

Attachment 2 to AEP:NRC:1145

Existing Technical Specifications Pages Marked
to Reflect Proposed Changes

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DEFINITIONS

REPORTABLE EVENT

1.7 REPORTABLE EVENT shall be any of those conditions specified in 10 CFR 50.73.

CONTAINMENT INTEGRITY

1.8 CONTAINMENT INTEGRITY shall exist when:

1.8.1 All penetrations required to be closed during accident conditions are either:

- a. Capable of being closed by an OPERABLE containment automatic isolation valve system, or
- b. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Table 3.6-1 of Specification 3.6.3.1.

1.8.2 All equipment hatches are closed and sealed.

1.8.3 Each air lock is ~~in compliance with the requirements of~~ *in compliance with the requirements of* Specification 3.6.1.3, and

1.8.4 The containment leakage rates are within the limits of Specification 3.6.1.2.

CHANNEL CALIBRATION

1.9 A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds with the necessary range and accuracy to known values of the parameter which the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is calibrated.

CHANNEL CHECK

1.10 A CHANNEL CHECK shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels measuring the same parameter.

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that:

1. All penetrations*not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except as provided in Table 3.6-1 of Specification 3.6.3.1, and

2. All equipment hatches are closed and sealed,

b. By verifying that each containment air lock is ^{in compliance} ~~OPERABLE per~~ Specification 3.6.1.3.
With the requirements of

*Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92 days.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. If any periodic Type A test fails to meet $.75 L_a$, the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet $.75 L_a$, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet $.75 L_a$, at which time the above test schedule may be resumed.
- c. The accuracy of each Type A test shall be verified by a supplemental test which:
 - 1. Confirms the accuracy of the Type A test by verifying that the difference between supplemental and Type A test data is within $0.25 L_a$,
 - 2. Has a duration sufficient to establish accurately the change in leakage between the Type A test and the supplemental test.
 - 3. Requires the quantity of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 25 percent of the total measured leakage rate at P_a , 12.0 psig.
- d. Type B and C tests shall be conducted at P_a , 12.0 psig, at intervals no greater than 24 months except for tests involving air locks.
Each containment air lock shall be verified to be in
- e. ~~Air locks shall be tested and demonstrated OPERABLE per Surveillance Requirement 4.6.1.3. compliance with the requirements of Specification 3.6.1.3.~~
- f. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurement system.

CONTAINMENT SYSTEMS

CONTAINMENT AIR LOCKS

LIMITING CONDITION FOR OPERATION

3.6.1.3 Each containment air lock shall be OPERABLE with:

- a. Both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed, and
- b. An overall air lock leakage rate of $\leq 0.05 L_a$ at P_a , 12 psig.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With an air lock inoperable, restore the air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

- a. ~~By visual inspection after each opening to verify that the seal has not been damaged.~~

a.b. *After each opening, except when the air lock is being used for multiple entries, when it shall be done at least once per 3 days, by performing an air leakage test without a simulated pressure force on the door by pressurizing the gap between the seals to 12 psig and verifying a seal leakage of no greater than $0.5 L_a$.

*Exemption to Appendix "J" of 10 CFR 50.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b~~g~~. At least once per 6 months, perform an air leakage test without a simulated pressure force on the door per 4.6.1.3.b., then perform an air leakage test with a simulated pressure force on the door, by pressurizing the gap between the seals to 12 psig and verifying a seal leakage of no greater than $0.0005 L_a$.
- c~~d~~. At least once per 6 months by conducting an overall air lock leakage test at P_a (12 psig) and by verifying that the overall air lock leakage rate is within its limit.
- d~~e~~. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

DEFINITIONS

REPORTABLE EVENT

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CONTAINMENT INTEGRITY

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1.8.1 All penetrations required to be closed during accident conditions are either:

- a. Capable of being closed by an OPERABLE containment automatic isolation valve system, or
- b. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Table 3.6-1 of Specification 3.6.3.1.

1.8.2 All equipment hatches are closed and sealed.

1.8.3 Each air lock is ~~closed in accordance with~~ *in compliance with the requirements of* Specification 3.6.1.3,

1.8.4 The containment leakage rates are within the limits of Specification 3.6.1.2, and

1.8.5 The sealing mechanism associated with each penetration (e.g., welds, bellows or O-rings) is OPERABLE.

CHANNEL CALIBRATION

1.9 A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds with the necessary range and accuracy to known values of the parameter which the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is calibrated.

CHANNEL CHECK

1.10 A CHANNEL CHECK shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels measuring the same parameter.

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that:

1. All penetrations* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except as provided in Table 3.6-1 of Specification 3.6.3.1, and

2. All equipment hatches are closed and sealed,

b. By verifying that each containment air lock is ~~OPERABLE~~ ^{in compliance with} per Specification 3.6.1.3.
the requirements of

*Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92 days.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. If any periodic Type A test fails to meet $.75 L_a$, the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet $.75 L_a$, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet $.75 L_a$, at which time the above test schedule may be resumed.
- c. The accuracy of each Type A test shall be verified by a supplemental test which:
 - 1. Confirms the accuracy of the Type A test by verifying that the difference between supplemental and Type A test data is within $0.25 L_a$,
 - 2. Has a duration sufficient to establish accurately the change in leakage rate between the Type A test and the supplemental test.
 - 3. Requires the quantity of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 25 percent of the total measured leakage at P_a , 12.0 psig.
- d. Type B and C tests shall be conducted with gas at P_a , 12.0 psig, at intervals no greater than 24 months except for tests involving air locks.
- e. *Each containment verified to be in compliance with the requirements of*
~~Air locks shall be tested and demonstrated OPERABLE per Surveillance Requirement 4.6.1.3. Specification 3.6.1.3.~~
- f. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurement system.
- g. The provisions of Specification 4.0.2 are not applicable.

Attachment 3 to AEP:NRG:1145

Proposed Revised Technical Specifications Pages

DEFINITIONS

REPORTABLE EVENT

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CONTAINMENT INTEGRITY

1.8 CONTAINMENT INTEGRITY shall exist when:

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1.8.3 Each air lock is in compliance with the requirements of Specification 3.6.1.3, and

1.8.4 The containment leakage rates are within the limits of Specification 3.6.1.2.

CHANNEL CALIBRATION

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS

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 - 3. Requires the quantity of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 25 percent of the total measured leakage rate at P_a , 12.0 psig.
- d. Type B and C tests shall be conducted at P_a , 12.0 psig, at intervals no greater than 24 months except^a for tests involving air locks.
- e. Each containment air lock shall be verified to be in compliance with the requirements of Specification 3.6.1.3.
- f. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurement system.

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LIMITING CONDITION FOR OPERATION

3.6.1.3 Each containment air lock shall be OPERABLE with:

- a. Both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed, and
- b. An overall air lock leakage rate of less than or equal to $0.05 L_a$ at P_a , 12 psig.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With an air lock inoperable, restore the air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

- a. *After each opening, except when the air lock is being used for multiple entries, when it shall be done at least once per 3 days, by performing an air leakage test without a simulated pressure force on the door by pressurizing the gap between the seals to 12 psig and verifying a seal leakage of no greater than $0.5 L_a$.

*Exemption to Appendix "J" of 10 CFR 50.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 6 months, perform an air leakage test without a simulated pressure force on the door per 4.6.1.3.b., then perform an air leakage test with a simulated pressure force on the door, by pressurizing the gap between the seals to 12 psig and verifying a seal leakage of no greater than $0.0005 L_a$.
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- d. Type B and C tests shall be conducted at P_a , 12.0 psig, at intervals no greater than 24 months except^a for tests involving air locks.
- e. Each containment air lock shall be verified to be in compliance with the requirements of Specification 3.6.1.3.
- f. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurement system.
- g. The provisions of Specification 4.0.2 are not applicable.