UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

INDIANA AND MICHIGAN ELECTRIC COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95
License No. DPR-58

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Indiana and Michigan Electric Company (the licensee) dated October 19, 1984, as supplemented by letters dated May 31, 1985, October 18, 1985, and February 7, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. DPR-58 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 95, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The change in Technical Specifications is to become effective within 60 days of issuance of the amendment. In the period between issuance of the amendment and the effective date of the new Technical Specifications, the licensee shall adhere to the Technical Specifications for the systems, components, or operation existing at the time. The period of time during changeover of systems, components or operation shall be minimized or compensated for by suitable temporary alternatives.

4. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Paul W O'Connor

for B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A, NRR

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 23, 1986

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 95 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The change in Technical Specifications is to become effective within 60 days of issuance of the amendment. In the period between issuance of the amendment and the effective date of the new Technical Specifications, the licensee shall adhere to the Technical Specifications for the systems, components, or operation existing at the time. The period of time during changeover of systems, components or operation shall be minimized or compensated for by suitable temporary alternatives.

4. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/S/

B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A, NRR

Attachment:
Changes to the Technical Specifications

Date of Issuance: April 23, 1986

PWR#4:DPWR-A	PWR#4:DPWR-A	OELD	PWR#4:DPWR-A
DWigginton:mac	MDuncan		BJYoungblood
04/16/86	04/16/86	04/17/86	04/16/86

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 81 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The change in Technical Specifications is to become effective within 60 days of issuance of the amendment. In the period between issuance of the amendment and the effective date of the new Technical Specifications, the licensee shall adhere to the Technical Specifications for the systems, components, or operation existing at the time. The period of time during changeover of systems, components or operation shall be minimized or compensated for by suitable temporary alternatives.

4. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A, NRR

Attachment:
Changes to the Technical Specifications

Date of Issuance: April 23, 1986

PWR#4:DPWR-A	PWR#4:DPWR-A	OELD	PWR#4:DPWR-A
DWigginton:mac	MDuncan		BJYoungblood
04/16/86	04/16/86	04/17/86	04/16/86

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

INDIANA AND MICHIGAN ELECTRIC COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 81
License No. DPR-74

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Indiana and Michigan Electric Company (the licensee) dated October 19, 1984, as supplemented by letters dated May 31, 1985, October 18, 1985, and February 7, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. DPR-74 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 81 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The change in Technical Specifications is to become effective within 60 days of issuance of the amendment. In the period between issuance of the amendment and the effective date of the new Technical Specifications, the licensee shall adhere to the Technical Specifications for the systems, components, or operation existing at the time. The period of time during changeover of systems, components or operation shall be minimized or compensated for by suitable temporary alternatives.

4. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Paul W O'Connor

for B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A, NRR

Attachment:
Changes to the Technical Specifications

Date of Issuance: April 23, 1986

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 95 FACILITY OPERATING LICENSE NO. DPR-58

AMENDMENT NO. 81 FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NOS. 50-315 AND 50-316

Revise Appendix A as follows:

Remove Pages	Insert Pages
UNIT 1	
3/4 6-1	3/4 6-1
3/4 6-2*	3/4 6-2*
3/4 6-14	3/4 6-14
3/4 6-15	3/4 6-15
3/4 6-16	3/4 6-16
3/4 6-17	3/4 6-17
3/4 6-18	3/4 6-18
3/4 6-19	3/4 6-19
3/4 6-20	3/4 6-20
3/4 6-21	3/4 6-21
3/4 6-22	3/4 6-22
UNIT 2	
3/4 6-17	3/4 6-17
3/4 6-18	3/4 6-18
3/4 6-19	3/4 6-19
3/4 6-22	3/4 6-22
3/4 6-23	3/4 6-23
3/4 6-24	3/4 6-24
3/4 6-27*	3/4 6-27*
3/4 6-28	3/4 6-28
3/4 6-29	3/4 6-29
3/4 6-30	3/4 6-30
3/4 6-31	3/4 6-31

* Included for Convenience

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 per Specification 3.6.1.3.

*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

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

a. An overall integrated leakage rate of $\leq L_a$, 0.25 percent by weight of the containment air per 24 hours at P_a, 12.0 psig, and

b. A combined leakage rate of $\leq 0.60\ L_a$ for all penetrations and valves subject to Type B and C tests when pressurized to P_a.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With either (a) the measured overall integrated containment leakage rate exceeding $0.75\ L_a$ or (b) with the measured combined leakage rate for all penetrations and valves subject to Types B and C tests exceeding $0.60\ L_a$ restore the leakage rate(s) to within the limit(s) prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50 using the methods and provisions of ANSI N45.4-1972:

a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 $\pm$ 10 month intervals during shutdown at P_a, 12.0 psig, during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant inservice inspection.

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3.1 The containment isolation valves specified in Table 3.6-1 shall be OPERABLE with isolation times as shown in Table 3.6-1. The ACTION statement of T/S 3/4.6.3 is not applicable to the containment purge supply and exhaust isolation valves, VCR-101 through 106 and VCR-201 through 206, listed in Table 3.6-1. The Limiting Condition for Operation and its associated ACTION statement for these valves is given in Technical Specification 3/4.6.1.7.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the isolation valve(s) specified in Table 3.6-1 inoperable, either:

a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or

b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or

c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange, or

d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.3.1.1 The isolation valves specified in Table 3.6-1 shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test and verification of isolation time.

SURVEILLANCE REQUIREMENTS (Continued)

valve or its associated actuator, control or power circuit by performance of the cycling test, above, and verification of isolation time.

4.6.3.1.2 Each isolation valve specified in Table 3.6-1 shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by:

a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.

b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.

c. Verifying that on a Containment Purge and Exhaust isolation signal, each Purge and Exhaust valve actuates to its isolation position.

4.6.3.1.3 The isolation time of each power operated or automatic valve of Table 3.6-1 shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

TABLE 3.6-1

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
A. PHASE "A" ISOLATION		
1. CCR-455	CCW to Reactor Supports	10
2. CCR-456	CCW from Reactor Supports	10
3. CCR-457	CCW from Reactor Supports	10
4. CCR-460	CCW from Excess ltdn. Hx.	10
5. CCR-462	CCW to Excess ltdn. Hx.	10
6. DCR-201	R.C. Drain Tank to Vent. Hdr.	10
7. DCR-202	R.C. Drain Tank to Gas Analyzer	10
8. DCR-203	R.C. Drain Tank to Vent. Hdr.	10
9. DCR-204	R.C. Drain Tank to Gas Analyzer	10
10. DCR-205	R.C. Drain Pump Suction Isolation	10
11. DCR-206	R.C. Drain Pump Suction Isolation	10
12. DCR-207	N_2 Supply to R.C. Drain Tank	10
13. DCR-301	Steam Generator Blowdown Sample #1	10
14. DCR-302	Steam Generator Blowdown Sample #2	10
15. DCR-303	Steam Generator Blowdown Sample #3	10
16. DCR-304	Steam Generator Blowdown Sample #4	10
17. DCR-310	Steam Generator Blowdown Lines #1	10
18. DCR-320	Steam Generator Blowdown Lines #2	10
19. DCR-330	Steam Generator Blowdown Lines #3	10
20. DCR-340	Steam Generator Blowdown Lines #4	10
21. DCR-600	Containment Sump to Waste Holdup	10
22. DCR-601	Containment Sump to Waste Holdup	10
23. DCR-610	Ice Condenser Drain to Drain Hdr.	10
24. DCR-611	Ice Condenser Drain to Drain Hdr.	10
25. DCR-620	Continuous Ventilation Drain to Holdup	10
26. DCR-621	Continuous Ventilation Drain to Holdup	10

TABLE 3.6-1 (Continued)

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
A. PHASE "A" ISOLATION (Continued)		
27. ECR-10	Cont. H_2 Sample Return	10
28. ECR-11	Cont. H_2 Sample - Air to Rec. E	10
29. ECR-12	Cont. H_2 Sample - Air from Rec. E	10
30. ECR-13	Cont. H_2 Sample - Low. Cont. Vol.	10
31. ECR-14	Cont. H_2 Sample - Low. Cont. Vol.	10
32. ECR-15	Cont. H_2 Sample - Up Cont. Vol.	10
33. ECR-16	Cont. H_2 Sample - Up Cont. Vol.	10
34. ECR-17	Cont. H_2 Sample - Air to Rec. W	10
35. ECR-18	Cont. H_2 Sample - Air from Rec. W	10
36. ECR-19	Cont. H_2 Sample - Cont. Dome Vol.	10
37. ECR-20	Cont. H_2 Sample - Return	10
38. ECR-21	Cont. H_2 Sample - Air to Rec. E.	10
39. ECR-22	Cont. H_2 Sample - Air fr. Rec. E	10
40. ECR-23	Cont. H_2 Sample - Low Cont. Vol.	10
41. ECR-24	Cont. H_2 Sample - Low Cont. Vol.	10
42. ECR-25	Cont. H_2 Sample - Up Cont. Vol.	10
43. ECR-26	Cont. H_2 Sample - Up Cont. Vol.	10
44. ECR-27	Cont. H_2 Sample - Air to Rec. W.	10
45. ECR-28	Cont. H_2 Sample - Air Fr. Rec. W.	10
46. ECR-29	Cont. H_2 Sample - Cont. Dome Vol.	10
47. ECR-416	PAS Containment Sump Sample	10
48. ECR-417	PAS Containment Sump Sample	10
49. ECR-496	PAS Waste Liquid and Gas Return	10
50. ECR-497	PAS Waste Liquid and Gas Return	10
51. ECR-535	PAS Containment Gas Sample	10
52. ECR-536	PAS Containment Gas Sample	10
53. GCR-301	N_2 Supply to Pressurizer Relief Tank	10
54. GCR-314	N_2 Supply to Accumulators	10
55. ICR-5	Accumulators Sample	10
56. ICR-6	Accumulators Sample	10
57. NCR-251	Sample Line from Steam Gen. Outlet #1	10
58. NCR-252	Sample Line from Steam Gen. Outlet #2	10
59. NCR-253	Sample Line from Steam Gen. Outlet #3	10
60. NCR-254	Sample Line form Steam Gen. Outlet #4	10
61. NCR-105	Hot Leg Sample	10
62. NCR-106	Hot Leg Sample	10

TABLE 3.6-1 (Continued)

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
A. PHASE "A" ISOLATION (Continued)		
63. NCR-107	PRZ Liquid Sample	10
64. NCR-108	PRZ Liquid Sample	10
65. NCR-109	PRZ Steam Sample	10
66. NCR-110	PRZ Steam Sample	10
67. NCR-252	Primary Water to Pressure Relief Tank	10
68. PCR-40	Containment Service Air	10
69. QCM-250	RCP Seal Water Discharge	15
70. QCM-350	RCP Seal Water Discharge	15
71. QCR-300	Letdown to Letdown Hx.	10
72. QCR-301	Letdown to Letdown Hx.	10
73. QCR-919	Demineralized Water Supply for Refueling Cavity	10
74. QCR-920	Demineralized Water Supply for Refueling Cavity	10
75. RCR-100	PRZ Relief Tank to Gas Anal.	10
76. RCR-101	PRZ Relief Tank to Gas Anal.	10
77. VCR-10	Glycol Supply to Fan Cooler	10
78. VCR-11	Glycol Supply to Fan Cooler	10
79. VCR-20	Glycol Supply from Fan Cooler	10
80. VCR-21	Glycol Supply from Fan Cooler	10
81. XCR-100	Control Air to Containment	10
82. XCR-101	Control Air to Containment Isolation	10
83. XCR-102	Control Air to Containment Isolation	10
84. XCR-103	Control Air to Containment	10
B. PHASE "B" ISOLATION		
1. CCM-451	CCW from RCP Oil Coolers	60
2. CCM-452	CCW from RCP Oil Coolers	60
3. CCM-453	CCW from RCP Thermal Barrier	30
4. CCM-454	CCW from RCP Thermal Barrier	30
5. CCM-458	CCW to RCP Oil Coolers & Thermal Barrier	60
6. CCM-459	CCW to RCP Oil Coolers & Thermal Barrier	60
7. ECR-31	Containment Airborne Radiation Monitor	10
8. ECR-32	Containment Airborne Radiation Monitor	10
9. ECR-33	Containment Airborne Radiation Monitor	10
10. ECR-35	Containment Airborne Radiation Monitor	10
11. ECR-36	Containment Airborne Radiation Monitor	10

TABLE 3.6-1 (Continued)

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
B. PHASE "B" ISOLATION (Continued)		
12. WCR-901	NESW to Low Containment Vent #1	10
13. WCR-903	NESW from Low Containment Vent #1	10
14. WCR-905	NESW to Low Containment Vent #2	10
15. WCR-907	NESW from Low Containment Vent #2	10
16. WCR-909	NESW to Low Containment Vent #3	10
17. WCR-911	NESW from Low Containment Vent #3	10
18. WCR-913	NESW to Low Containment Vent #4	10
19. WCR-915	NESW from Low Containment Vent #4	10
20. WCR-921	NESW to Up Containment Vent #1	10
21. WCR-923	NESW from Up Containment Vent #1	10
22. WCR-925	NESW to Up Containment Vent #2	10
23. WCR-927	NESW from Up Containment Vent #2	10
24. WCR-929	NESW to Up Containment Vent #3	10
25. WCR-931	NESW from Up Containment Vent #3	10
26. WCR-933	NESW to Up Containment Vent #4	10
27. WCR-935	NESW from Up Containment Vent #4	10
28. WCR-941	NESW to RCP Motor Air Cooler	10
29. WCR-942	NESW to RCP Motor Air Cooler	10
30. WCR-943	NESW to RCP Motor Air Cooler	10
31. WCR-944	NESW to RCP Motor Air Cooler	10
32. WCR-945	NESW from RCP Motor Air Cooler	10
33. WCR-946	NESW from RCP Motor Air Cooler	10
34. WCR-947	NESW from RCP Motor Air Cooler	10
35. WCR-948	NESW from RCP Motor Air Cooler	10
36. WCR-951	NESW to RCP Motor Air Cooler Vent #1	10
37. WCR-952	NESW to RCP Motor Air Cooler Vent #2	10
38. WCR-953	NESW to RCP Motor Air Cooler Vent #3	10
39. WCR-954	NESW to RCP Motor Air Cooler Vent #4	10
40. WCR-955	NESW from RCP Motor Air Cooler Vent #1	10
41. WCR-956	NESW from RCP Motor Air Cooler Vent #2	10
42. WCR-957	NESW from RCP Motor Air Cooler Vent #3	10
43. WCR-958	NESW from RCP Motor Air Cooler Vent #4	10

TABLE 3.6-1 (Continued)

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
D. PHASE "B" ISOLATION (Continued)		
44. WCR-961	NESW to Instr. Rm. East Vent	10
45. WCR-963	NESW from Instr. Rm. West Vent	10
46. WCR-965	NESW to Instr. Rm. East Vent	10
47. WCR-967	NESW from Instr. Rm. West Vent	10
48. WCR-900	NESW to RCP Lower Containment Vent #1	10
49. WCR-902	NESW from Lower Containment Vent #1	10
50. WCR-904	NESW to RCP Lower Containment Vent #2	10
51. WCR-906	NESW from Lower Containment Vent #2	10
52. WCR-908	NESW to RCP Lower Containment Vent #3	10
53. WCR-910	NESW from Lower Containment Vent #3	10
54. WCR-912	NESW to RCP Lower Containment Vent #4	10
55. WCR-914	NESW from Lower Containment Vent #4	10
56. WCR-920	NESW to RCP Upper Containment Vent #1	10
57. WCR-922	NESW from Upper Containment Vent #1	10
58. WCR-924	NESW to RCP Upper Containment Vent #2	10
59. WCR-926	NESW from Upper Containment Vent #2	10
60. WCR-928	NESW to RCP Upper Containment Vent #3	10
61. WCR-930	NESW from Upper Containment Vent #3	10
62. WCR-932	NESW to RCP Upper Containment Vent #4	10
63. WCR-934	NESW from Upper Containment Vent #4	10
64. WCR-960	NESW to Instrument Room East Vent	10
65. WCR-962	NESW from Instrument Room East Vent	10
66. WCR-964	NESW to Instrument Room West Vent	10
67. WCR-966	NESW from Instrument Room West Vent	10
C. CONTAINMENT PURGE AND EXHAUST **		
1. VCR-101	Instr. Room Purge Air Inlet	5
2. VCR-102	Instr. Room Purge Air Outlet	5
3. VCR-103	Lower Comp. Purge Air Inlet	5
4. VCR-104	Lower Comp. Purge Air Outlet	5
5. VCR-105	Upper Comp. Purge Air Inlet	5
6. VCR-106	Upper Comp. Purge Air Outlet	5
7. VCR-107*	Cont. Press. Relief Fan Isolation	5
8. VCR-201	Instr. Room Purge Air Inlet	5
9. VCR-202	Instr. Room Purge Air Outlet	5
10. VCR-203	Lower Comp. Purge Air Inlet	5
11. VCR-204	Lower Comp. Purge Air Outlet	5

TABLE 3.6-1 (Continued)

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
C. CONTAINMENT PURGE EXHAUST (Continued)[8]		
12. VCR-205	Upper Comp. Purge Air Inlet	5
13. VCR-206	Upper Comp. Purge Air Outlet	5
14. VCR-207[8]	Cont. Press Relief Fan Isolation	5
D. MANUAL ISOLATION VALVES[1]		
1. ICM-111	RHR to RC Cold Legs	NA
2. ICM-129	RHR Inlet to Pumps	NA
3. ICM-250	Boron Injection Inlet	NA
4. ICM-251	Boron Injection Inlet	NA
5. ICM-260	Safety Injection Inlet	NA
6. ICM-265	Safety Injection Inlet	NA
7. ICM-305	RHR Suction from Sump	NA
8. ICM-306	RHR Suction from Sump	NA
9. ICM-311	RHR to RC Hot Legs	NA
10. ICM-321	RHR to RC Hot Legs	NA
11. MPX 151 VI	Dead Weight Tester	NA
12. PA-343	Containment Service Air	NA
13. SF-151	Refueling Water Supply	NA
14. SF-153	Refueling Water Supply	NA
15. SF-159	Refueling Cavity Drain to Purification System	NA
16. SF-160	Refueling Cavity Drain to Purification System	NA
17. SI-171	Safety Injection Test Line	NA
18. SI-172	Accumulator Test Line	NA

TABLE 3.6-1 (Continued)

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
D. MANUAL ISOLATION VALVES (1) (Continued)		
19. CCR-440	CCW from Main Steam Penetration	NA
20. CCR-441	CCW from Main Steam Penetration	NA
21. MCM-221	Main Steam to Auxiliary Feed Pump	NA
22. MCM-231	Main Steam to Auxiliary Feed Pump	NA
23. CCM-430	CCW to East Pressure Equalization Fan	NA
24. CCM-431	CCW from East Pressure Equalization Fan	NA
25. CCM-432	CCW to West Pressure Equalization Fan	NA
26. CCM-433	CCW from West Pressure Equalization Fan	NA
27. SM-8*	Upper Containment Sample	NA
28. SM-10*	Upper Containment Sample	NA
29. SM-4*	Instrument Room Sample	NA
30. SM-6*	Instrument Room Sample	NA

NA - Manual Valve-Isolation time not applicable.
(1) - Includes motor operated valves which do not isolate automatically.
* - May be opened on an intermittent basis under administrative control.
** - Containment purge supply and exhaust isolation valves (VCR-101 through 106 and VCR-201 through 206) may be opened under Technical Specification 3/4.6.1.7.

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
A. PHASE "A" ISOLATION (Continued)		
25. DCR-620	Continuous Ventilation Drain to Holdup	≤ 10
26. DCR-621	Continuous Ventilation Drain to Holdup	≤ 10
27. ECR-10	Cont. H_2 Sample Return	≤ 10
28. ECR-11	Cont. H_2 Sample - Air to Rec. E	≤ 10
29. ECR-12	Cont. H_2 Sample - Air From Rec. E	≤ 10
30. ECR-13	Cont. H_2 Sample - Low. Cont. Vol.	≤ 10
31. ECR-14	Cont. H_2 Sample - Low. Cont. Vol.	≤ 10
32. ECR-15	Cont. H_2 Sample - Up. Cont. Vol.	≤ 10
33. ECR-16	Cont. H_2 Sample - Up. Cont. Vol.	≤ 10
34. ECR-17	Cont. H_2 Sample - Air to Rec. W	≤ 10
35. ECR-18	Cont. H_2 Sample - Air from Rec. W	≤ 10
36. ECR-19	Cont. H_2 Sample - Cont. Dome Vol.	≤ 10

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER		FUNCTION	ISOLATION TIME IN SECONDS
A.	PHASE "A" ISOLATION (Continued)		
37.	ECR-20	Cont. H_2 Sample-Return	≤10
38.	ECR-21	Cont. H_2 Sample - Air to Rec. E.	≤10
39.	ECR-22	Cont. H_2 Sample - Air Fr. Rec. E.	≤10
40.	ECR-23	Cont. H_2 Sample - Low. Cont. Vol.	≤10
41.	ECR-24	Cont. H_2 Sample - Low. Cont. Vol.	≤10
42.	ECR-25	Cont. H_2 Sample - Up. Cont. Vol.	≤10
43.	ECR-26	Cont. H_2 Sample - Up. Cont. Vol.	≤10
44.	ECR-27	Cont. H_2 Sample - Air to Rec. W.	≤10
45.	ECR-28	Cont. H_2 Sample - Air Fr. Rec. W.	≤10
46.	ECR-29	Cont. H_2 Sample - Cont. Dome Vol.	≤10
47.	ECR-416	PAS Containment Sump Sample	≤10
48.	ECR-417	PAS Containment Sump Sample	≤10
49.	ECR-496	PAS Waste Liquid and Gas Return	≤10
50.	ECR-497	PAS Waste Liquid and Gas Return	≤10
51.	ECR-535	PAS Containment Gas Sample	≤10
52.	ECR-536	PAS Containment Gas Sample	≤10
53.	GCR-301	H_2 Supply to Pressurizer Relief Tank	≤10
54.	GCR-314	H_2 Supply to Accumulators	≤10

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
A. PHASE "A" ISOLATION (Continued)		
55. 1CR-5	Accumulators Sample	≤ 10
56. 1CR-6	Accumulators Sample	≤ 10
57. MCR-251#	Sample Line from Steam Gen. Outlet #1	≤ 10
58. MCR-252#	Sample Line from Steam Gen. Outlet #1	≤ 10
59. MCR-253#	Sample Line from Steam Gen. Outlet #3	≤ 10
60. MCR-254#	Sample Line from Steam Gen. Outlet #4	≤ 10
61. MCR-105	Hot Leg Sample	≤ 10
62. MCR-106	Hot Leg Sample	≤ 10
63. MCR-107	PRZ Liquid Sample	≤ 10
64. MCR-108	PRZ Liquid Sample	≤ 10
65. MCR-109	PRZ Steam Sample	≤ 10
66. MCR-110	PRZ Steam Sample	≤ 10

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
B. PHASE "B" ISOLATION (Continued)		
12. WCR-901	NESW to Low. Containment Vent #1	≤10
13. WCR-903	NESW from Low. Containment Vent #1	≤10
14. WCR-905	NESW to Low. Containment Vent #2	≤10
15. WCR-907	NESW from Low. Containment Vent #2	≤10
16. WCR-909	NESW to Low. Containment Vent #3	≤10
17. WCR-911	NESW from Low. Containment Vent #3	≤10
18. WCR-913	NESW to Low. Containment Vent #4	≤10
19. WCR-915	NESW from Low Containment Vent #4	≤10
20. WCR-921	NESW to Up. Containment Vent #1	≤10
21. WCR-923	NESW from Up. Containment Vent #1	≤10
22. WCR-925	NESW to Up. to Containment Vent #2	≤10
23. WCR-927	NESW from Up. Containment Vent #2	≤10

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
B. PHASE "B" ISOLATION (Continued)		
24. WCR-929	NESW to Up. Containment Vent #3	≤10
25. WCR-931	NESW from Up. Containment Vent #3	≤10
26. WCR-933	NESW to Up. Containment Vent #4	≤10
27. WCR-935	NESW from Up. Containment Vent #4	≤10
28. WCR-941	NESW to RCP Motor Air Cooler	≤10
29. WCR-942	NESW to RCP Motor Air Cooler	≤10
30. WCR-943	NESW to RCP Motor Air Cooler	≤10
31. WCR-944	NESW to RCP Motor Air Cooler	≤10
32. WCR-945	NESW from RCP Motor Air Cooler	≤10
33. WCR-946	NESW from RCP Motor Air Cooler	≤10
34. WCR-947	NESW from RCP Motor Air Cooler	≤10
35. WCR-948	NESW from RCP Motor Air Cooler	≤10
36. WCR-951	NESW to RCP Motor Air Cooler Vent #1	≤10
37. WCR-952	NESW to RCP Motor Air Cooler Vent #2	≤10
38. WCR-953	NESW to RCP Motor Air Cooler Vent #3	≤10
39. WCR-954	NESW to RCP Motor Air Cooler Vent #4	≤10

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
B. PHASE "B" ISOLATION (Continued)		
40. WCR-955	NESW from RCP Motor Air Cooler Vent #1	≤10
41. WCR-956	NESW from RCP Motor Air Cooler Vent #2	≤10
42. WCR-957	NESW from RCP Motor Air Cooler Vent #3	≤10
43. WCR-958	NESW from RCP Motor Air Cooler Vent #4	≤10
44. WCR-961	NESW to Instr. Rm. East Vent	≤10
45. WCR-963	NESW from Instr. Rm. West Vent	≤10
46. WCR-965	NESW to Instr. Rm. East Vent	≤10
47. WCR-967	NESW from Instr. Rm. West Vent	≤10
48. WCR-900	NESW to RCP Lower Containment Vent #1	≤10
49. WCR-902	NESW from Lower Containment Vent #1	≤10
50. WCR-904	NESW to RCP Lower Containment Vent #2	≤10
51. WCR-906	NESW from Lower Containment Vent #2	≤10
52. WCR-908	NESW to RCP Lower Containment Vent #3	≤10
53. WCR-910	NESW from Lower Containment Vent #3	≤10
54. WCR-912	NESW to RCP Lower Containment Vent #4	≤10
55. WCR-914	NESW from Lower Containment Vent #4	≤10

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER		FUNCTION	ISOLATION TIME IN SECONDS
D. MANUAL ISOLATION VALVES[1] (Continued)			
3.	1CM-250	Boron Injection Inlet	NA
4.	1CM-251	Boron Injection Inlet	NA
5.	1CM-260	Safety Injection Inlet	NA
6.	1CM-265	Safety Injection Inlet	NA
7.	1CM-305	RHR Suction From Sump	NA
8.	1CM-306	RHR Suction From Sump	NA
9.	1CM-311#	RHR to RC Hot Legs	NA
10.	1CM-321#	RHR to RC Hot Legs	NA
E. OTHER			
1.	CS-442-1	Seal Wtr. to RCP #1	NA
2.	CS-442-2	Seal Wtr. to RCP #2	NA
3.	CS-442-3	Seal Wtr. to RCP #3	NA
4.	CS-442-4	Seal Wtr. to RCP #4	NA

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TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER		FUNCTION	ISOLATION TIME IN SECONDS
E. OTHER (Continued)			
5.	SI-189	R. C. Relief Valve Vent Hole	NA
6.	PA-342	Service Air to Containment	NA
7.	NPX-151 VI	Dead Weight Calibrator	NA
8.	N-160	N_2 to R. C. Drain Tank	NA
9.	SM-1	Air Particle/Radio Gas Detect Return	NA
10.	N-102	N_2 To Accumulators	NA
11.	SI-171	Safety Injection Test Line	NA
12.	SI-172	Safety Injection Test Line	NA
13.	SI-194	Safety Injection Test Line	NA
14.	PW-275	Primary Wtr. to Pre. Relief Tank	NA
15.	CS-321	R.C.S. Charging	NA

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
E. OTHER (Continued)		
16. SF-152	Refueling Wtr. to Refuel Cavity	NA
17. SF-154	Refueling Wtr. to Refuel Cavity	NA
18. SF-159	Refueling Cavity Drain	NA
19. SF-160	Refueling Cavity Drain	NA
20. N-159	N_2 to Prz. Relief Tank	NA
21. CCW-135	CCW to Reactor Supports	NA
22. CA-181-N	Weld Channel Supply Air	NA
23. CA-181-S	Weld Channel Supply Air	NA
24. SM-8*	Upper Cont. Grab Sample	NA
25. SM-10*	Upper Cont. Grab Sample	NA

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	ISOLATION TIME IN SECONDS
E. OTHER (Continued)		
26. PPP-300	Instrument Penetration	NA
27. PPP-301	Instrument Penetration	NA
28. PPP-302	Instrument Penetration	NA
29. PPP-303	Instrument Penetration	NA
30. PPA-310 and PPA-311	Instrument Penetration	NA
31. PPA-312 and PPA-313	Instrument Penetration	NA
32. Blind Flange	Fuel Transfer Penetration	NA
33. Blind Flange	Ice Condenser Ice Supply	NA
34. Blind Flange	Ice Condenser Ice Return	NA
35. Blind Flange	In-Core Flux Thimble Access	NA