

ATTACHMENT 2 TO AEP:NRC:1137A
PROPOSED REVISED TECHNICAL SPECIFICATION PAGES
FOR DONALD G. COOK NUCLEAR PLANT UNITS 1 AND 2

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TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURED ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>TRIP ACTUATING DEVICE OPERATIONAL TEST</u>	<u>MODE IN WHICH SURVEILLANCE REQUIRED</u>
4. STEAM LINE ISOLATION					
a. Manual	----- See Functional Unit 9 -----				
b. Automatic Actuation Logic	N.A.	N.A.	M(2)	N.A.	1,2,3
c. Containment Pressure--High-High	S	R	M(3)	N.A.	1,2,3
d. Steam Flow in Two Steam Lines--High Coincident with Tavg--Low-Low or Steam Line Pressure--Low	S	R	M	N.A.	1,2,3
5. TURBINE TRIP AND FEEDWATER ISOLATION					
a. Steam Generator Water Level--High-High	S	R	M	N.A.	1,2,3
6. MOTOR DRIVEN AUXILIARY FEEDWATER PUMPS					
a. Steam Generator Water Level--Low-Low	S	R	M	N.A.	1,2,3
b. 4 kv Bus Loss of Voltage	S	R	M	N.A.	1,2,3
c. Safety Injection	N.A.	N.A.	M(2)	N.A.	1,2,3
d. Loss of Main Feed Pumps	N.A.	N.A.	R	N.A.	1,2

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. 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 volume between the door seals to 12 psig and verifying a seal leakage rate of no greater than $0.5 L_a$.



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 Specification 4.6.1.3.a., then perform an air leakage test with a simulated pressure force on the door, by pressurizing the volume between the door seals to 12 psig and verifying a seal leakage rate of no greater than $0.0005 L_a$.
- c. 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. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

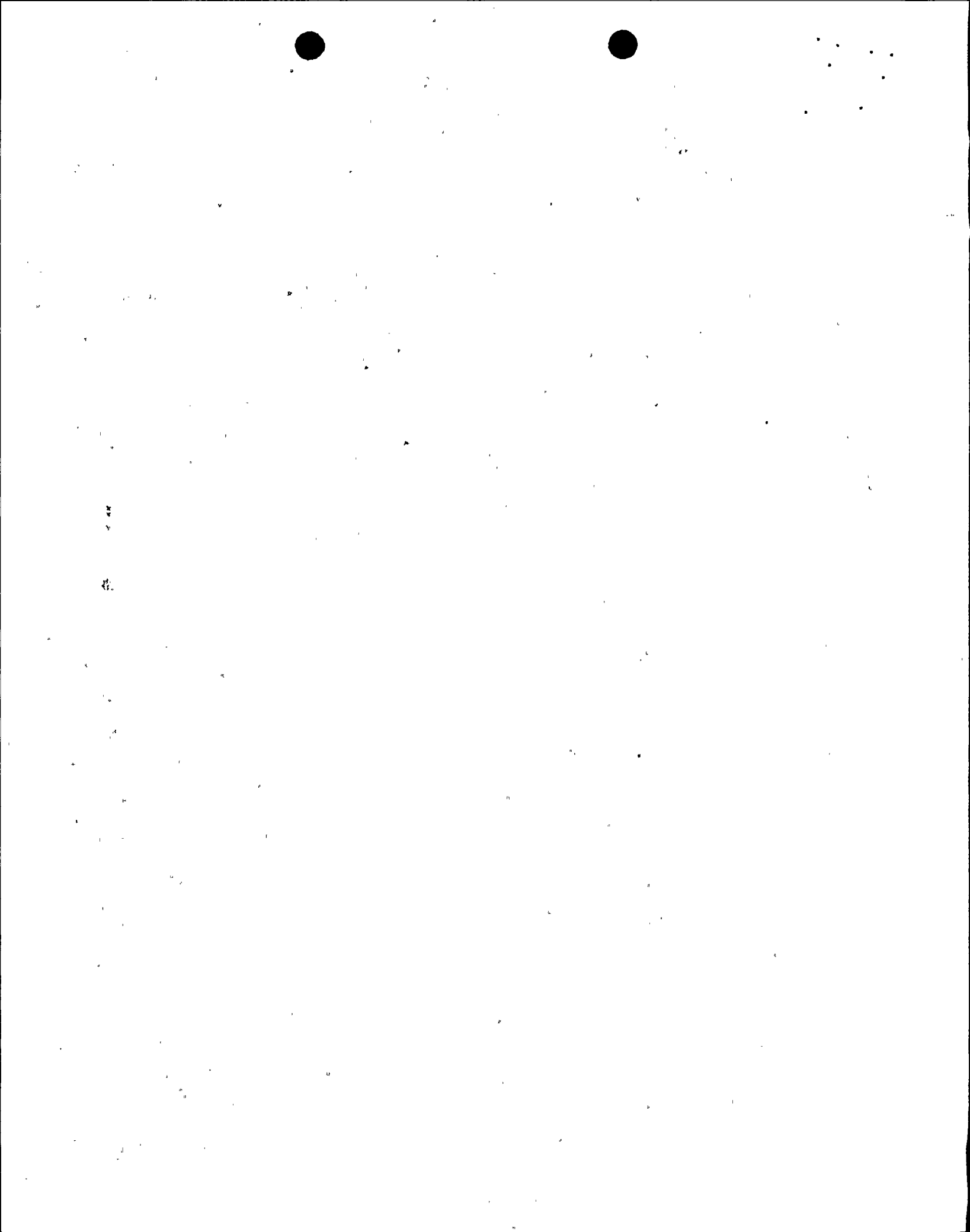


TABLE 2.2-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
13. Steam Generator Water Level-Low-Low	Greater than or equal to 21% of narrow range instrument span - each steam generator	Greater than or equal to 19.2% of narrow range instrument span - each steam generator
14. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	Less than or equal to 1.47 $\times 10^6$ lbs/hr of steam flow at RATED THERMAL POWER coincident with steam generator water level greater than or equal to 25% of narrow range instrument span - each steam generator	Less than or equal to 1.56 $\times 10^6$ lbs/hr of steam flow at RATED THERMAL POWER coincident with steam generator water level greater than or equal to 24% of narrow range instrument span - each steam generator
15. Undervoltage - Reactor Coolant Pumps	Greater than or equal to 2905 volts - each bus	Greater than or equal to 2870 volts - each bus
16. Underfrequency - Reactor Coolant Pumps	Greater than or equal to 57.5 Hz - each bus	Greater than or equal to 57.4 Hz - each bus
17. Turbine Trip		
A. Low Fluid Oil Pressure	Greater than or equal to 58 psig	Greater than or equal to 57 psig
B. Turbine Stop Valve Closure	Greater than or equal to 1% open	Greater than or equal to 1% open
18. Safety Injection Input from ESF	Not Applicable	Not Applicable
19. Reactor Coolant Pump Breaker Position Trip	Not Applicable	Not Applicable

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 , 12.0 psig.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With an air lock inoperable, maintain at least one door closed; 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 volume between the door seals to 12 psig and verifying a seal leakage rate of no greater than $0.5 L_a$.
- b. At least once per 6 months perform an air leakage test without a simulated pressure force on the door per Specification 4.6.1.3.a. then perform an air leakage with a simulated pressure force on the door by pressurizing the volume between the door seals to 12 psig and verifying a seal leakage rate of no greater than $0.0005 L_a$.

ATTACHMENT 3 TO AEP:NRC:1137A
EXISTING TECHNICAL SPECIFICATION PAGES
MARKED TO REFLECT PROPOSED CHANGES

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURED ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODE IN WHICH SURVEILLANCE REQUIRED</u>
4. STEAM LINE ISOLATION				
a. Manual	N.A.	N.A.	M(1)	1,2,3
b. Automatic Actuation Logic	N.A.	N.A.	M(2)	1,2,3
c. Containment Pressure--High-High	S	R	M(3)	1,2,3
d. Steam Flow in Two Steam Lines--High Coincident with Tavg--Low-Low OR	S	R	M	1,2,3
<i>ew</i> Steam Line Pressure--Low	<i>S</i>	<i>R</i>	<i>M</i>	<i>1,2,3</i>
5. TURBINE TRIP AND FEEDWATER ISOLATION				
a. Steam Generator Water Level--High-High	S	R	M	1,2,3
6. MOTOR DRIVEN AUXILIARY FEEDWATER PUMPS				
a. Steam Generator Water Level--Low-Low	S	R	M	1,2,3
b. 4 kv Bus Loss of Voltage	S	R	M	1,2,3
c. Safety Injection	N.A.	N.A.	M(2)	1,2,3
d. Loss of Main Feed Pumps	N.A.	N.A.	R	1,2

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURED ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>TPIP ACTUATING DEVICE OPERATIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
4. STEAM LINE ISOLATION					
a. Manual	----- See Functional Unit 9 -----				
b. Automatic Actuation Logic	N.A.	N.A.	M(2)	N.A.	1, 2, 3
c. Containment Pressure--High-High	S	R	M(3)	N.A.	1, 2, 3
d. Steam Flow in Two Steam Lines--High Coincident with Tavg--Low-Low <i>OR STEAM LINE</i> Pressure--Low	S	R	M	N.A.	1, 2, 3
5. TURBINE TRIP AND FEEDWATER ISOLATION					
a. Steam Generator Water Level--High-High	S	R	M	N.A.	1, 2, 3
6. MOTOR DRIVEN AUXILIARY FEEDWATER PUMPS					
a. Steam Generator Water Level--Low-Low	S	R	M	N.A.	1, 2, 3
b. 4 kv Bus Loss of Voltage	S	R	M	N.A.	1, 2, 3
c. Safety Injection	N.A.	N.A.	M(2)	N.A.	1, 2, 3
d. Loss of Main Feed Pumps	N.A.	N.A.	R	N.A.	1, 2

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:

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

- 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~~ *delete* ^{of no greater than 0.5 L_a .} *door* ^{ARATE}

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



CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. x. 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 ^{door} to 12 psig and verifying a seal leakage of no greater than 0.0005 L_a.
RATE VOLUME
- c. x. 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. x. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

TABLE 2.2-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
13. Steam Generator Water Level-Low-Low	Greater than or equal to 21% of narrow range instrument span - each steam generator	Greater than or equal to 19.2% of narrow range instrument span - each steam generator
14. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	Less than or equal to 1.47 $\times 10^6$ lbs/hr of steam flow at RATED THERMAL POWER coincident with steam generator water level greater than or equal to 25% of narrow range instrument span - each steam generator	Less than or equal to 1.56 $\times 10^6$ lbs/hr of steam flow at RATED THERMAL POWER coincident with steam generator water level greater than or equal to 24% of narrow range instrument span - each steam generator
15. Undervoltage - Reactor Coolant Pumps	Greater than or equal to 2905 volts - each bus	Greater than or equal to 2870 volts - each bus
16. Underfrequency - Reactor Coolant Pumps	Greater than or equal to 57.5 Hz - each bus	Greater than or equal to 57.4 Hz - each bus
17. Turbine Trip		
A. Low Reactor System Pressure	Greater than or equal to 58 psig	Greater than or equal to 57 psig
B. Turbine Stop Valve Closure	Greater than or equal to 1 $\frac{1}{2}$ open	Greater than or equal to 1 $\frac{1}{2}$ open
18. Safety Injection Input from ESF	Not Applicable	Not Applicable
19. Reactor Coolant Pump Breaker Position Trip	Not Applicable	Not Applicable

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 , 12.0 psig.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With an air lock inoperable, maintain at least one door closed; restore the air lock to OPERABLE status within 24 hours or be in at least HCT 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, then at least once per 72 hours,~~ ^{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 volume between the door seals to 12 psig and verifying a seal leakage rate of no greater than $0.5 L_a$.
- b. At least once per 6 months by performing an air leakage test without a simulated pressure force on the door per Specification 4.6.1.3.a; then by performing an air leakage with a simulated pressure force on the door by pressurizing the volume between the door seals to 12 psig and verifying a seal leakage rate of no greater than $0.0005 L_a$.

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