressor and vacuum pump, fire damper housings, drain pans, bolting, washers and nuts, filter housing, screens and strainers, housings for condenser and cooler, fan, heating and cooling coils, pipe fittings, hoses, tubes, rupture disk, nor housings for positive pressure devices.

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Additionally, LRA Table 3.3.2-18, "Summary of Aging Management Review Results-Plant Ventilation," does not list the component types for blower housings, fan housings, vacuum pump casing, drip pans, filter housing, housings for condenser, cooler, fan, heating and cooling coils, pump casing, housings for positive pressure devices, valve bodies, fire damper housings nor damper housings.

Clarify whether these component types and all other applicable component types of the system, including duct sealants, wall sealants, pressure boundary sealants, etc., are within the scope of license renewal in accordance with 10 CFR 54.4(a), and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If these components types are in the scope of license renewal, update the LRA by providing the applicable information in the appropriate LRA tables. If these components types are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.

DAEC Response to RAI 2.3.3.18-1

For clarity, the component type descriptions in Tables 2.3.3-18 and 3.3.2-18 should have been consistent. A table is provided as Enclosure 1 to this letter which can be used to correlate selected component types in Table 2.3.3-18 with their equivalent component types listed in Table 3.3.2-18. The table includes component types for which the Section 3 component description is worded somewhat differently from the component type listed in Section 2.

The following specific responses explain how the Table 3.3.2-18 component types correlate with the component types listed in Table 2.3.3-18.

Response to Table 2.3.3-18 Examples

1. Blower and fan housings and casings for compressor and vacuum pumps are not shown as separate line items since they are included in component type Blower in Table 2.3.3-18 and the equivalent component type Blower, compressor, fan, vacuum pump in Table 3.3.2-18.
2. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
3. The component type Drip pans in Table 2.3.3-18 is equivalent to Drain pans in Table 3.3.2-18.
4. The component type Fasteners in Table 2.3.3-18 is equivalent to Fastener, bolting, washers and nuts in Table 3.3.2-18.
5. The component type Filters in Table 2.3.3-18 is equivalent to Filter, screens, strainer in Table 3.3.2-18.

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6. The component type Heat exchanger in Table 2.3.3-18 is equivalent to Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-18. In this system the 1VAC condenser and cooler housing is the only portion of the component in scope for criterion (a)(2) and the cooling coils for these components are not in scope. They have no criterion (a)(1), (a)(2), or (a)(3) functions since they are enclosed inside the AC Unit.
7. The component type Heat exchanger in Table 2.3.3-18 is equivalent to Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-18. In this system the heating coils 1VD and 1VUH on the LR drawings are included in component type Heat exchanger.
8. The component type Piping in Table 2.3.3-18 is equivalent to Pipe, pipe fittings, hoses, tubes, and rupture disk in Table 3.3.2-18.
9. The component type Pump in Table 2.3.3-18 is equivalent to Pumps, positive pressure devices (except blowers) in Table 3.3.2-18.

Based on the above explanation, no revisions to Table 2.3.3-18 are proposed. All of the above components except Fire damper housings are included, as applicable, in Table 3.3.2-18 and are subject to aging management review.

Response to Table 3.3.2-18 Examples

1. Blower housings, fan housings, and vacuum pump casings are not shown as separate line items since they are included in component group Blower, compressor, fan, vacuum pump in Table 3.3.2-18.
2. The component type Drip pans in Table 2.3.3-18 is equivalent to Drain pans in Table 3.3.2-18.
3. Filter housing is not shown as a separate line item since they are included in component group Filter, screens, strainer in Table 3.3.2-18.
4. Housings for condenser and cooler are not shown as separate line items since they are included in component group Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-18. In this system the cooling coils are not in scope and have no criterion (a)(1), (a)(2), or (a)(3) functions since they are enclosed inside the AC Units.
5. Fan housings are not shown as separate line items since they are included in component group Blower, compressor, fan, vacuum pump in Table 3.3.2-18.
6. The heating and cooling coils are not shown as separate line items since they are included in component group Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-18.

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7. Pump casings and housings for positive pressure devices are not shown as separate line items since they are included in component group Pumps, positive pressure devices (except blowers) in Table 3.3.2-18.
8. Valve bodies and damper housings are not shown as separate line items since they are included in component group valve, damper in Table 3.3.2-18.
9. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.

Based on the above explanation, no revisions to Table 3.3.2-18 are proposed.

RAI 2.3.3.20-1

DAEC Primary Containment Heating, Ventilation, and Air Conditioning described in LRA Section 2.3.3.20 and on LRA Drawings BECH-M144-LR, BECH-M157(1)-LR, BECH-M157(2)(1)-LR, and LRA Table 2.3.3-20, "Primary Containment Heating, Ventilation, and Air Conditioning," does not contain all the component types of the Primary Containment Heating, Ventilation, and Air Conditioning highlighted on the drawings. For example, while the table lists component types for fasteners, filters, heat exchanger, valve body, etc., it does not list component types for piping that include pipe Class 1, pipe fittings, and tubing, bolting, washers and nuts, pipe fittings, hoses, tubes, rupture disk, housings for positive pressure devices, fan coil housings, housings for filters, screens, and strainer, fire damper housings, nor damper housing.

Additionally, LRA Table 3.3.2-20, "Summary of Aging Management Review Results-Primary Containment Heating, Ventilation, and Air Conditioning" does not list the component types for casings for pumps and housings for positive devices, housings for filters, screens, strainer, fan coil housings, valve bodies, fire damper housings nor damper housings.

Clarify whether these component types and all other applicable component types of the system, including duct sealants, wall sealants, pressure boundary sealants, etc., are within the scope of license renewal in accordance with 10 CFR 54.4(a), and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If these component types are in the scope of license renewal, update the LRA by providing the applicable information in the appropriate LRA tables. If these component types are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.

DAEC Response to RAI 2.3.3.20-1

For clarity, the component type descriptions in Tables 2.3.3-20 and 3.3.2-20 should have been consistent. A table is provided as Enclosure 1 to this letter which can be

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used to correlate selected component types in Table 2.3.3-20 with their equivalent component types listed in Table 3.3.2-20. The table includes component types for which the Section 3 component description is worded somewhat differently from the component type listed in Section 2.

The following specific responses explain how the Table 3.3.2-20 component types correlate with the component types listed in Table 2.3.3-20.

Response to Table 2.3.3-20 Examples

1. The component type Piping in Table 2.3.3-20 encompasses both Pipe Class 1, pipe fittings, tubing as well as Pipe, pipe fittings, hoses, tubes, rupture disk in Table 3.3.2-20. There are no hoses, tubes, or rupture disk contained in this particular system.
2. The component type Fasteners in Table 2.3.3-20 is equivalent to Fastener, bolting, washers, and nuts in Table 3.3.2-20.
3. Pump casings and housings for positive pressure devices are not shown as separate line items since they are included in component group Pumps in Table 2.3.3-20 and the equivalent component type Pump, positive pressure devices (except blowers) in Table 3.3.2-20. There are no housings for positive pressure devices nor positive pressure devices contained in this particular system.
4. Fan coil housings are not shown as separate line items since they are included in component type Heat exchanger in Table 2.3.3-20 and the equivalent component type Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-20.
5. Housings for filters, screens and strainers are not shown as separate line items since they are included in the component type Filters in Table 2.3.3-20 and the equivalent component type Filter, screens, strainer shown in Table 3.3.2-20.
6. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
7. Damper housings would not be shown as separate line items since they are included in the component type Valve body in Table 2.3.3-20 and the equivalent component type Valve, damper in table 3.3.2-20.

The drywell cooling function is not a safety related function of the Primary Containment HVAC System. The ventilation portion of the system is not credited in the current Licensing Basis as being required to function so the damper housings are not in scope for 10 CFR 54.4(a)(1). The damper housings are not water filled so they do not meet the requirement for inclusion for 10 CFR 54.4 (a)(2). The damper housings are not credited to be needed for the Regulated events identified in 10

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CFR 54.4(a)(3). Therefore, damper housings are not in scope and subject to aging management review in Table 2.3.3-20.

Based on the above explanations, no revisions to Table 2.3.3-20 are proposed. All of the above components except Fire damper housings are included, as applicable, in Table 3.3.2-20 and are subject to aging management review.

Response to Table 3.3.2-20 Examples

1. Pump casings are not shown as separate line items since they are included in component group Pumps, positive pressure devices (except blowers) in Table 3.3.2-20. There are no positive pressure devices in this particular system.
2. Housings for filters, screens, and strainers are not shown as separate line items since they are included in component group Filter, screens, strainer in Table 3.3.2-20.
3. Fan coil housings are not shown as separate line items since they are included in component group Heat exchanger, condenser, cooler, fan coil in Table 3.3.2-20.
4. Valve bodies are not shown as separate line items since they are included in component group Valve, damper in Table 3.3.2-20.
5. Fire damper housings are included in the component type valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
6. Damper housings would not be shown as separate line items since they are included in the component type Valve body in Table 2.3.3-20 and the equivalent component type Valve, damper in table 3.3.2-20.

The drywell cooling function is not a safety related function of the Primary Containment HVAC System. The ventilation portion of the system is not credited in the current Licensing Basis as being required to function so the damper housings are not in scope for 10 CFR 54.4(a)(1). The damper housings are not water filled so they do not meet the requirement for inclusion for 10 CFR 54.4 (a)(2). The damper housings are not credited to be needed for the Regulated events identified in 10 CFR 54.4(a)(3). Therefore, damper housings are not in scope and subject to aging management review in Table 3.3.2-20.

7. Duct Sealants and pressure boundary sealants are not relied on to maintain leakage below established limits. The system pressure boundary is the pressure envelope for a space. Therefore, aging of the sealing materials does not jeopardize the accomplishment of the system intended functions.

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8. Wall Sealants are evaluated in the civil/structural area as elastomers in Sections 2.4 and 3.5 of the Application.

RAI 2.3.3.23-1

DAEC Reactor Building Heating, Ventilation, and Air Conditioning described in LRA Section 2.3.3.23 and on LRA Drawings BECH-M111-LR, BECH-M152-LR, BECH-M160(1)-LR, BECH-M162-LR, BECH-M165-LR, BECH-M166-LR, BECH-M170-LR, BECH-M171-LR, and LRA Table 2.3.3-23, Reactor Building Heating, Ventilation, and Air Conditioning, does not contain all the component types of the Reactor Building Heating, Ventilation, and Air Conditioning highlighted on the drawings. For example, while the table lists component types for pressure vessel, drip pans, ductwork, fasteners, heat exchanger, piping, valve body, etc., it does not list component types for accumulator housing, pulsation damper housing, and low pressure tank housing, bolting, washers and nuts, pipe fittings, hoses, tubes, rupture disk, housings for positive pressure devices (housings for separators and degasifiers (also not listed in Table 3.3.2-23), fire damper housings, fan housings, filter housings, nor damper housing (also not listed in Table 3.3.2-23).

Additionally, LRA Table 3.3.2-23, "Summary of Aging Management Review Results-Reactor Building Heating, Ventilation, and Air-Conditioning" does not list the component types for accumulator housing, pulsation damper housing and low pressure tank housing, pump casings, housings for positive pressure devices, fan housings, filter housings, fire damper housings, nor damper housings.

Clarify whether these component types and all other applicable component types of the system, including duct sealants, wall sealants, pressure boundary sealants, etc., are within the scope of license renewal in accordance with 10 CFR 54.4(a), and subject to aging management review in accordance with 10 CFR 54.21(a)(1). If these component types are in the scope of license renewal, update the LRA by providing the applicable information in the appropriate LRA tables. If these component types are excluded from the scope of license renewal and not subject to an AMR, provide justification for the exclusion.

DAEC Response to RAI 2.3.3.23-1

For clarity, the component type descriptions in Tables 2.3.3-23 and 3.3.2-23 should have been consistent. A table is provided as Enclosure 1 to this letter which can be used to correlate selected component types in Table 2.3.3-23 with their equivalent component types in Table 3.3.2-23. The table includes component types for which the Section 3 component description is worded somewhat differently from the component type listed in Section 2.

The following specific responses explain how the Table 3.3.2-23 component types correlate with the component types listed in Table 2.3.3-23.

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Response to Table 2.3.3-23 Examples

1. Accumulator housing, pulsation damper housing, and low pressure tank housing are not shown as separate line items since they are included in component group Pressure vessel in Table 2.3.3-23 and the equivalent line item Accumulator, pulsation damper, low pressure tank in Table 3.3.2-23.
2. The component type Fasteners in Table 2.3.3-23 is equivalent to Fasteners, bolting, washers, and nuts in Table 3.3.2-23.
3. The component type Piping in Table 2.3.3-23 is equivalent to Pipe, pipe fittings, hoses, tubes, and rupture disk in Table 3.3.2-23.
4. Housings for positive pressure devices are included in component type Pump casing in Table 2.3.3-23 and the equivalent line item Pumps, positive pressure devices (except blowers) in Table 3.3.2-23.
5. Housings for separators and degasifiers are included in the component type Separators in Table 2.3.3-23 and the equivalent line item Separators, degasifiers in Table 3.3.2-23.
6. Fire damper housings are included in the component type Valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
7. Fan housings would be included in the component type Blower in Section 2 tables and its equivalent line item Blower, compressor, fan, vacuum pump in 3.x.2 tables, if applicable. Damper housings would be included in the component type Valve or Valve body in Section 2 tables and the equivalent line item Valve, damper in 3.x.2 tables, if applicable. There are no fan housings or damper housings in scope and subject to aging management review in the Reactor Building Heating, Ventilation and Air Conditioning System.
8. Filter housings are included in the component type Filter in Section 2 tables and the equivalent line item Filter, screens, strainer in 3.x.2 tables. In this particular system there are no filter housings in scope and subject to aging management review.

Response to Table 3.3.2-23 Examples

1. Accumulator housings, pulsation damper housings, and low pressure tank housings are not shown as separate line items in Table 3.3.2-23 since they are included in component type Accumulator, pulsation damper, low pressure tank.

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2. Pump casings and housings for positive pressure devices are not shown as separate line items in Table 3.3.2-23 since they are included in Component type Pumps, positive pressure devices.
3. Fan housings would be included in the component type Blower in Section 2 tables and its equivalent line item Blower, compressor, fan, vacuum pump in 3.x.2 tables, if applicable. There are no fan housings in scope and subject to aging management review in the Reactor Building heating, Ventilation and Air Conditioning system.
4. Filter housings are included in the component type Filter in Section 2 tables and the equivalent line item Filter, screens, strainer in 3.x.2 tables. In this particular system there are no filter housings in scope and subject to aging management review.
5. Fire damper housings are included in the component type Valve body in the Fire Protection System Table 2.3.3-11 and in the line item Valve, damper in Table 3.3.2-11.
6. Damper housings would be included in the component type Valve or Valve body in Section 2 tables and the equivalent line item Valve, damper in 3.x.2 tables, if applicable. There are no damper housings in scope and subject to aging management review in the Reactor Building Heating Ventilation and Air Conditioning System.
7. Duct Sealants and pressure boundary sealants are not relied on to maintain leakage below established limits. The system pressure boundary is the pressure envelope for a space. Therefore, aging of the sealing materials does not jeopardize the accomplishment of the system intended functions.
8. Wall Sealants are evaluated in the civil/structural area as elastomers in Section 2.4 and 3.5 of the Application.