ATTACHMENT 2

REVISED TECHNICAL SPECIFICATION PAGES

REACTOR COOLANT SYSTEM ISOLATION VALVES

Line or System	No. of Valves (Each Line)	Location Relative to Primary Containment	Normal Position	Motive Power*	Maximum Oper. Time (Sec)	Action on Initiating Signal	Initiating Signal (All Valves Have Remote Manual Backup)
Emergency Cooling							
Steam Leaving Reactor[1]	1	Outside	Open	AC Motor	38	Close	High system flow
(Two Lines)	1	Outside	Open	DC Motor	38	Close	
Condensate Return to Reactor[1]	1	Inside	-	Self Act. Ck.	-	-	-
(Two Lines)	1	Outside	Closed	Pn/DC Solenoid	60	Close	High system flow
					60	Open	Reactor water level low-low or high reactor pressure
High Point Vent Line[7] (Two Lines)	2	Outside	Open	Pn/DC Solenoid	10	Close	High system flow or main steam line isolation
Reactor Cleanup							
Water Leaving Reactor[1]	1	Inside	Open	AC Motor	18	Close	Reactor water level low-low or high area temperature or liquid poison initiation
(One Line)	1	Outside	Open	DC Motor	18	Close	
Water Return to Reactor[1]	1	Inside	Open	AC Motor	18	Close	
(One Line)	1	Outside	-	Self Act. Ck.	-	-	

LIMITING CONDITIONS FOR OPERATION
Table 3.2.7 (Cont'd)

REACTOR COOLANT SYSTEM ISOLATION VALVES

Line or System	No. of Valves (Each Line)	Location Relative to Primary Containment	Normal Position	Motive Power*	Maximum Oper. Time (Sec)	Action on Initiating Signal	Initiating Signal (All Valves Have Remote Manual Backup)
Shutdown Cooling							
Water Leaving Reactor[1][2]	1	Inside	Closed	AC Motor	40	Close	Reactor water level low-low, or high area temperature
(One Line)	1	Outside	Closed	DC Motor	40	Close	
Water Return to Reactor[1][2]	1	Inside	Closed	AC Motor	40	Close	
(One Line)	1	Outside	-	Self Act. Ck.	-	-	
Liquid Poison[1]	1	Inside	-	Self Act. Ck.	-	-	-
(One Line)	1	Outside	-	Self Act. Ck.	-	-	-
Control Rod Drive Hydraulic[3]	1	Inside	-	Self Act. Ck.	-	-	-
(One Line)	1	Outside	-	Self Act. Ck.	-	-	-
Core Spray Injection[4]	2	Inside	Closed	AC Motor	22.5	Open	Reactor water level low-low or high drywell pressure
(Two Lines)	1	Outside	Locked Open	AC Motor	22.5	Open	
Core Spray High Point Vent[4][8]	1	Outside	Closed	Pn/DC Solenoid	27	Close	Reactor water level low-low or high drywell pressure
(Two Lines)	1	Inside	Closed	AC Motor	27	Close	
Core Spray Condensate Supply[6] (Keep Fill) (Two Lines)	2	Outside	Open	Self Act. Ck.	-	-	-
Core Spray System Valves[6] (Two Lines)	1	Outside	Closed	Self Act. Ck.	-	-	-

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
	(3) If the leakage rate exceeds the acceptance criterion, corrective action shall be required. If, during the performance of a Type A test, excessive leakage occurs through locally testable penetrations or isolation valves to the extent that it would interfere with the satisfactory completion of the test, these leakage paths may be isolated and the Type A re-test continued until completion. The Type A test shall be considered a failed test. A local leakage test shall be performed at P_t before and after the repair of each isolated leakage path. The sum of the post repaired local leakage rates and the UCL shall be less than 75 percent of the maximum allowable leakage rate, L_t (22). Local leakage rates shall not be subtracted from the Type A test results to determine the acceptability of a test. The as found and as left leakage data values of excessive leakage areas beyond acceptance criteria shall be provided to the NRC.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

(4) Closure of the containment isolation valves for the purpose of the test shall be accomplished by the means provided for normal operation of the valves.

(5) A Type A test shall last a minimum of eight (8) hours with leakage rates calculated based on "Total Time" method. If a twenty-four (24) hour test is performed the "Mass Point" method will be used to calculate leakage rates. A verification test shall be performed following each Type A test. The verification test provides a method for assuring that systematic error or bias is given adequate consideration. During the verification test, containment pressure may not decrease more than one (1) psi below P_t.

b. Acceptance Criteria

(1) The maximum allowable leakage rate L_t (22) shall not exceed 1.19 weight percent of the contained air per 24 hours at the test pressure of 22 psig (P_t).

(2) The maximum allowable operational leakage rate L_{to} (22) which shall be met prior to power operation

following a Type A test (either as measured or following repairs and retest) shall not exceed 0.75 L_t (22) (0.892 weight percent per day).

(3) When adding the leakage rate measured during a Type C test to the results of a Type A test, the leakage rate shall be determined using minimum pathway analysis.

c. Frequency

(1) Three Type A tests shall be conducted during each ten year service interval at approximately equal intervals. The third test will be conducted when the plant is shutdown for the 10 year inservice inspections.

(2) Retesting

(a) If a Type A test fails to meet the acceptance criteria of 4.3.3.b.(1), a Corrective Action Plan that focuses attention on the cause of the problem shall be developed and implemented. A Type A test that meets the requirements of

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
	4.3.3.a.(3) and 4.3.3.b.(2) is required prior to plant start-up. A report of the Corrective Action following the failed Type A shall be submitted to the NRC for review and approval with the Containment Leak Test Report.
	(b) If any periodic Type A test fails to meet the acceptance criteria of 4.3.3.b.(1), the test schedule for subsequent Type A tests will be reviewed and approved by the NRC.
	(c) If two consecutive periodic Type A tests (not including an immediate retest under (a) fail to meet the acceptance criteria of 4.3.3.b.(1), 4.3.3.b.(2) and 4.3.3.a.(3), notwithstanding the periodic retest schedule of (b), a Type A test must be performed at each refueling outage or every 18 months, whichever occurs first, unless alternative leak test requirements are accepted by the NRC by means of specific exemption from Appendix J per 10CFR50.12. This testing shall be performed until two

consecutive periodic Type A tests (not including an immediate retest under (a)) meet the acceptance criteria of 4.3.3.b.(1) or 4.3.3.a.(3), then the retest schedule specified in 4.3.3.c.(1) should be resumed.

d. Local Leak Rate-Type B and Type C Tests

(1) Primary containment testable penetrations and isolation valves required to be Type B or Type C tested by regulatory requirements, shall be tested at a pressure of 35.0 psig (P_a)

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
	(a) The airlocks shall be tested at a test pressure of 35 psig following a refueling outage or maintenance outage requiring drywell access prior to primary containment integrity being required.
	(b) Airlocks opened during periods when primary containment integrity is required shall be tested within three days after being opened. For airlock doors opened more frequently than once every three days, the airlocks shall be tested at least once every three days.
	(c) The airlocks shall be tested every six months at a test pressure of 35 psig.
	(d) Leakage rate for airlocks shall not exceed $0.05L_a$ at 35 psig.

The maximum allowable test leak rate as specified in 4.3.3.b is 1.5%/day at a pressure of 35 psig. This value for the test condition was derived from the maximum allowable accident leak rate of about 1.9%/day when corrected for the effects of containment environment under accident and test conditions. In the accident case, the containment atmosphere initially would be composed of steam and hot air depleted of oxygen whereas under test conditions the test medium would be air or nitrogen at ambient conditions. Considering the differences in mixture composition and temperatures, the appropriate correction factor applied was 0.8 and determined from the guide on containment testing.[3]

Although the dose calculations suggest that the allowable test leak rate could be allowed to increase to about 3.0%/day before the guideline thyroid dose limit given in 10 CFR 100 would be exceeded, establishing the limit at 1.5%/day provides an adequate margin of safety to assure the health and safety of the general public. It is further considered that the allowable leak rate should not deviate significantly from the containment design value to take advantage of the design leak-tightness capability of the structure over its service lifetime. Additional margin to maintain the containment in the "as built" condition is achieved by establishing the allowable operational leak rate. The operational limit is derived by multiplying the allowable test leak rate by 0.75 thereby providing a 25% margin to allow for leakage deterioration which may occur during the period between leak rate tests.

A reduced pressure test program is used for the integrated test. The test pressures are based on loss-of-coolant accident conditions. The peak primary containment pressure following a loss-of-coolant accident would be 35 psig. This would rapidly reduce to 22 psig. The total time drywell pressure would be above 22 psig would be about 10 seconds. Pre-operational integrated leak tests were performed at test pressures at 35 psig and 22 psig. Subsequent integrated tests are performed at a test pressure of 22 psig.

Closure of the containment isolation valves for the purpose of the test is accomplished by the means provided for normal operation of the valves. The reactor is vented to the containment atmosphere during testing.

The acceptance criteria states that the maximum allowable leakage rate (L_t) shall not exceed 1.19 weight percent of the contained air in 24 hours at 22 psig (P_t). This corresponds to the maximum allowable leakage rate (L_a) of 1.5 weight percent at 35 psig (P_a). The maximum allowable test leak rate L_t (at 22 psig) shall not exceed the 1.5 percent per day times the square root of the ratio of the pressures P_t (at 22 psig) and P_a (at 35 psig), respectively since the ratio of measured leakages for Nine Mile Point Unit 1 is 0.735. The allowable operational leakage rate, L_{to} (at 22 psig) shall not exceed 75 percent of L_t (at 22 psig) and shall be met prior to resumption of power operation following a test.

LIMITING CONDITIONS FOR OPERATION
Table 3.3.4 (Cont'd)
PRIMARY CONTAINMENT ISOLATION VALVES
LINES ENTERING FREE SPACE OF THE CONTAINMENT

Line or System	No. of Valves (Each Line)	Location Relative to Primary Containment	Normal Position	Motive Power*	Maximum Oper. Time (Sec)	Action on Initiating Signal	Initiating Signal (All Valves Have Remote Manual Backup)
Core Spray High Point Vent[3]	1 1	Outside Inside	Closed Closed	Pn/DC Solenoid AC Motor	27 27	Close Close	Reactor water level low-low or high drywell pressure
Containment Spray Drywell & Suppression Chamber Common Supply[6] (Four Lines)	1	Outside	Open	Pn/DC Solenoid	60	Open	Remote manual
Drywell Branch[6] (Four Lines)	1	Outside	-	Self Act. Ck.	-	-	-
Suppression Chamber Branch[6] (One Branch for Each System)	2**	Outside	-	Self Act. Ck.	-	-	-
Pump Suction From Suppression Chamber[5] (Four Lines)	1	Outside	Open	AC Motor	70	-	Remote manual

LIMITING CONDITIONS FOR OPERATION
Table 3.3.4 (Cont'd)
PRIMARY CONTAINMENT ISOLATION VALVES
LINES ENTERING FREE SPACE OF THE CONTAINMENT

Line or System	No. of Valves (Each Line)	Location Relative to Primary Containment	Normal Position	Motive Power*	Maximum Oper. Time (Sec)	Action on Initiating Signal	Initiating Signal (All Valves Have Remote Manual Backup)
Containment Atmosphere Monitoring Supply Line[1] (One Line)	2	Outside	Open	Pn/DC Solenoid	60	Close(b)	Reactor water level low-low or high drywell pressure
Containment Post LOCA Vent (Two Lines)	2	Outside	Closed	Pn/DC Solenoid	60	Close(b)	Reactor water level low-low or high drywell pressure
N2 Purge - TIP Indexers[1] (One Line)	2	Outside	Open	Self Act. Ck.	-	-	-
Traversing Incore Probe[1] (Four Lines)	1	Outside	Closed	AC Motor	60	Close	Reactor water level low-low or high drywell pressure
LINES WITH A CLOSED LOOP INSIDE CONTAINMENT VESSELS							
Recirc. Pump Cooling Water[4]							
Supply Line	1	Outside	Open	Self Act. Ck.	-	-	-
Return Line	1	Outside	Open	DC Motor	60	-	Remote manual
Drywell Cooler Water[4]							
Supply Line	1	Outside	Open	Self Act. Ck.	-	-	-
Return Line	1	Outside	Open	DC Motor	60	-	Remote manual