

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
a. <u>Automatic Isolation Valves (Continued)</u>		
Equipment Drain (Radioactive)	4	15
EDR-V-19		
EDR-V-20		
Floor Drain (Radioactive)	4	15
FDR-V-3		
FDR-V-4		
Fuel Pool Cooling/Suppression Pool Cleanup		35
FPC-V-149		
FPC-V-153(f)		
FPC-V-154(f)		
FPC-V-156		
Reactor Recirculation Hydraulic Control(e)	4	15
HY-V-17A,B		
HY-V-18A,B		
HY-V-19A,B		
HY-V-20A,B		
HY-V-33A,B		
HY-V-34A,B		
HY-V-35A,B		
HY-V-36A,B		
Traversing Incore Probe Valve	4	5
1, 2, 3, 4, 5		
TIP-V-8, 7, 8, 9, 10 (Probe Line Ball Valves)		
TIP-V-11 (H₂ Gate Valve)		

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TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
a. <u>Automatic Isolation Valves (Continued)</u>		
Reactor Closed Cooling	4	60
RCC-V-5		
RCC-V-21		
RCC-V-40		
RCC-V-104		
Radiation Monitoring Supply & Return		5
PI-VX-250		
PI-VX-251		
PI-VX-253		
PI-VX-256		
PI-VX-257		
PI-VX-259		
Residual Heat Removal		
RHR-V-123A,B(g)	5	15
RHR-V-8(g)	6	40
RHR-V-9(g)	6	40
RHR-V-23(g)	6	90
RHR-V-53A,B(g)	6	40
RHR-V-24A,B(c)	10	270
RHR-V-21	10	270
RHR-V-27A,B(c)	10	36
Reactor Water Cleanup System	7	
RWCU-V-1(d)		30 (j)
RWCU-V-4		21 (j)

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30 (j)
21 (j)

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
a. <u>Automatic Isolation Valves (Continued)</u>		
Reactor Core Isolation Cooling		
RCIC-V-8	8	13 (j)
RCIC-V-63	8	16 (j)
RCIC-V-64	12	N.A.
RCIC-V-76	8	22
Low Pressure Core Spray		
LPCS-V-12	10	180
High Pressure Core Spray		
HPCS-V-23	11	180
b. <u>Excess Flow Check Valves(e)</u>		
Containment Atmosphere		
PI-EFC-X29 d		N.A.
PI-EFC-X29 e		
PI-EFC-X30a e		
PI-EFC-X30 e		
PI-EFC-X42 e		
PI-EFC-X61c		
PI-EFC-X62b		
PI-EFC-X69 e		
PI-EFC-X72b		
PI-EFC-X73c		
PI-EFC-X66		
PI-EFC-X67		
PI-EFC-X82b		
PI-EFC-84a		
PI-EFC-X86A		
PI-EFC-X86B		
PI-EFC-X87A		
PI-EFC-X87B		
PI-EFC-X119		

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TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
b. <u>Excess Flow Check Valves (e) (Continued)</u>		
Reactor Pressure Vessel		N.A.
PI-EFC-X8		
PI-EFC-X12A,B,C		
PI-EFC-X18A,B,C,D		
PI-EFC-X37e,f		
PI-EFC-X38a,b,c,d,e,f		
PI-EFC-X39a,b,d,e		
PI-EFC-X40c,d		
PI-EFC-X41c,d		
PI-EFC-X42a,b		
PI-EFC-X44Aa,Ab,Ac,Ad,Ae,Af,Ag,Ah,Aj, Ak,Al,Am		
PI-EFC-X44Ba,Bb,Bc,Bd,Be,Bf,Bg,Bh,Bj, Bk,Bl,Bm		
PI-EFC-X61a,b		
PI-EFC-X62c,d		
PI-EFC-X68		
PI-EFC-X67		
PI-EFC-X69a,b,e		
PI-EFC-X70a,b,c,d,e,f		
PI-EFC-X71a,b,c,d,e,f		
PI-EFC-X72a		
PI-EFC-X73a		
PI-EFC-X74a,b,e,f		
PI-EFC-X75a,b,c,d,e,f		
PI-EFC-X78b,c,f		
PI-EFC-X79a,b		
PI-EFC-X82b		
PI-EFC-X84a		
PI-EFC-X106		
PI-EFC-X107		
PI-EFC-X108		
PI-EFC-X109		
PI-EFC-X110		

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TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
b. <u>Excess Flow Check Valves (e) (Continued)</u>		
Reactor Pressure Vessel (Continued)		N.A.
PI-EFC-X111		
PI-EFC-X112		
PI-EFC-X113		
PI-EFC-X114		
PI-EFC-X115		
PI-EFC-X119		
Other		N.A.
PI-EFC-X40e,f		
PI-EFC-X41e,f		
PI-EFC-X86A,B		
PI-EFC-X87A,B		
c. <u>Manual Containment Isolation Valves</u>		
Demineralized Water		N.A.
DW-V-156		
DW-V-157		
Containment Air System		N.A.
CAS-VX-B2e		
CAS-V-730		
Service Air		N.A.
SA-V-109		
Fuel Pool/Suppression Pool Cooling		N.A.
FPC-V-149		

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TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
<u>c. Manual Containment Isolation Valves (Continued)</u>		
<u>Residual Heat Removal</u>		
RHR-V-120	RHR-V-124A, B RHR-V-125A, B	N.A.
RHR-V-121		N.A.
RHR-V-11A, B		N.A.
<u>Reactor Core Isolation Cooling</u>		
RCIC-V-742 (g)(b)	RCIC-V-64	N.A.
RCIC-V-64		N.A.
<u>Air Supply to Testable Check Valves</u>		
<u>Air Supply</u>	<u>Check Valve</u>	
PI-VX-42d	RHR-V-50A	
PI-VX-216		
PI-VX-69c	RHR-V-50B	
PI-VX-221		
PI-VX-61f	RHR-V-41A	
PI-VX-219		
PI-VX-54Bf	RHR-V-41B	
PI-VX-218		
PI-VX-62f	RHR-V-41C	
PI-VX-220		
LPCS-V-66	LPCS-V-6	
LPCS-V-67		
HPCS-V-65	HPCS-V-5	
HPCS-V-68		
RCIC-V-184	RCIC-V-66	
RCIC-V-740		

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TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
<u>d. Other Containment Isolation Valves</u>		
Main Steam Leakage Control(b)		
MSLC-V-3A,B,C,D		15 N.A.
Reactor Feedwater/RWCU Return		
RFW-V-65A,B		120 N.A.
RFW-V-10A,B		N.A.
RFW-V-32A,B		N.A.
RWCU-V-40		35 N.A.
High Pressure Core Spray		
HPCS-V-5(g)(b)		N.A.
HPCS-V-4(g)(b)		17 N.A.
HPCS-V-15(f)(b)		18 N.A.
HPCS-V-12		20 N.A.
HPCS-RV-14(e)(h)		N.A.
HPCS-RV-35(e)(h)		N.A.
Low Pressure Core Spray		
LPCS-V-1(f)(b)		130 N.A.
LPCS-V-5(g)(b)		27 N.A.
LPCS-V-6(g)(b)		N.A.
LPCS-FCV-11		45 N.A.
LPCS-RV-31(e)(h)		N.A.
LPCS-RV-18(e)(h)		N.A.

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TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVESVALVE FUNCTION AND NUMBERVALVE GROUP(a)MAXIMUM
ISOLATION TIME
(Seconds)d. Other Containment Isolation Valves (Continued)

Standby Liquid Control

SLC-V-7
SLC-V-4A,BN.A.
N.A.

Reactor Core Isolation Cooling

RCIC-V-19
RCIC-V-68 ✓
RCIC-V-40
RCIC-V-69
RCIC-V-28
RCIC-V-31(f)(b)
RCIC-V-66(g)(b)
RCIC-V-13(g)(b)N.A.
N.A.
N.A.
N.A.
N.A.
N.A.
N.A.Residual Heat Removal/Low Pressure
InjectionRHR-V-16A,B
RHR-V-17A,B
RHR-V-41A,B,C(g)(b)
RHR-V-42A,B,C(g)(b)
RHR-V-50A,B(g)(b)
RHR-V-209(g)(b)
RHR-V-25A,B,C(e)(h)
RHR-V-55A,B(e)(h)
RHR-V-36(e)(h)
RHR-FCV-64A,B,C
RHR-RV-1A,B(e)(h)
RHR-V-73A,B
RHR-V-134A,B(c)N.A.
N.A.
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TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
<u>d. Other Containment Isolation Valves (Continued)</u>		
<u>Residual Heat Removal/Low Pressure Injection (Continued)</u>		
RHR-RV-88A,B,C(e)(h)		N.A.
RIIR-RV-5(e)(h)		N.A.
RIIR-RV-30(e)(h)		N.A.
RIIR-V-4A,B,C(f)(h)		120 N.A.
RIIR-RV-95A,B(e)(h)		N.A.
RIIR-V-121A,B		N.A.
RIIR-V-125A,B		N.A.
<u>Containment Atmosphere Control(c)(i)</u> <u>(H₂ Recombiner)</u>		
CAC-V-2		20 N.A.
CAC-FCV-2A,B		30 N.A.
CAC-V-15		20 N.A.
CAC-FCV-1A,B		30 N.A.
CAC-V-11		20 N.A.
CAC-V-6		20 N.A.
CAC-V-4		20 N.A.
CAC-FCV-4A,B		30 N.A.
CAC-V-13		20 N.A.
CAC-V-17		20 N.A.
CAC-FCV-3A,B		30 N.A.
CAC-V-8		20 N.A.
CSP-V-5		4 N.A.
CSP-V-6		4 N.A.
CSP-V-7		4 N.A.

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TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
d. <u>Other Containment Isolation Valves (Continued)</u>		
Containment Purge System		
CSP-V-8		N.A.
CSP-V-9		N.A.
CSP-V-10		N.A.
Reactor Recirculation (Seal Injection)		
RRC-V-13A,B		N.A.
RRC-V-16A,B		N.A.
Containment Instrument Air		
CIA-V-20		N.A.
CIA-V-21		N.A.
CIA-V-30A,B		N.A.
CIA-V-31A,B		N.A.
Containment Air Supply		
CAS V 453		
Post-Accident Sampling System(c)		
PSR-V-X73-1		
PSR-V-X73-2		
PSR-V-X77A1		
PSR-V-X77A2		
PSR-V-X77A3		
PSR-V-X77A4		
PSR-V-X80-1		

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TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
d. <u>Other Containment Isolation Valves (Continued)</u>		
Post-Accident Sampling System(c) (Continued)		
PSR-V-X80-2	Radiation Monitoring PI-EFCX-72f PI-EFCX-73e	H.A.
PSR-V-X82-1		
PSR-V-X82-2		
PSR-V-X82-7		
PSR-V-X82-8		
PSR-V-X83-1		
PSR-V-X83-2		
PSR-V-X84-1		
PSR-V-X84-2		
PSR-V-X88-1		
PSR-V-X88-2		
Transvending Incore Probe System		H.A.
TIP-V-12 (Check Valve)		
TIP-V-7, 8, 9, 10, 11 (Probe Line Shear Valves)		
7, 8, 9, 10, 11 (e)		

TABLE NOTATIONS

^But greater than 3 seconds.

#Provisions of Technical Specification 3.0.4 are not applicable.

- (a) See Technical Specification 3.3.2 for the isolation signal(s) which operate each group.
 (b) Valve leakage not included in sum of Type B and C tests.
 (c) May be opened on an intermittent basis under administrative control.
 (d) Not closed by SIC actuation signal.
 (e) Not subject to Type C Leak Rate Test.
 (f) Hydraulic leak test at 38.2 psig.
 (g) Not subject to Type C test. Test per Technical Specification ~~4.4.3.2~~ 4.4.3.2.2.
 (h) Tested as part of Type A test.
 (i) May be tested as part of Type A test. If so tested, Type C test results may be excluded from sum of other Type B and C tests.

(j) These valves reflect closure times for containment isolation only. The limiting times for valve closure are based on Environmental Equipment Qualification Requirements and are defined in Table 6.2-16 of the WNP-2 FSAR.

