

**2.6.4 Fuel Building Ventilation System**

**Design Description**

**1.0 System Description**

The fuel building ventilation system (FBVS) receives the conditioned air supply from the nuclear auxiliary building ventilation system (NABVS). The exhaust from the FBVS is processed by the NABVS through a filtration train, and the exhaust air is directed to the vent stack.

The FBVS controls the Fuel Building temperature, humidity and air change rate for personnel comfort, personnel safety, and equipment protection during normal plant operation. The FBVS provides cooling, heating, and ventilation for the Fuel Building (FB) to remove equipment heat and heat generated from other sources. The FBVS also provides heat to maintain a minimum temperature in the building. The FBVS provides a minimal air change rate for the building and controls the building pressurization to reduce spreading of contamination.

The FBVS provides the following safety-related functions:

- Isolation of the FB from NABVS supply and exhaust on receipt of containment isolation signal.
- Heating of the rooms which have safety-related systems, structures, or equipment containing borated fluid and the rooms surrounding the extra borating system tanks to maintain minimum ambient room temperatures.
- Cooling of rooms which have the extra borating system pumps and the fuel pool cooling system pumps to maintain ambient conditions.

The FBVS provides the following non-safety related functions:

- Diverts the ventilation air flow to the NABVS iodine filter train on a high radiation signal from the radiation monitors (R-17, R-18).
- Isolates the fuel handling area ventilation on a high radiation signal from the radiation monitors (R-19).

**2.0 Arrangement**

2.1 The functional arrangement of the FBVS is as described in the Design Description of Section 2.6.4, Tables 2.6.4-1—Fuel Building Ventilation System Equipment Mechanical Design and 2.6.4-2—Fuel Building Ventilation System Equipment I&C and Electrical Design, and as shown on Figure 2.6.4-1—Fuel Building Ventilation System Functional Arrangement.

2.2 Deleted.

2.3 Physical separation exists between the FBVS ventilation trains located in the Fuel Building as listed in Table 2.6.4-2 and as shown on Figure 2.6.4-1.

### **3.0 Mechanical Design Features**

3.1 Deleted.

3.2 Class 1E dampers listed in Table 2.6.4-2 will function to change position as listed in Table 2.6.4-1 under normal operating conditions.

3.3 Equipment identified as Seismic Category I in Table 2.6.4-1 can withstand seismic design basis loads without a loss of safety function(s).

3.4 Deleted.

3.5 Deleted.

3.6 Equipment listed in Table 2.6.4-1 as ASME AG-1 Code are fabricated, installed, inspected, and tested in accordance with ASME AG-1 Code requirements.

### **4.0 I&C Design Features, Displays, and Controls**

4.1 Displays listed in Table 2.6.4-2 are indicated on the PICS operator workstations in the MCR and the RSS.

4.2 Controls on the PICS operator workstations in the MCR and the RSS perform the function listed in Table 2.6.4-2.

4.3 Equipment listed as being controlled by a priority and actuator control system (PACS) module in Table 2.6.4-2 responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.

### **5.0 Electrical Power Design Features**

5.1 Equipment designated as Class 1E in Table 2.6.4-2 is powered from the Class 1E division as listed in Table 2.6.4-2 in a normal or alternate feed condition.

5.2 Deleted.

### **6.0 Environmental Qualifications**

6.1 Equipment designated as harsh environment in Table 2.6.4-2 can perform the function listed in Table 2.6.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions.

### **7.0 Equipment and System Performance**

7.1 Deleted.

- 
- 7.2 Upon receipt of a containment isolation signal (CIS), the FBVS isolation dampers identified in Table 2.6.4-1 realign to exhaust air to the SBVS iodine filtration exhaust to the plant vent stack.
- 7.3 The FBVS provides cooling to maintain design temperatures in the pump rooms in the Fuel Building, while operating in a design basis accident alignment.
- 7.4 The FBVS provides heating to maintain design temperatures in the rooms with systems containing borated fluid in the Fuel Building, while operating in a design basis accident alignment.
- 7.5 Upon receipt of a high radioactivity signal from the radiation monitors (R-17, R-18), the FBVS diverts the ventilation air flow to the NABVS iodine filter train.
- 7.6 Upon receipt of a high radioactivity signal from the radiation monitors (R-19), the FBVS isolates the fuel handling area ventilation and diverts exhaust to SBVS iodine filtration.

#### **Inspections, Tests, Analyses, and Acceptance Criteria**

Table 2.6.4-3 lists the FBVS ITAAC.

**Table 2.6.4-1—FBVS Equipment Mechanical Design  
Sheet 1 of 3**

Description	Tag Number <sup>[1]</sup>	Location	ASME AG-1 Code	Function	Seismic Category
<b>Supply and Exhaust of Fuel Handling Hall</b>					
Motor Operated Supply Damper	30KLL11AA002	Fuel Building	Yes	Close	I
Motor Operated Supply Damper	30KLL14AA002	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper	30KLL21AA002	Fuel Building	Yes	Open	I
Motor Operated Exhaust Damper	30KLL24AA002	Fuel Building	Yes	Open	I
<b>Supply and Exhaust in front of Equipment Hatch</b>					
Motor Operated Supply Damper	30KLL11AA001	Fuel Building	Yes	Close	I
Motor Operated Supply Damper	30KLL14AA001	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper	30KLL21AA001	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper	30KLL24AA001	Fuel Building	Yes	Close	I
<b>Supply and Exhaust in front of Emergency Airlock</b>					
Motor Operated Supply Damper	30KLL11AA003	Fuel Building	Yes	Close	I
Motor Operated Supply Damper	30KLL14AA003	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper	30KLL21AA003	Fuel Building	Yes	Close	I

**Table 2.6.4-1—FBVS Equipment Mechanical Design  
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<b>Description</b>	<b>Tag Number<sup>[1]</sup></b>	<b>Location</b>	<b>ASME AG-1 Code</b>	<b>Function</b>	<b>Seismic Category</b>
Motor Operated Exhaust Damper	30KLL24AA003	Fuel Building	Yes	Close	I
<b>Fuel Building Isolation</b>					
Motor Operated Supply Damper (Cell 5)	30KLL34AA090	Fuel Building	Yes	Close	I
Motor Operated Supply Damper (Cell 5)	30KLL31AA049	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper (Cell 5)	30KLL41AA101	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper (Cell 5)	30KLL44AA101	Fuel Building	Yes	Close	I
Motor Operated Supply Damper (Cell 4)	30KLL34AA065	Fuel Building	Yes	Close	I
Motor Operated Supply Damper (Cell 4)	30KLL31AA090	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper (Cell 4)	30KLL41AA100	Fuel Building	Yes	Close	I
Motor Operated Exhaust Damper (Cell 4)	30KLL44AA100	Fuel Building	Yes	Close	I
Motor Operated Damper	30KLL21AA004	Fuel Building	Yes	Open	I
Motor Operated Damper	30KLL24AA004	Fuel Building	Yes	Open	I
<b>Recirculation Cooling Units for the Extra Borating System Pump Rooms</b>					
Air Cooling Coil	30KLL61AC001	Fuel Building	Yes	N/A	I
Moisture Separator	30KLL61AT001	Fuel Building	Yes	N/A	I
Recirculation Fan	30KLL61AN001	Fuel Building	Yes	Run	I

**Table 2.6.4-1—FBVS Equipment Mechanical Design  
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<b>Description</b>	<b>Tag Number<sup>[1]</sup></b>	<b>Location</b>	<b>ASME AG-1 Code</b>	<b>Function</b>	<b>Seismic Category</b>
Air Cooling Coil	30KLL64AC001	Fuel Building	Yes	N/A	I
Moisture Separator	30KLL64AT001	Fuel Building	Yes	N/A	I
Recirculation Fan	30KLL64AN001	Fuel Building	Yes	Run	I
<b>Recirculation Cooling Units for the Fuel Pool Cooling System Pump Rooms</b>					
Air Cooling Coil	30KLL61AC002	Fuel Building	Yes	N/A	I
Recirculation Fan	30KLL61AN002	Fuel Building	Yes	Run	I
Air Cooling Coil	30KLL61AC003	Fuel Building	Yes	N/A	I
Recirculation Fan	30KLL61AN003	Fuel Building	Yes	Run	I
Air Cooling Coil	30KLL64AC002	Fuel Building	Yes	N/A	I
Recirculation Fan	30KLL64AN002	Fuel Building	Yes	Run	I
Air Cooling Coil	30KLL64AC003	Fuel Building	Yes	N/A	I
Recirculation Fan	30KLL64AN003	Fuel Building	Yes	Run	I
Moisture Separator	30KLL61AT002	Fuel Building	Yes	N/A	I
Moisture Separator	30KLL61AT003	Fuel Building	Yes	N/A	I
Moisture Separator	30KLL64AT002	Fuel Building	Yes	N/A	I
Moisture Separator	30KLL64AT003	Fuel Building	Yes	N/A	I
<b>Electric Heaters for the Extra Borating System Pump Rooms and Pipe Chase</b>					
Electric Heaters	30KLL61AH001/002	Fuel Building	Yes	On/Off	I
Electric Heaters	30KLL61AH003/004	Fuel Building	Yes	On/Off	I
Electric Heaters	30KLL64AH001/002	Fuel Building	Yes	On/Off	I
Electric Heaters	30KLL64AH003/004	Fuel Building	Yes	On/Off	I

1. Equipment tag numbers are provided for information only and are not part of the certified design.

**Table 2.6.4-2—FBVS Equipment I&C and Electrical Design  
Sheet 1 of 4**

Description	Tag Number <sup>(1)</sup>	Location	IEEE Class 1E <sup>(2)</sup>	EQ – Harsh Env.	PACS	MCR/ RSS Displays	MCR/RSS Controls
<b>Supply and Exhaust of Fuel Handling Hall</b>							
Motor Operated Supply Damper	30KLL11AA002	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Supply Damper	30KLL14AA002	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper	30KLL21AA002	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper	30KLL24AA002	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
<b>Supply and Exhaust in front of Equipment Hatch</b>							
Motor Operated Supply Damper	30KLL11AA001	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Supply Damper	30KLL14AA001	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper	30KLL21AA001	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper	30KLL24AA001	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close

**Table 2.6.4-2—FBVS Equipment I&C and Electrical Design**  
**Sheet 2 of 4**

Description	Tag Number <sup>(1)</sup>	Location	IEEE Class 1E <sup>(2)</sup>	EQ – Harsh Env.	PACS	MCR/ RSS Displays	MCR/RSS Controls
<b>Supply and Exhaust in front of Emergency Airlock</b>							
Motor Operated Supply Damper	30KLL11AA003	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Supply Damper	30KLL14AA003	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper	30KLL21AA003	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper	30KLL24AA003	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
<b>Fuel Building Isolation</b>							
Motor Operated Supply Damper (Cell 5)	30KLL34AA090	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Supply Damper (Cell 5)	30KLL31AA049	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper (Cell 5)	30KLL41AA101	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper (Cell 5)	30KLL44AA101	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Supply Damper (Cell 4)	30KLL34AA065	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close



**Table 2.6.4-2—FBVS Equipment I&C and Electrical Design**  
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Description	Tag Number <sup>(1)</sup>	Location	IEEE Class 1E <sup>(2)</sup>	EQ – Harsh Env.	PACS	MCR/ RSS Displays	MCR/RSS Controls
Motor Operated Supply Damper (Cell 4)	30KLL31AA090	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper (Cell 4)	30KLL41AA100	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Exhaust Damper (Cell 4)	30KLL44AA100	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Damper	30KLL21AA004	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
Motor Operated Damper	30KLL24AA004	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	Position / Position	Open-Close / Open-Close
<b>Recirculation Cooling Units for the Extra Borating System Pump Rooms</b>							
Recirculation Fan	30KLL61AN001	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	On-Off / On-Off	Run-Stop / Run-Stop
Recirculation Fan	30KLL64AN001	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	On-Off / On-Off	Run-Stop / Run-Stop
<b>Recirculation Cooling Units for the Fuel Pool Cooling System Pump Rooms</b>							
Recirculation Fan	30KLL61AN002	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	On-Off / On-Off	Run-Stop / Run-Stop
Recirculation Fan	30KLL61AN003	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	On-Off / On-Off	Run-Stop / Run-Stop

**Table 2.6.4-2—FBVS Equipment I&C and Electrical Design**  
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Description	Tag Number <sup>(1)</sup>	Location	IEEE Class 1E <sup>(2)</sup>	EQ – Harsh Env.	PACS	MCR/ RSS Displays	MCR/RSS Controls
Recirculation Fan	30KLL64AN002	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	On-Off / On-Off	Run-Stop / Run-Stop
Recirculation Fan	30KLL64AN003	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	On-Off / On-Off	Run-Stop / Run-Stop
<b>Electric Heaters for the Extra Borating System Pump Rooms and Pipe Chase</b>							
Electric Heaters	30KLL61AH 001/002/003/004	Fuel Building	1 <sup>N</sup> 2 <sup>A</sup>	Yes	Yes	On-Off / On-Off	On-Off / On-Off
Electric Heaters	30KLL64AH 001/002/003/004	Fuel Building	4 <sup>N</sup> 3 <sup>A</sup>	Yes	Yes	On-Off / On-Off	On-Off / On-Off
<b>Instruments</b>							
Radiation Monitors (R-17)	30KLK34CR001 30KLK34CR031 30KLK34CR071	Fuel Building	N/A	N/A	N/A	Radioactivity level	N/A
Radiation Monitors (R-18)	30KLK35CR001 30KLK35CR031 30KLK35CR071	Fuel Building	N/A	N/A	N/A	Radioactivity level / Radioactivity level	N/A
Radiation Monitors (R-19)	30KLK38CR001 30KLK38CR002	Fuel Building	N/A	N/A	N/A	Radioactivity level / Radioactivity level	N/A

1. Equipment tag numbers are provided for information only and are not part of the certified design.
2. <sup>N</sup> denotes division the equipment is normally powered from, while <sup>A</sup> denotes division the equipment is powered from

**Table 2.6.4-3—Fuel Building Ventilation System ITAAC**  
**Sheet 1 of 6**

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
2.1	The functional arrangement of the FBVS is as described in the Design Description of Section 2.6.4, Tables 2.6.4-1 and 2.6.4-2, and as shown on Figure 2.6.4-1.	An inspection of the as-built FBVS functional arrangement will be performed.	The FBVS conforms to the functional arrangement as described in the Design Description of Section 2.6.4, Tables 2.6.4-1 and 2.6.4-2, and as shown on Figure 2.6.4-1.
2.2	Deleted.	Deleted.	Deleted.
2.3	Physical separation exists between the FBVS ventilation trains located in the Fuel Building as listed in Table 2.6.4-1 and as shown on Figure 2.6.4-1.	An inspection will be performed to verify that the as-built FBVS ventilation trains are located in separate cells in the Fuel Building.	The FBVS ventilation trains are located in separate cells in the Fuel Building as listed in Table 2.6.4-1 and as shown on Figure 2.6.4-1.
3.1	Deleted.	Deleted.	Deleted.
3.2	Class 1E dampers listed in Table 2.6.4-2 will function to change position as listed in Table 2.6.4-1 under normal operating conditions.	Tests will be performed to verify the ability of Class 1E dampers to change position under normal operating conditions.	Class 1E dampers change position as listed in Table 2.6.4-1 under normal operating conditions.
3.3	Equipment identified as Seismic Category I in Table 2.6.4-1 can withstand seismic design basis loads without a loss of safety function(s).	<ul style="list-style-type: none"> <li>a. Type tests, analyses, or a combination of type tests and analyses will be performed on the equipment identified as Seismic Category I in Table 2.6.4-1 using analytical assumptions, or under conditions, which bound the Seismic Category I design requirements.</li> <li>b. An inspection will be performed of the as-built equipment identified as Seismic Category I in Table 2.6.4-1 to verify that the equipment, including anchorage, are installed in a condition bounded by the tested or analyzed condition.</li> </ul>	<ul style="list-style-type: none"> <li>a. Test/analysis reports conclude that the equipment identified as Seismic Category I in Table 2.6.4-1 can withstand seismic design basis loads without a loss of safety function(s).</li> <li>b. Inspection reports conclude that the equipment identified as Seismic Category I in Table 2.6.4-1, including anchorage, are installed in a condition bounded by the tested or analyzed condition.</li> </ul>

**Table 2.6.4-3—Fuel Building Ventilation System ITAAC**  
**Sheet 2 of 6**

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.4	Deleted.	Deleted.	Deleted.
3.5	Deleted.	Deleted.	Deleted.
3.6	Equipment listed in Table 2.6.4-1 as ASME AG-1 Code are fabricated, installed, inspected, and tested in accordance with ASME AG-1 Code requirements.	An inspection of the as-built construction activities and documentation for ASME AG-1 Code equipment will be conducted.	A report concludes that ASME AG-1 Code equipment listed in Table 2.6.4-1 are fabricated, installed, inspected, and tested in accordance with ASME AG-1 Code requirements.
4.1	Displays listed in Table 2.6.4-2 are indicated on the PICS operator workstations in the MCR and the RSS.	<ul style="list-style-type: none"> <li>a. Tests will be performed to verify that the displays listed in Table 2.6.4-2 are indicated on the PICS operator workstations in the MCR.</li> <li>b. Tests will be performed to verify that the displays listed in Table 2.6.4-2 are indicated on the PICS operator workstations in the RSS.</li> </ul>	<ul style="list-style-type: none"> <li>a. Displays listed in Table 2.6.4-2 are indicated on the PICS operator workstations in the MCR.</li> <li>b. Displays listed in Table 2.6.4-2 are indicated on the PICS operator workstations in the RSS.</li> </ul>
4.2	Controls on the PICS operator workstations in the MCR and the RSS perform the function listed in Table 2.6.4-2.	<ul style="list-style-type: none"> <li>a. Tests will be performed using controls on the PICS operator workstations in the MCR.</li> <li>b. Tests will be performed using controls on the PICS operator workstations in the RSS.</li> </ul>	<ul style="list-style-type: none"> <li>a. Controls on the PICS operator workstations in the MCR perform the function listed in Table 2.6.4-2.</li> <li>b. Controls on the PICS operator workstations in the RSS perform the function listed in Table 2.6.4-2.</li> </ul>
4.3	Equipment listed as being controlled by a PACS module in Table 2.6.4-2 responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.	A test will be performed using test input signals to verify equipment controlled by a PACS module responds to the state requested and provides drive monitoring signals back to the PACS module.	Equipment listed as being controlled by a PACS module in Table 2.6.4-2 responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.

**Table 2.6.4-3—Fuel Building Ventilation System ITAAC**  
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<b>Commitment Wording</b>		<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
5.1	Equipment designated as Class 1E in Table 2.6.4-2 are powered from the Class 1E division as listed in Table 2.6.4-2 in a normal or alternate feed condition.	<ul style="list-style-type: none"> <li>a. Testing will be performed by providing a test input signal in each normally aligned division.</li> <li>b. Testing will be performed by providing a test input signal in each division with the alternate feed aligned to the divisional pair.</li> </ul>	<ul style="list-style-type: none"> <li>a. The test input signal provided in the normally aligned division is present at the respective Class 1E equipment identified in Table 2.6.4-2.</li> <li>b. The test input signal provided in each division with the alternate feed aligned to the divisional pair is present at the respective Class 1E equipment identified in Table 2.6.4-2.</li> </ul>
5.2	Deleted.	Deleted.	Deleted.

**Table 2.6.4-3—Fuel Building Ventilation System ITAAC**  
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	<b>Commitment Wording</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
6.1	Equipment designated as harsh environment in Table 2.6.4-2 can perform the function listed in Table 2.6.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions.	<p>a. Type tests or type tests and analysis will be performed to demonstrate the ability of the equipment designated as harsh environment in Table 2.6.4-2 to perform the function listed in Table 2.6.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions.</p> <p>b. An inspection will be performed of the as-built equipment designated as harsh environment in Table 2.6.4-2 to verify that the equipment, including the associated cables, wiring, and terminations located in a harsh environment, are bounded by the type test or combination of type tests and analyses.</p>	<p>a. EQDPs conclude that the equipment designated as harsh environment in Table 2.6.4-2 can perform the function listed in Table 2.6.4-1 under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions, including the time required to perform the listed function.</p> <p>b. A report exists and concludes that the equipment designated as harsh environment in Table 2.6.4-2, including the associated cables, wiring, and terminations located in a harsh environment, are bounded by the type test or combination of type tests and analyses.</p>
7.1	Deleted.	Deleted.	Deleted.
7.2	Upon receipt of a containment isolation signal, the FBVS isolation dampers identified in Table 2.6.4-1 realign to exhaust air to the SBVS iodine filtration exhaust to the plant vent stack.	A test will be performed using test input signals to verify that upon receipt of a containment isolation test input signal, the FBVS isolation dampers realign to exhaust air to the SBVS iodine filtration exhaust to the plant vent stack.	Within 60 seconds after receipt of a containment isolation test input signal from the PACS module the FBVS isolation dampers identified in Table 2.6.4-1 realign to exhaust air to the SBVS iodine filtration exhaust to the plant vent stack.

**Table 2.6.4-3—Fuel Building Ventilation System ITAAC**  
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	<b>Commitment Wording</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
7.3	The FBVS provides cooling to maintain design temperatures in the pump rooms in the Fuel Building, while operating in a design basis accident alignment.	<ul style="list-style-type: none"> <li>a. Tests and analysis will be performed to verify that the FBVS provides cooling to maintain design temperatures in the pump rooms in the Fuel Building, while operating in a design basis accident alignment.</li> <li>b. A test of the FBVS fans will be performed to verify that the air flow is greater than the approved design requirement.</li> </ul>	<ul style="list-style-type: none"> <li>a. The FBVS provides the design cooling capacity, while operating in a design basis accident alignment, and is capable of maintaining temperatures in the Fuel Building pump rooms.</li> <li>b. Each FBVS fan is capable of meeting the design air flow requirements, while operating in a design basis accident alignment.</li> </ul>
7.4	The FBVS provides heating to maintain design temperatures in the rooms with systems containing borated fluid in the Fuel Building, while operating in a design basis accident alignment.	Tests and analysis of the FBVS heaters will be performed to verify that the FBVS provides heating to maintain design temperatures in the rooms with systems containing borated fluid in the Fuel Building, while operating in a design basis accident alignment.	<ul style="list-style-type: none"> <li>a. Each FBVS heater energizes and provides equal to, or greater, than its required design heating capacity.</li> <li>b. The FBVS provides the required heating capacity to maintain design temperatures in the rooms with systems containing borated fluid in the Fuel Building, while operating in a design basis accident alignment.</li> </ul>
7.5	Upon receipt of a high radioactivity signal from the radiation monitors (R-17, R-18), the FBVS diverts the ventilation air flow to the NABVS iodine filter train.	A test will be performed to verify that the FBVS diverts the ventilation air flow to the NABVS iodine filter train upon receipt of a high radioactivity signal from the radiation monitors (R-17, R-18).	The FBVS diverts the ventilation air flow to the NABVS iodine filter train upon receipt of a high radioactivity signal from the radiation monitors (R-17, R-18) using an established trip setpoint.

**Table 2.6.4-3—Fuel Building Ventilation System ITAAC**  
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	<b>Commitment Wording</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
7.6	Upon receipt of a high radioactivity signal from the radiation monitors (R-19), the FBVS isolates the fuel handling area ventilation and diverts exhaust to SBVS iodine filtration.	A test will be performed to verify that the FBVS isolates the fuel handling area ventilation and diverts exhaust to SBVS iodine filtration upon receipt of a high radioactivity signal from the radiation monitors (R-19).	The FBVS isolates the fuel handling area ventilation and diverts exhaust to SBVS iodine filtration upon receipt of a high radioactivity signal from the radiation monitors (R-19) using an established trip setpoint.