APPENDIX D

TECHNICAL SPECIFICATION CATEGORY IDENTIFICATION

Table D-1: Penetration Flow Paths Connected to Containment Atmosphere

- Table D-2: Penetration Flow Paths Connected to the RCS
- Table D-3:
 Penetration Flow Paths Connected to the SGs

*Please note, the information contained within Tables D-1, D-2 and D-3 is directly from Tables 8-2, 8-3 and 8-4. Tables D-1, D-2 and D-3 are shown to facilitate implementing the information into tech specs.

Table D-1 7	Fech Spec Category I	dentification: Class I - Penetration Flow Paths Connec	ted to Containment	Atmosphere		
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
1. Group I,A (see Section 8.2.2.1)	2 valves - normally closed - same valve type	1 2 1 1 1 1 1 1 in maintenance	all	A B	5 12	48 hrs 48 hrs
		1 2 2 in maintenance	all	A B	5 12	48 hrs 48 hrs
2. Group I,A (see Section 8.2.2.1)	2 valves - normally closed - different valve type	in maintenance	all	A B	7 14	168 hrs 168 hrs

..

Table D-1 Te (cont.)	ech Spec Category Id	entification: Class I - Penetration Flow Paths Connecte	ed to Containment A		F	
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			all	A B	7 14	168 hrs 168 hrs
		in maintenance				
3. Group I,A (see Section	2 valves - normally open - same valve		SOV	A B	4 11	24 hrs 24 hrs
8.2.2.1)	type	1 2	MOV	A B	5 12	48 hrs 48 hrs
			AOV	A B	4 11	24 hrs 24 hrs
		in maintenance	Check	A B	5 12	48 hrs 48 hrs
			SRV	A B	3 10	12 hrs 12 hrs

Table D-1 To (cont.)	ech Spec Category Id	lentification: Class I - Penetration Flow Paths Connect	ed to Containment	Atmosphere		•
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	A B	4 11	24 hrs 24 hrs
		1 2	MOV	A B	5 12	48 hrs 48 hrs
			AOV	A B	4 11	24 hrs 24 hrs
		in maintenance	Check	A B	5 12	48 hrs 48 hrs
			SRV	A B	3 10	12 hrs 12 hrs
	2 valves - normally open - different		SOV	A B	7 14	168 hrs 168 hrs
8.2.2.1)	valve type	1 <mark>- 2</mark>	MOV	A B	7 14	168 hrs 168 hrs
			AOV	A B	7 14	168 hrs 168 hrs
		in maintenance	Check	A B	7 14	168 hrs 168 hrs
			SRV	A B	7 14	168 hrs 168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	A B	7 14	168 hrs 168 hrs
			MOV	A B	7 14	168 hrs 168 hrs
			AOV	A B	7 14	168 hrs 168 hrs
		in maintenance	Check	A B	7 14	168 hrs 168 hrs
			SRV	A B	7 14	168 hrs 168 hrs
5. Group I,A (see Section 8.2.2.1)	2 valves IC or OC in parallel, normally closed – 1 valve OC or IC, normally closed – same valve type		all	A B	4 11	24 hrs 24 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		1 3 2 1 valve 1 or 2 in maintenance	all	A B	5 12	48 hrs 48 hrs
(see Section in parallel, 8.2.2.1) normally closed 1 valve OC or I normally closed	2 valves IC or OC in parallel, normally closed – 1 valve OC or IC, normally closed – different valve type	1 3 1 2 in maintenance	all	A B	7 14	168 hrs 168 hrs
		1 3 2 1 valve 1 or 2 in maintenance	all	A B	7 14	168 hrs 168 hrs

Table D-1 Te (cont.) Calculation Number and Group	ch Spec Category Id Penetration Description	lentification: Class I - Penetration Flow Paths Connec	Valve Type Assumption (see assumption 7 of Section 8.2)	Atmosphere Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
(see Section	2 valves IC or OC in parallel,		SOV	A B	3 10	12 hrs 12 hrs
	normally open – 1 valve OC or IC, normally open –		MOV	A B	4 11	24 hrs 24 hrs
	same valve type		AOV	A B	3 10	12 hrs 12 hrs
		2 in maintenance	Check	A B	4 11	24 hrs 24 hrs
			SRV	A B	2 9	8 hrs 8 hrs
			SOV	A B	4 11	24 hrs 24 hrs
			MOV	A B	5 12	48 hrs 48 hrs
			AOV	A B	4 11	24 hrs 24 hrs
		valve 1 or 2 in maintenance	Check	A B	5 12	48 hrs 48 hrs
			SRV	A B	3 10	12 hrs 12 hrs

D-7

Table D-1 To (cont.)	ech Spec Category Id	lentification: Class I - Penetration Flow Paths Connect	ed to Containment A	Atmosphere		
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
8. Group I,A	2 valves IC or OC		SOV	А	6	72 hrs
(see Section 8.2.2.1)	in parallel, normally open –			В	13	72 hrs
8.2.2.1)	1 valve OC or IC,		MOV	А	7	168 hrs
	normally open –	1 3		В	14	168 hrs
	different valve type		AOV	А	6	72 hrs
				B	13	72 hrs 72 hrs
			Check	A	7	168 hrs
		2	Check	A B	7 14	168 hrs
- - -		in maintenance				
			SRV	A B	6 13	72 hrs 72 hrs
			SOV		7	168 hrs
			307	A B	14	168 hrs
		1 3	MOV	A B	7 14	168 hrs 168 hrs
				2	1.4	100 m3
			AOV	A	7	168 hrs
				В	14	168 hrs
		L . T	Check	А	7	168 hrs
		2 📕 valve 1 or 2 in maintenance		В	14	168 hrs
			SRV	А	7	168 hrs
				В	14	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
9 Group I,A (see Section 8.2.2.1)	3 valves IC or OC in parallel, normally closed – 1 valve OC or IC, normally closed - same valve type	in maintenance	all	A B	3 10	12 hrs 12 hrs
			all	A B	5 12	48 hrs 48 hrs
10. Group I,A (see Section 8.2.2.1)	3 valves IC or OC in parallel, normally closed – 1 valve OC or IC, normally closed - different valve type	valve 1, 2 or 3 in maintenance	all	A B	7 14	168 hrs 168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		4 2 3 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4	all	A B	7 14	168 hrs 168 hrs
11. Group I,A (see Section			SOV	A B	3 10	12 hrs 12 hrs
8.2.2.1)	normally open – 1 valve OC or IC, normally open –		MOV	A B	3 10	12 hrs 12 hrs
	same valve type	$-\bigvee^2$	AOV	A B	3 10	12 hrs 12 hrs
		in maintenance	Check	A B	3 10	12 hrs 12 hrs
			SRV	A B	1 8	4 hrs 4 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justifie CT
			SOV	A B	4 11	24 hrs 24 hrs
			MOV	A B	5 12	48 hrs 48 hrs
		$- \swarrow^2 - \swarrow$	AOV	A B	4 11	24 hrs 24 hrs
			Check	A B	5 12	48 hrs 48 hrs
		valve 1, 2 or 3 in maintenance	SRV	A B	3 10	12 hrs 12 hrs
2. Group I,A (see Section	3 valves IC or OC in parallel,		SOV	A B	6 13	72 hrs 72 hrs
8.2.2.1)	normally open – 1 valve OC or IC, normally open –		MOV	A B	7 14	168 hi 168 hi
	different valve type		AOV	A B	6 13	72 hr 72 hr
		in maintenance	Check	A B	7 14	168 h 168 h
			SRV	A B	6 13	72 hi 72 hi

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	A B	7 14	168 hrs 168 hrs
			MOV	A B	7 14	168 hrs 168 hrs
			AOV	A B	7 14	168 hrs 168 hrs
			Check	A B	7 14	168 hrs 168 hrs
		valve 1, 2 or 3 in maintenance	SRV	A B	7 14	168 hrs 168 hrs
3. Group I,A (see Section 8.2.2.1)	2 valves – 1 normally closed, 1 normally open –		SOV	A B	7 14	168 hrs 168 hrs
8.2.2.1)	same valve type	1 2	MOV	A B	7 14	168 hr: 168 hr:
			AOV	A B	7 14	168 hr 168 hr
		in maintenance	Check	A B	7 14	168 hr 168 hr
			SRV	A B	7 14	168 hr 168 hr

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justifie CT
			SOV	A B	7 14	168 hr: 168 hr:
		1 2	MOV	A B	7 14	168 hr 168 hr
			AOV	A B	7 14	168 hi 168 hi
		in maintenance	Check	A B	7 14	168 h 168 h
			SRV	A B	7 14	168 h 168 h
4. Group I,A (see Section	2 valves – 1 normally closed,		SOV	A B	7 14	168 h 168 h
8.2.2.1)	1 normally open - different valve type	1 J 2	MOV	A B	7 14	168 h 168 h
			AOV	A B	7 14	168 h 168 h
		in maintenance	Check	A B	7 14	168 h 168 h
			SRV	A B	7 14	168 h 168 h

Table D-1 To (cont.)	ech Spec Category Id	dentification: Class I - Penetration Flow Paths Cor	nnected to Containment A	Atmosphere		
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	A B	7 14	168 hrs 168 hrs
			MOV	A B	7 14	168 hrs 168 hrs
			AOV	A B	7 14	168 hrs 168 hrs
		in maintenance	Check	A B	7 14	168 hrs 168 hrs
			SRV	A B	7 14	168 hrs 168 hrs
15. Group I,A (see Section 8.2.2.1)	2 valves IC in parallel, normally closed - 2 valves OC in parallel, normally closed - all same valve types		all	A B	4	24 hrs 24 hrs
		valve 3 or 4 in maintenance				

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		valve 1 or 2 in maintenance	all	A B	4 11	24 hrs 24 hrs
16. Group I,A (see Section	2 valves IC in parallel, 1 normally		SOV	A B	4 11	24 hrs 24 hrs
8.2.2.1)	closed, 1 normally open - 2 valves OC in parallel, 1		MOV	A B	5 12	48 hrs 48 hrs
	normally closed, 1 normally open - all same valve types		AOV	A B	4	24 hrs 24 hrs
		in maintenance	Check	A B	5 12	48 hrs 48 hrs
			SRV	A B	3 10	12 hrs 12 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justifie CT
			SOV	A B	4 11	24 hrs 24 hrs
			MOV	A B	5 12	48 hrs 48 hrs
			AOV	A B	4 11	24 hrs 24 hrs
		in maintenance	Check	A B	5 12	48 hrs 48 hrs
			SRV	A B	3 10	12 hrs 12 hrs
		in maintenance	SOV	A B	4 11	24 hrs 24 hrs
			MOV	A B	5 12	48 hrs 48 hrs
			AOV	A B	4 11	24 hrs 24 hrs
			Check	A B	5 12	48 hr: 48 hr:
			SRV	A B	4	24 hrs 24 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	SOV	A B	4 11	24 hrs 24 hrs
			MOV	A B	5 12	48 hrs 48 hrs
			AOV	A B	4 11	24 hrs 24 hrs
			Check	A B	5 12	48 hrs 48 hrs
			SRV	A B	4 11	24 hrs 24 hrs
I. Group I,B (see Section 8.2.2.2)	1 valve - normally closed (valve is OC or IC)		all	A B	2 9	8 hrs 8 hrs
		in maintenance				

Table D-1 Te (cont.)	ch Spec Category I	dentification: Class I - Penetration Flow Paths Connect	ed to Containment	Atmosphere		
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	all	A	2	8 hrs
		in maintenance	all	В	8	4 hrs

Table D-1 Te (cont.)	ech Spec Category Id	lentification: Class I - Penetration Flow Paths Connect	ed to Containment A	Atmosphere		
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
2. Group I,B 1 valve - normally (see Section open (valve can be		SOV	A B	2 9	8 hrs 8 hrs	
8.2.2.2)	OC or IC)		MOV	A B	2 9	8 hrs 8 hrs
			AOV	A B	2 9	8 hrs 8 hrs
		in maintenance	Check	A B	2 9	8 hrs 8 hrs
			SRV	A B	2 9	8 hrs 8 hrs
			SOV	A	2	8 hrs
		in maintenance	MOV	А	2	8 hrs
			AOV	А	2	8 hrs
			Check	A	2	8 hrs
			SRV	A	2	8 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	SOV	В	8	4 hrs
			MOV AOV	B B	8	4 hrs 4 hrs
			Check	B	8	4 hrs 4 hrs
			SRV	В	8	4 hrs
3. Group I,B (see Section 8.2.2.2) 2 valves - normally closed – same valve type	closed – same	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	all	A B	6 13	72 hrs 72 hrs
		in maintenance	all	A	6	72 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	all	В	12	48 hrs
4. Group I,B (see Section 8.2.2.2) 2 valves - normally closed - different valve type	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	all	A B	7 14	168 hrs 168 hrs	
		in maintenance	all	A	7	168 hrs

Appendix D 5836-appd.doc-050702

(cont.) Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	all	В	14	168 hrs
5. Group I,B (see Section 8.2.2.2)	2 valves - normally open - same valve type		SOV MOV	A B A B	6 13 6 13	72 hrs 72 hrs 72 hrs 72 hrs 72 hrs
- - - -			AOV	A B	6 13	72 hrs 72 hrs
		in maintenance	Check	A B	6 13	72 hrs 72 hrs
			SRV	A B	4 11	24 hrs 24 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	A	6	72 hrs
		in maintenance	MOV	А	6	72 hrs
			AOV	А	6	72 hrs
			Check	А	6	72 hrs
			SRV	Α	4	24 hrs
		in maintenance	SOV	В	11	24 hrs
		2	MOV	В	12	48 hrs
			AOV	В	11	24 hrs
			Check	В	12	48 hrs
			SRV	В	10	12 hrs

(cont.) Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
6. Group I,B (see Section 8.2.2.2)	2 valves - normally open – different valve type		SOV	A B	7 14	168 hrs 168 hrs
0.2.2.2)			MOV	A B	7 14	168 hrs 168 hrs
			AOV	A B	7 14	168 hrs 168 hrs
		in maintenance	Check	A B	7 14	168 hrs 168 hrs
			SRV	A B	7 14	168 hrs 168 hrs
			SOV	A	7	168 hrs
		in maintenance 2	MOV	А	7	168 hrs
			AOV	А	7	168 hrs
			Check	А	7	168 hrs
			SRV	Α	7	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	SOV	В	14	168 hrs
			MOV AOV	B	14	168 hrs 168 hrs
			Check	В	14	168 hrs
			SRV	В	14	168 hrs
	parallel, 1 normally	in maintenance	SOV	A B	7 14	168 hrs 168 hrs
8.2.2.2)	closed, 1 normally open, same valve types - 1 valve IC,		MOV	A B	7 14	168 hrs 168 hrs
	normally open, different valve type from the valves OC		AOV	A B	7 14	168 hrs 168 hrs
			Check	A B	7	168 hrs 168 hrs
			SRV	A	7	168 hr
				В	14	168 hr

Table D-1 Te (cont.) Calculation Number and	ch Spec Category I Penetration	dentification: Class I - Penetration Flow Paths Connect	ted to Containment A Valve Type Assumption (see assumption 7	Atmosphere Applicable Tech Spec 3.6.3 Condition	Completion Time (CT) Category	Justified
Group	Description	Penetration Type	of Section 8.2)	(A or B)	Number	CT
			SOV	A	7	168 hrs
		₽ 2		В	14	168 hrs
			MOV	А	7	168 hrs
				В	14	168 hrs
		1 t	AOV	А	7	168 hrs
				В	14	168 hrs
		in maintenance	Check	А	7	168 hrs
			Check	В	14	168 hrs
			SRV	А	7	168 hrs
			U.I.	B	14	168 hrs
		in maintenance	SOV	А	7	168 hrs
			MOV	А	7	168 hrs
			AOV	А	7	168 hrs
			Check	А	7	168 hrs
			SRV	Α	7	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	SOV	В	14	168 hrs
		Į į	MOV	В	14	168 hrs
			AOV	В	14	168 hrs
			Check	В	14	168 hrs
		· ·	SRV	В	14	168 hrs
. Group I,B	2 valves OC in		SOV	А	6	72 hrs
(see Section	parallel, 1 normally			В	13	72 hrs
8.2.2.2)	closed, 1 normally	in maintenance				
	open - 2 valves IC		MOV	A	6 13	72 hrs
	in parallel,	↓		В	15	72 hrs
	1 normally closed, 1 normally open -		AOV	А	6	72 hrs
	all same valve		AU V	B	13	72 hr
				D	15	/2
	types		Check	А	6	72 hr
				В	13	72 hr
					1	
			SRV	A	6	72 hr
				В	13	72 hr

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	A B	6 13	72 hrs 72 hrs
			MOV	AB	6 13	72 hrs 72 hrs
			AOV	A B	6 13	72 hrs 72 hrs
		in maintenance	Check	A B	6 13	72 hrs 72 hrs
		in maintenance	SRV	A B	4	24 hrs 24 hrs
			SOV	A	6	72 hrs
			MOV	A	6	72 hrs
			AOV	А	6	72 hrs
			Check	А	6	72 hrs
		in maintenance	SRV	А	6	72 hrs

(cont.) Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		1	SOV	В	11	24 hrs
			MOV	В	12	48 hrs
			AOV	В	11	24 hrs
			Check	В	12	48 hrs
		in maintenance	SRV	В	11	24 hrs
		in maintenance	SOV	А	6	72 hrs
			MOV	A	6	72 hrs
			AOV	А	6	72 hrs
			Check	А	6	72 hrs
			SRV	А	4	24 hrs
		in maintenance	SOV	В	11	24 hrs
			MOV	В	12	48 hrs
			AOV	В	11	24 hrs
			Check	В	12	48 hrs
			SRV	В	10	12 hrs

Table D-1 Te (cont.)	ech Spec Category Io	dentification: Class I - Penetration Flow Paths Connected	ed to Containment	Atmosphere		
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
1. Group I,C (see Section 8.2.2.3)	1 valve – normally closed (valve is OC or IC)		all	A B	2 9	8 hrs 8 hrs
		in maintenance				
		in maintenance	all	A	2	8 hrs
		in maintenance	all	В	8	4 hrs

D-30

Table D-1 To (cont.) Calculation Number and Group	ech Spec Category Id Penetration Description	lentification: Class I - Penetration Flow Paths Connecte Penetration Type	ed to Containment A Valve Type Assumption (see assumption 7 of Section 8.2)	Atmosphere Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
2. Group I,C (see Section 8.2.2.3)	1 valve - normally open (valve is OC or IC)		SOV	A B	2 9	8 hrs 8 hrs
8.2.2.3)			MOV	A B	2 9	8 hrs 8 hrs
		in maintenance	AOV	A B	2 9	8 hrs 8 hrs
			Check	A B	2 9	8 hrs 8 hrs
			SRV	A B	2 9	8 hrs 8 hrs
			sov	A	2	8 hrs
		in maintenance	MOV	A	2	8 hrs
			AOV	A	2	8 hrs
			Check	Α	2	8 hrs
			SRV	A	2	8 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	SOV	В	8	4 hrs
			MOV	В	8	4 hrs
			AOV	В	8	4 hrs
		1	Check	В	8	4 hrs
			SRV	В	8	4 hrs
3. Group I,C (see Section 8.2.2.3)	2 valves - normally closed - same valve type		all	A B	6 13	72 hrs 72 hrs
		n maintenance				
		in maintenance	all	A	6	72 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	all	В	12	48 hrs
4. Group I,C (see Section 8.2.2.3)	2 valves - normally closed - different valve type	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	all	A B	7 14	168 hrs 168 hrs
		in maintenance	all	A	7	168 hrs

Appendix D 5836-appd.doc-050702

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	all	В	14	168 hrs
5. Group I,C (see Section 8.2.2.3)	2 valves - normally open - same valve type		SOV	A B	6 13	72 hrs 72 hrs
0.2.2.3)	type		MOV	A B	6 13	72 hrs 72 hrs
			AOV	A B	6 13	72 hrs 72 hrs
		n maintenance	Check	A B	6 13	72 hrs 72 hrs
			SRV	A B	4 11	24 hrs 24 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	А	6	72 hrs
		in maintenance	MOV	Α	6	72 hrs
			AOV	Α	6	72 hrs
			Check	А	6	72 hrs
			SRV	А	4	24 hrs
		in maintenance	sov	В	11	24 hrs
			MOV	В	12	48 hrs
			AOV	В	11	24 hrs
		1 2	Check	В	12	48 hrs
			SRV	В	10	12 hrs

.

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
6. Group I,C (see Section 8.2.2.3)	2 valves - normally open - different valve type	, ç L	SOV	A B	7 14	168 hrs 168 hrs
0.2.2.3)			MOV	A B	7 14	168 hrs 168 hrs
		n maintenance	AOV	A B	7 14	168 hrs 168 hrs
			Check	A B	7 14	168 hrs 168 hrs
			SRV	A B	7 14	168 hrs 168 hrs
			SOV	А	7	168 hrs
		in maintenance	MOV	А	7	168 hrs
			AOV	А	7	168 hrs
			Check	А	7	168 hrs
			SRV	А	7	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	SOV	В	14	168 hrs
		1 🗆 📕	MOV	В	14	168 hrs
			AOV	В	14	168 hrs
			Check	В	14	168 hrs
			SRV	В	14	168 hrs
an ann an Arraige An Arraige an Arraige a	i dhati y					
1. Group I,D (see Section 8.2.2.4)	2 valves - normally closed - different valve type	in maintenance	all	A	7	168 hrs
		in maintenance	all	В	14	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		n maintenance	all	Α	7	168 hrs
		in maintenance	all	В	14	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
1. Group II,A (see Section 8.2.3.1)	 ECCS Test Line Return - High Pressure Coolant Injection System: 2 valves OC in parallel, normally closed, different valve types – 1 valve IC, normally closed - orifice 	RCS Pressure (24) Pressure (24)	all	A B	7 14	168 hrs 168 hrs
	between RCS and IC CIV 3/8" or less diameter (The valve IC has additional normally closed valves between it and the RCS, Note: path 2 is eliminated)	RCS 5 = path 1 = path 2 in maintenance	all	A B	7 14	168 hrs 168 hrs

Table D-2 Te (cont.)	ech Spec Categor	y Identification: Class II - Penetration Flow Paths Connecte	ed to the RCS			<u>, , , , , , , , , , , , , , , , , , , </u>
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		RCS	all	Α	7	168 hrs
		n maintenance	all	В	12	48 hrs

Calculation Number and Group	Penetration Description	Penetration Type	9	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
2. Group II,A (see Section 8.2.3.1)	Pressurizer Vapor Sample Line: • 2 valves OC in parallel, normally closed, different valve types – 1 valve IC, normally closed - 3/8" or less piping diameter		in maintenance	all	A B	7 14	168 hrs 168 hrs
			2	all	A B	5 12	48 hrs 48 hrs

Table D-2 Te (cont.)	ech Spec Categor	y Identification: Class II - Penetration Flow Paths Connecte	ed to the RCS			
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			all	A	5	48 hrs
		in maintenance	all	В	12	48 hrs
		n maintenance]	

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
. Group II,A (see Section		valve 2 or 4 in maintenance	SOV	A B	7 14	168 hrs 168 hrs
8.2.3.1)	Line:		MOV	А	7	168 hrs
	• 3 valves OC in parallel, 2	≥ ₄		B	14	
	normally		AOV	A	7	168 hrs
	closed, 1 normally			B	14	
	open - 1 valve IC	S 3	Check	A	7	168 hrs
	normally open - 3/8" or			В	14	168 hrs
	less piping diameter		SOV	A	4	24 hrs
				В	11	24 hrs
			MOV	A	5	48 hrs
				В	12	48 hrs
			AOV	A	4	168 hrs 168 hrs 168 hrs 168 hrs 168 hrs 168 hrs 168 hrs 168 hrs 24 hrs 24 hrs 48 hrs 48 hrs 24 hrs 24 hrs 24 hrs
				В	11	24 hrs
		4	Check	A	5	48 hrs
			Chook	B	12	48 hrs

in maintenance RCS A MOV A MOV A AOV A Check A	4 5 4 5	24 hrs 48 hrs 24 hrs 48 hrs
RCS AOV A	4	24 hrs
Check A	5	48 hrs
n maintenance SOV B	11	24 hrs
→ ² MOV B	12	48 hrs
	11	24 hrs
Check B	12	48 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
4. Group II,A (see Section 8.2.3.1)	Post Accident Sample Line: 3 valves OC in parallel, normally closed, different valve types - 1 valve IC, normally closed 3/8" or less piping diameter	valve 2 or 3 in maintenance	all	A B	7 14	168 hrs 168 hrs
		RCS 1 3 4 in maintenance	all	A B	7 14	168 hrs 168 hrs

Table D-2 Te (cont.) Calculation Number and Group	ech Spec Category Penetration Description	y Identification: Class II - Penetration Flow Paths Connect Penetration Type	ed to the RCS Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance 2 RCS 3 4 4	all	A	4	24 hrs
		n maintenance	all	В	11	24 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
5. Group II,A (see Section 8.2.3.1)	Residual Heat Removal System (Low Head) - Hot Leg Injection, Recirc to Hot Leg: OR	valve 5 or 6 in maintenance (RHR / SI Pump) SIS Hot Leg / RCS Hot Leg 1 2 Loop 2 / Loop 1 Coop 3 / Loop 4 3 4	all	A B	6 13	72 hrs 72 hrs
	Safety Injection Pump (Intermediate Head) - Hot Leg Injection, Recirc to Hot Leg: • 2 valves IC in parallel, normally closed - 2 valve OC in parallel, normally closed - different valve types	valve 2 or 4 in maintenance (RHR / Si Pump) SIS Hot Leg / RCS Hot Leg 1 2 Loop 2 / Loop 1 4 4 4 5 RC Loop 3 / Loop 4 4 4 6 6 3 4	all	A	6	72 hrs

Table D-2 To (cont.)	ech Spec Categor	y Identification: Class II - Penetration Flow Paths Connected	ed to the RCS			
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
	(The 2 check valves IC each have another normally closed check valve in series with them)	valve 2 or 4 in maintenance	all	В	14	168 hrs
6. Group II,A (see Section 8.2.3.1)	Residual Heat Removal System (Low Head) - Cold Leg Injection, Recirc to Cold	RCS Cold Leg 1 2	SOV MOV	A B A B	1 8 1 8	4 hrs 4 hrs 4 hrs 4 hrs 4 hrs
	Leg:		AOV	A B	1 8	4 hrs 4 hrs
			Check	A B	1 8	4 hrs 4 hrs

D-48

1

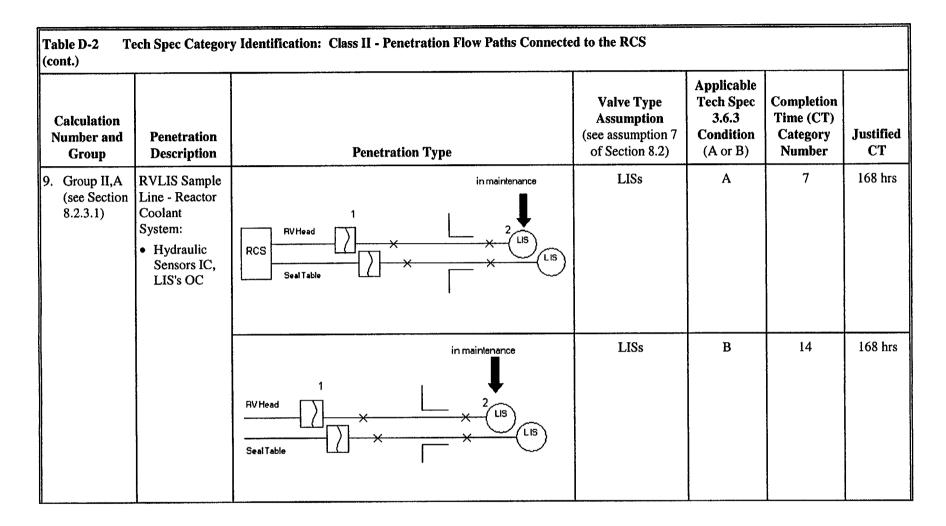
L

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
	• 2 valves IC in parallel, normally	RCSColdLeg 1 2	SOV	A B	1 8	4 hrs 4 hrs
	closed – 2 valves OC in parallel,	RC Loop 2 or 4	MOV	A B	1 8	4 hrs 4 hrs
	1 normally closed, 1 normally	3 4 1	AOV	A B	1 8	4 hrs 4 hrs
	open - different valve types	ìn maintenance	Check	A B	1 8	4 hrs 4 hrs
	(The 2 check	valve 2 or 4 in maintenance	SOV	A	1	4 hrs
	valves IC each have		MOV	A	1	4 hrs
	another normally	ACS Cold Leg 1 2	AOV	A	1	4 hrs
	closed check valve in series with them)		Check	A	1	4 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
	valve 2 or 4 in maintenance	SOV	В	8	4 hrs
	L I	MOV	В	8	4 hrs
		AOV	В	8	4 hrs
		Check	В	8	4 hrs
Safety Injection		SOV	A	1	4 hrs 4 hrs
(intermediate head) - Cold Leg Injection,		MOV	A B	8	4 hrs 4 hrs 4 hrs
Leg:	RCS	AOV	A B	1 8	4 hrs 4 hrs
in parallel, normally closed - 2 valve OC in parallel, 1 normally closed, 1 normally		Check	A B	1 8	4 hrs 4 hrs
	Description Description Safety Injection Pump (intermediate head) - Cold Leg Injection, Recirc to Cold Leg: • 4 valves IC in parallel, normally closed - 2 valve OC in parallel, 1 normally closed, 1	Description Penetration Type valve 2 or 4 in maintenance	Penetration Description Assumption (see assumption 7 of Section 8.2) valve 2 or 4 in maintenance SOV Valve 2 or 4 in maintenance MOV Accumulator Inj Check Safety Injection Accumulator Inj ColdLeg 2 in maintenance Kerst to Cold Loop 2 Leg: Loop 1 4 valves IC In parallel, normally closed - 2 Valve OC in parallel, 1 normally Loop 3 closed , 1 Valve OC in parallel, 1	Penetration Description Penetration Type Valve Type Assumption (see assumption 7) of Section 8.2) Tech Spec 3.6.3 Condition (A or B) valve 2 or 4 in maintenance SOV B valve 2 or 4 in maintenance MOV B valve 2 or 4 in maintenance MOV B valve 2 or 4 in maintenance MOV B valve 2 or 4 in maintenance SOV B valve 2 or 4 in maintenance MOV B valve 2 or 4 in maintenance MOV B MOV B AOV B Safety Injection Pump (intermediate head) - Cold Leg: Accumulator Inj ColdLeg2 SOV A RCS Loop 2 1 2 MOV B RCS Loop 4 5 6 MOV A Recirc to Cold Leg: Loop 4 5 6 MOV A Recirc to Cold Leg: Loop 4 5 6 AOV A Valve OC in parallel, 1 normally closed, 1 B AOV A B Normally In ormally In ormally B B B	Penetration DescriptionPenetration TypeValve Type Assumption 7Tech Spec 3.6.3 Condition (A or B)Completion Time (CT) Category Numbervalve 2 or 4 in maintenanceSOVB8 $valve 2 or 4 in maintenanceMOVB8valve 2 or 4 in maintenanceMOVB8valve 2 or 4 in maintenanceSOVB8valve 2 or 4 in maintenanceSOVB8valve 2 or 4 in maintenanceSOVB8MOVB88MOVB8Safety InjectionPump(intermediatehead) - ColdLeg Injection,Recirc to ColdLeg Injection,recirc to ColdLeg 1Accumulator InjCodLeg 2SOVA1RCSLoop 1111188AOVA1B88Loop 4556MOVA1Loop 4556MOVA1Loop 37810CheckA1Normallyclosed, 1Loop 37881Loop 37810CheckA1Normallyclosed, 1Loop 37881Loop 378881Loop 378888Normallyclosed, 1SovA11Loop 378881Loop 3$

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
	(The 4 check valves IC each have	Accumulator Inj Cold Leg 2	SOV	A B	1 8	4 hrs 4 hrs
	another normally closed check	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	MOV	A B	1 8	4 hrs 4 hrs
	valve in series with it)		AOV	A B	1 8	4 hrs 4 hrs
		Loop 3 7 8 in maintenance	Check	A B	1 8	4 hrs 4 hrs
		in maintenance	SOV	A	1	4 hrs
		valve 2, 4, 6, 8 in maintenance Accumulatot Inj	MOV	A	1	4 hrs
		ColdLeg 2	AOV	A	1	4 hrs
		$\operatorname{RCS} \xrightarrow{\operatorname{Loop1} 3 4}_{\operatorname{Loop2} 4} 5 6 1 10 10 10 10 10 10 10 10 10 10 10 10 1$	Check	A	1	4 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		valve 2, 4, 6, 8 in maintenance	SOV	В	8	4 hrs
		Į	MOV	В	8	4 hrs
			AOV	В	8	4 hrs
			Check	В	8	4 hrs
(see Section 8.2.3.1) Remov System Head) to RHI RHR S	Residual Heat Removal System (Low Head) - Hot Leg to RHR Pumps, RHR Shutdown Lines:	in maintenance	all	A	1	4 hrs
	• 1 valve IC, normally closed					
	(The valve IC has another normally closed valve in series with it)	in maintenance	all	В	8	4 hrs



Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	sensors	Α	7	168 hrs
		in maintenance	sensors	В	14	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
10. Group II,A (see Section 8.2.3.1)	Centrifugal Charging Pumps (High Head) - Recirc to Hot Legs: • 3 valves of same type IC in parallel, normally closed – 1 valve OC,	RCS Hot Legs Leg A 1 4 in maintenance RC Leg B 2 5 S Leg C 3 6	all	A B	6 13	72 hrs 72 hrs
	r valve OC, normally closed - valves IC different type from those OC (The check valves IC have 3 parallel normally closed check valves in series with them)	valve 4, 5 or 6 in maintenance RCS HotLegs Leg A 1 4 RC Leg A 2 5 S Leg A 3 6 Leg A 3 6	all	A	7	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		valve 4, 5 or 6 in maintenance	all	В	14	168 hrs
11. Group II,A (see Section 8.2.3.1)	Centrifugal Charging Pumps (High Head) - Recirc to Hot Legs:	RCS Cold Leg valve 6 or 7 in maintenance	all	A	7	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
	 3 valves of same type IC in parallel, normally closed - 1 valve OC, normally closed - valves IC different type from those OC 	RCS Cold Leg valve 6 or 7 in maintenance	all	В	14	168 hrs
	(The check valves IC have 3 parallel normally closed check valves in series with them)	$\begin{array}{c c} RCS Cold Leg \\ \hline Loop 2 & 2 \\ \hline Loop 3 & 3 \\ \hline RCS & 1 \\ \hline Loop 1 & 4 \\ \hline Loop 4 & 5 \\ \hline \end{array}$	all	A	7	168 hrs

Table D-2 T (cont.)	ech Spec Categor	y Identification: Class II - Penetration Flow Paths Connecte	ed to the RCS	· · · · · · · · · · · · · · · · · · ·		
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	all	В	14	168 hrs
12. Group II,A (see Section 8.2.3.1)	Centrifugal Charging Pumps (High Head) - Injection to Cold Legs, Recirc to Cold Legs:	$\begin{array}{c} \text{RCS Cold Legs} \\ \text{Leg A} & 1 & 4 \\ \text{RC} & \text{Leg B} & 2 & 5 \\ \text{S} & \text{Leg C} & 3 & 6 \\ \text{Leg C} & 3 & 6 \\ \text{Leg C} & 3 & 6 \\ \end{array}$	all	A	7	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
	 3 valves of same type IC in parallel, normally closed - 2 valves of same valve type OC in parallel, normally closed - valves IC 	RCS Cold Legs Leg A 1 1 4 7 or 8 in maintenance RC Leg B 21 5 7 Leg C 31 6 8 Leg C 31 6 8	all	В	14	168 hrs
	different type from those OC (The check valves IC have 3 parallel normally closed check valves in series with them)	valve 4, 5 or 6 in maintenance RCS Cold Legs Leg A 1 4 RC Leg B 215 Leg C 316	all	A	7	168 hrs

Table D-2 To (cont.)	ech Spec Categor	y Identification: Class II - Penetration Flow Paths Connected	ed to the RCS			
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
	(The valves OC have another normally closed check valves in series with them)	valve 4, 5 or 6 in maintenance	all	В	14	168 hrs
1. Group II,B (see Section 8.2.3.2)	Chemical & Volume Control System -Normal	in maintenance	SOV	A B	4 11	24 hrs 24 hrs
	Letdown Legs: • 1 valve IC,		MOV	A B	4 11	24 hrs 24 hrs
	normally open - 2 valves OC, 1 normally		AOV	A B	4 11	24 hrs 24 hrs
	open, 1 normally closed - same valve type		Check	A B	4 11	24 hrs 24 hrs

.

Appendix D 5836-appd.doc-050702 _

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justifie CT
		2	SOV	A	7	168 hrs
			ΜΟΫ	B A B	14 7 14	168 hr 168 hr 168 hr
			AOV	A	7	168 hr
				В	14	168 hr
			Check	A	7	168 hr
		in maintenance		B	14	168 hr
		2	SOV	A	4	24 hr:
			MOV	A	4	24 hr
			AOV	A	4	24 hr
			Check	A	4	24 hr
		in maintenance				
		· · · · · · · · · · · · · · · · · · ·	SOV	В	11	24 hr
			MOV	В	12	48 hr
			AOV	В	11	24 hr
			Check	В	12	48 hr

Table D-2 Te (cont.)	ech Spec Category	y Identification: Class II - Penetration Flow Paths Connec	cted to the RCS	<u></u>	<u></u>	
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
2. Group II,B (see Section 8.2.3.2)	Chemical & Volume Control	in maintenance	SOV	A B	4 11	24 hrs 24 hrs
8.2.3.2)	System -Normal Letdown Legs: 3 valves IC, 1 normally open,		MOV	A B	4 11	24 hrs 24 hrs
	2 normally closed - 1 valve OC, normally		AOV	A B	4 11	24 hrs 24 hrs
	open - all same valve type		Check	A B	4 11	24 hrs 24 hrs
			SOV	А	4	24 hrs
			MOV	A	4	24 hrs
			AOV	А	4	24 hrs
			Check	А	4	24 hrs
		n maintenance				

.

ł

=

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justifie CT
			SOV	В	11	24 hrs
			MOV	В	12	48 hrs
			- AOV	В	11	24 hrs
			Check	В	12	48 hrs
		n maintenance	SOV	A	7	168 hr
		n maintenance	MOV	A	7	168 hr
		· · · · · · · · · · · · · · · · · · ·	AOV	A	7	168 hr
			Check	A	7	168 hr

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
		in maintenance	SOV	В	14	168 hrs
		Ļ	MOV	В	14	168 hrs
		Þ Í	AOV	В	14	168 hrs
			Check	В	. 14	168 hrs
3. Group II,B	Chemical &	in maintenance	SOV	А	7	168 hrs
(see Section 8.2.3.2)	Volume Control System -		MOV	A	7	168 hrs
	Charging Line: • 1 CIV IC	$ _{RC} _{1^2/1^4}$	AOV	A	7	168 hrs
	normally open - 1 CIV OC, normally open - different valve types		Check	A	7	168 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justifie CT
	(The	in maintenance	SOV	В	14	168 hrs
	normally open CIV IC		MOV	В	14	168 hrs
	has 1 more normally open valves in series between it and the RCS, same valve type)		AOV	В	14	168 hrs
			Check	В	14	168 hr
		in maintenance	SOV	A	7	168 hr
	(The		MOV	A	7	168 hi
	normally open CIV OC		AOV	A	7	168 hr
	has 1 more normally		Check	A	7	168 hr
	open valve downstream	in maintenance	SOV	В	14	168 hi
	of it, same valve type)		MOV	В	14	168 hi
			AOV	В	14	168 h
			Check	В	14	168 h

Table D-3 Te	ech Spec Categor	y Identification: Class III - Penetration Flow Paths Connec	ted to the SGs			
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
1. Group III,A (see Section 8.2.4.1)	1 valve - normally closed (valve can be OC or IC)	SG I I in maintenance	all	A B	2 9	8 hrs 8 hrs
		in maintenance	all	A	2	8 hrs
		in maintenance	all	В	8	4 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
2. Group III,A (see Section	normally open		SOV	A B	2 9	8 hrs 8 hrs
8.2.4.1) (valve can be OC or IC)		1	MOV	A B	2 9	8 hrs 8 hrs
			AOV	A B	2 9	8 hrs 8 hrs
		in maintenance	Check	A B	2 9	8 hrs 8 hrs
			SRV	A B	2 9	8 hrs 8 hrs
			SOV	A	2	8 hrs
		in maintenance	MOV	A	2	8 hrs
		ISG 🛃 🛄	AOV	A	2	8 hrs
		Check	A	2	8 hrs	
		•	SRV	A	2	8 hrs

. .. .

Table D-3 To (cont.)	ech Spec Categor	y Identification: Class III - Penetration Flow Paths Connec	ted to the SGs	<u></u>	·····	
Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	В	8	4 hrs
		in maintenance	MOV	В	8	4 hrs
			AOV	В	8	4 hrs
			Check	В	8	4 hrs
			SRV	В	8	4 hrs
			anna ann an Aonaichte Martaite Canaige ann an Aonaichte Martaite ann an Aonaichte			
1. Group III,B (see Section	1 valve - normally open	in maintenance	SOV	А	2	8 hrs
8.2.4.2)	(valve can be OC or IC)		MOV	А	2	8 hrs
			AOV	А	2	8 hrs
			Check	А	2	8 hrs
			SRV	А	2	8 hrs

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justifie CT
			SOV	В	9	8 hrs
		in maintenance	MOV	В	9	8 hrs
			AOV	В	9	8 hrs
			Check	В	9	8 hrs
			SRV	В	9	8 hrs
			SOV	А	2	8 hrs
		in maintenance	MOV	А	2	8 hrs
			AOV	A	2	8 hrs
			Check	A	2	8 hrs
			SRV	A	2	8 hrs

····

Calculation Number and Group	Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Applicable Tech Spec 3.6.3 Condition (A or B)	Completion Time (CT) Category Number	Justified CT
			SOV	В	9	8 hrs
		in maintenance	MOV	В	9	8 hrs
			AOV	В	9	8 hrs
			Check	В	9	8 hrs
			SRV	В	9	8 hrs

<u>D-70</u>

APPENDIX E

APPLICABLE TECH SPEC 3.6.3 CONDITIONS A AND B

Table E-1: Penetrations where System Pressure Boundary is Intact - Condition A

 Table E-2:
 Penetrations where System Pressure Boundary is not Intact – Condition B

*Please note, the information contained within Tables E-1 and E-2 is directly from Tables 8-2, 8-3 and 8-4. Tables E-1 and E-2 are shown to facilitate implementing the information into tech specs.

Table E-1 Applicable	Tech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bound	dary is Intact	an a	<u>, , , , , , , , , , , , , , , , , , , </u>
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	4 2 3 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	SRV	1	4 hrs
Residual Heat Removal System (Low Head) -	in maintenance	SOV	1	4 hrs
Cold Leg Injection,		MOV	1	4 hrs
Recirc to Cold Leg	RC Loop 1or 3	AOV	1	4 hrs
	$\begin{array}{c c} & & \\ S \end{array} \\ \hline \\ S \end{array} \\ \hline \\ \\ S \end{array} \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Check	1	4 hrs
	RCS Cold Leg 1 2	SOV	1	4 hrs
	RC Loop 2 or 4	MOV	1	4 hrs
		AOV	1	4 hrs
	3 4	Check	1	4 hrs
	in maintenance			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	valve 2 or 4 in maintenance	SOV	1	4 hrs
	Ļ	MOV	1	4 hrs
	RCSColdLeg 1 2	AOV	1	4 hrs
	$\begin{array}{c c} RC \\ S \\ \hline \\ S \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Check	1	4 hrs
Safety Injection Pump	Accumulator Inj	SOV	1	4 hrs
(intermediate head) - Cold Leg Injection, Recirc to Cold Leg	Cold Leg 2 in maintenance	MOV	1	4 hrs
		AOV	1	4 hrs
	$\begin{array}{c c} RCS \\ \hline Loop 4 \\ \hline Loop 3 \\ \hline 17 \\ \hline 18 \\ \hline 10 \\ $	Check	1	4 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justi C'
	Accumulator Inj	SOV	1	4 h
	Cold Leg 2	MOV	1	4 h
		AOV	1	4 h
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Check	1	4 h
	in maintenance			ļ
	valve 2, 4, 6, 8 in maintenance	SOV	1	4 h
	Accumulator Inj Cold Leg 2	MOV	1	4 h
		AOV	1	4 h
	RCS	Check	I	4 h

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Residual Heat Removal System (Low Head) - Hot Leg to RHR Pumps, RHR Shutdown Lines	in maintenance	all	1	4 hrs
				ng theological na T
general penetration type	1 3 2 in maintenance	SRV	2	8 hrs
general penetration type	in maintenance	all	2	8 hrs

.

Table E-1 Applicable To (cont.)	ech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bound	ary is Intact		<u> </u>
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		all	2	8 hrs
general penetration type		SOV	2	8 hrs
	1	MOV	2	8 hrs
		AOV	2	8 hrs
		Check	2	8 hrs
	in maintenance	SRV	2	8 hrs
		SOV	2	8 hrs
	in maintenance	MOV	2	8 hrs
		AOV	2	8 hrs
		Check	2	8 hrs
	۱ 	SRV	2	8 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 1 1 1 1 1 1 1 1 1 1 1 1 1	all	2	8 hrs
		all	2	8 hrs
general penetration type		SOV MOV	2 2	8 hrs 8 hrs
		AOV Check	2 2	8 hrs 8 hrs
	in maintenance	SRV	2	8 hrs

-

Table E-1Applicable Te(cont.)	ech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bound	ary is Intact		<u></u>
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		SOV	2	8 hrs
	in maintenance	MOV	2	8 hrs
		AOV	2	8 hrs
		Check	2	8 hrs
		SRV	2	8 hrs
general penetration type		all	2	8 hrs
	in maintenance			
	in maintenance	all	2	8 hrs
	1			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1	SOV	2	8 hrs
		ΜΟΥ	2	8 hrs
		AOV	2	8 hrs
	in maintenance	Check	2	8 hrs
		SRV	2	8 hrs
		SOV	2	8 hrs
	in maintenance	MOV	2	8 hrs
	SG L	AOV	2	8 hrs
		Check	2	8 hrs
		SRV	2	8 hrs
general penetration type	in maintenance	SOV	2	8 hrs
	ı 1	MOV	2	8 hrs
		AOV	2	8 hrs
		Check	2	8 hrs
		SRV	2	8 hrs

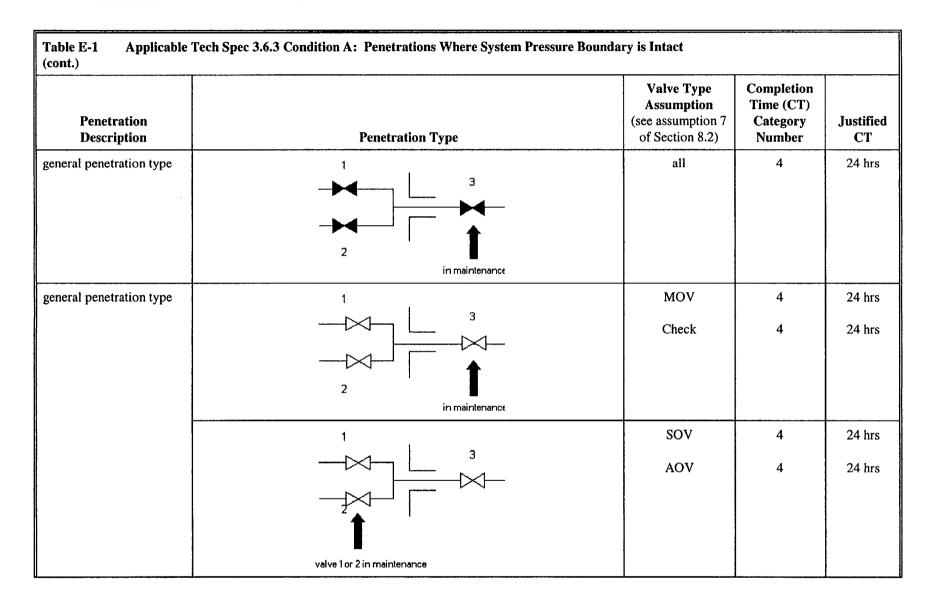
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		SOV	2	8 hrs
	in maintenance	MOV	2	8 hrs
	SG L	AOV	2	8 hrs
		Check	2	8 hrs
		SRV	2	8 hrs
			4	
general penetration type	1 2	SRV	3	12 hrs
	in maintenance			
	1 2	SRV	3	12 hrs
	in maintenance			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV AOV	3 3	12 hrs 12 hrs
	2 in maintenance			
		SRV	3	12 hrs
	valve 1 or 2 in maintenance			
general penetration type		all	3	12 hrs
	in maintenance			

and a second second

Table E-1Applicable Te(cont.)	ech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bounda	ry is Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV	3	12 hrs
		MOV	3	12 hrs
		AOV	3	12 hrs
	in maintenance	Check	3	12 hrs
	$ \begin{array}{c} - \swarrow^{1} \\ - \swarrow^{2} \\ \end{array} $	SRV	3	12 hrs
1	valve 1, 2 or 3 in maintenance			
general penetration type	in maintenance	SRV	3	12 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		SRV	3	12 hrs
	in maintenance			
				ang
general penetration type		SOV	4	24 hrs
		AOV	4	24 hrs
	in maintenance			
		sov	4	24 hrs
		AOV	4	24 hrs
	in maintenance			



Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV	4	24 hrs
		AOV	4	24 hrs
	valve 1, 2 or 3 in maintenance			
general penetration type		all	4	24 hrs
	valve 3 or 4 in maintenance			
	valve 1 or 2 in maintenance	all	4	24 hrs

المهار الموليات الم

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
eneral penetration type		SOV	4	24 hrs
		AOV	4	24 hrs
	in maintenance			
		SOV	4	24 hrs
		AOV	4	24 hrs
	in maintenance			
	in maintenance	SOV	4	24 hr:
		AOV	4	24 hr
		SRV	4	24 hr:

=

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	SOV	4	24 hrs
	l	AOV	4	24 hrs
		SRV	4	24 hrs
general penetration type		SRV	4	24 hrs
	in maintenance			
	in maintenance	SRV	4	24 hrs

. .

.

Table E-1Applicable Tech(cont.)	Spec 3.6.3 Condition A: Penetrations Where System Pressure Bound	ary is Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	in maintenance	SRV	4	24 hrs
	in maintenance	SRV	4	24 hrs
general penetration type	n maintenance	SRV	4	24 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	SRV	4	24 hrs
Pressurizer Liquid Sample Line	RCS 1	SOV AOV	4	24 hrs 24 hrs
	in maintenance	SOV AOV	4	24 hrs 24 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Post Accident Sample Line	in maintenance	all	4	24 hrs
Chemical & Volume Control System -Normal Letdown Legs	in maintenance	SOV MOV AOV Check	4 4 4	24 hrs 24 hrs 24 hrs 24 hrs 24 hrs

=

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
	2	SOV	4	24 hrs
		MOV	4	24 hrs
		AOV	4	24 hrs
		Check	4	24 hrs
	in maintenance			
Chemical & Volume		SOV	4	24 hrs
Control System -Normal Letdown Legs	in maintenance	MOV	4	24 hrs
		AOV	4	24 hrs
		Check	4	24 hrs
		Cneck	4	

. . .

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	1	SOV	4	24 hrs
		MOV	4	24 hrs
		AOV	4	24 hrs
	n maintenance	Check	4	24 hrs
·				
general penetration type	1 2	all	5	48 hrs
	in maintenance			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	1 2 	all	5	48 hrs
general penetration type	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	MOV Check	5 5	48 hrs 48 hrs
		MOV Check	5 5	48 hrs 48 hrs

Table E-1 Applicable Tech Spectrum (cont.)	c 3.6.3 Condition A: Penetrations Where System Pressu	-		Г
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 3 2 valve 1 or 2 in maintenance	all	5	48 hrs
general penetration type	1 3 yalve 1 or 2 in maintenance	MOV Check	5	48 hrs 48 hrs
general penetration type	valve 1, 2 or 3 in maintenance	all	5	48 hrs

-

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	→ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	MOV Check	5	48 hrs 48 hrs
general penetration type	in maintenance	MOV Check	5 5	48 hrs 48 hrs
	in maintenance	MOV Check	5 5	48 hrs 48 hrs

(cont.) Penetration Description	Spec 3.6.3 Condition A: Penetrations Where System Pressure Boun	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	MOV	5	48 hrs
		Check	5	48 hrs
	in maintenance	MOV	5	48 hrs
	$ \begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Check	5	48 hrs
Pressurizer Vapor Sample Line	RCS RCS I I I I I I I I I I I I I I I I I I I	all	5	48 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
		all	5	48 hrs
Prossurizer Liquid Sample	in maintenance	MOV	5	48 hrs
Pressurizer Liquid Sample Line	RCS 1	Check	5	48 hrs
	in maintenance2	MOV	5	48 hrs
		Check	5	48 hr:

.

Table E-1 Applicable (cont.)	Tech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bounda	ry is Intact	<u> </u>	
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 3	SOV	6	72 hrs
		AOV	6	72 hrs
		SRV	6	72 hrs
	2 in maintenance			
general penetration type		SOV	6	72 hrs
		AOV	6	72 hrs
		SRV	6	72 hrs
	in maintenance			
general penetration type	1 2	all	6	72 hrs
	in maintenance			

E-28

F

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	all	6	72 hrs
general penetration type	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	SOV MOV AOV Check	6 6 6 6	72 hrs 72 hrs 72 hrs 72 hrs 72 hrs
	in maintenance	SOV MOV AOV Check	6 6 6 6	72 hrs 72 hrs 72 hrs 72 hrs 72 hrs

Table E-1Applicable Tech S(cont.)	pec 3.6.3 Condition A: Penetrations Where System Pressure Bound	ary is Intact		<u></u>
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	in maintenance	SOV	6	72 hrs
		MOV	6	72 hrs
		AOV	6	72 hrs
		Check	6	72 hrs
	·	SRV	6	72 hrs
		SOV	6	72 hrs
		MOV	6	72 hrs
		AOV	6	72 hrs
	1	Check	6	72 hrs
	in maintenance			
		SOV MOV	6 6	72 hrs 72 hrs
		AOV	6	72 hrs
	Î	Check	6	72 hrs
	in maintenance	SRV	6	72 hrs

E-30

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
	in maintenance	SOV	6	72 hrs
	↓ .	MOV	6	72 hrs
		AOV	6	72 hrs
		Check	6	72 hrs
general penetration type		all	6	72 hrs
	n maintenance			
	in maintenance	all	6	72 hrs

Table E-1 Applicable 7 (cont.)	Fech Spec 3.6.3 Condition A: Penetrations Where System Pressure Boundary	ry is Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1	SOV	6	72 hrs
		MOV	6	72 hrs
		AOV	6	72 hrs
	n maintenance	Check	6	72 hrs
	in maintenance	SOV	6	72 hrs
		MOV	6	72 hrs
		AOV	6	72 hrs
	l	Check	6	72 hrs
Residual Heat Removal System (Low Head) - Hot	valve 5 or 6 in maintenance (RHR / SI Pump)	all	6	72 hrs
Leg Injection, Recirc to Hot Leg	SIS Hot Leg / RCS Hot Leg 1 2			
OR	RC S Loop 3/Loop 4			
Safety Injection Pump				
(Intermediate Head) - Hot Leg Injection, Recirc to Hot Leg	V 4			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	valve 2 or 4 in maintenance (RHR/SIPump) SIS HotLeg / RCS HotLeg 1 2 RC Loop 2/Loop 1 Loop 3/Loop 4 3 4	ali	6	72 hrs
Centrifugal Charging Pumps (High Head) - Recirc to Hot Legs	$\begin{array}{c c} RCSHotLegs \\ \hline Leg A & 1 & in maintenance \\ \hline RC & Leg B & 2 & 5 \\ S & Leg C & 3 & 6 \\ \hline Leg C & 3 & 6 \\ \hline Leg C & 3 & 6 \\ \hline \end{array}$	all	6	72 hrs
			en andre standige en standige sold andre sold Andre sold andre sold an Andre sold and andre s	
general penetration type	in maintenance	all	7	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
	1 다 2	all	7	168 hrs
	in maintenance			
general penetration type		SOV	7	168 hr
		MOV	7	168 hr
		AOV	7	168 hr
	in maintenance	Check	7	168 hr
		SRV	7	168 hr
		SOV	7	168 hr
	1 - 2	MOV	7	168 hi
		AOV	7	168 h
		Check	7	168 h
	in maintenance	SRV	7	168 hi

Table E-1 Applicable Tech Spectrum (cont.)	c 3.6.3 Condition A: Penetrations Where System Pressure Bo	·····		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 3 1 2 in maintenance	all	7	168 hrs
	1 3 2 2 valve 1 or 2 in maintenance	all	7	168 hrs
general penetration type	1 3 	MOV Check	7 7	168 hrs 168 hrs

• • • • • •

Table E-1 Applicable Tell (cont.)	ech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bounda	ry is Intact	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	1 3	SOV	7	168 hrs
		MOV	7	168 hrs
		AOV	7	168 hrs
	2	Check	7	168 hrs
	valve 1 or 2 in maintenance	SRV	7	168 hrs
general penetration type	→ ¹ → ² → ³ in maintenance	all	7	168 hrs
	4 2 3 3 valve 1, 2 or 3 in maintenance	all	7	168 hrs

Table E-1 Applicable Tech Spectrum (cont.)	ec 3.6.3 Condition A: Penetrations Where System Pressure Bo	undary is Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		MOV	7	168 hrs
		Check	7	168 hrs
	in maintenance			
		SOV	7	168 hrs
		MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
	valve 1, 2 or 3 in maintenance	SRV	7	168 hrs
general penetration type		SOV	7	168 hrs
	1 2	MOV	7	168 hrs
		AOV	7	168 hrs
	Ĩ [∣]	Check	7	168 hrs
	in maintenance	SRV	7	168 hrs

Table E-1Applicable Tech Spe(cont.)	c 3.6.3 Condition A: Penetrations Where System Pressure	Boundary is Intact	2	· · · · · · · · · · · · · · · · · · ·
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		SOV	7	168 hrs
	1 2	MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
	in maintenance	SRV	7	168 hrs
general penetration type		SOV	7	168 hrs
	1 _□ 2	MOV	7	168 hrs
		AOV	7	168 hrs
	Î I	Check	7	168 hrs
	in maintenance	SRV	7	168 hrs
		SOV	7	168 hrs
		MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
	in maintenance	SRV	7	168 hrs

E-38

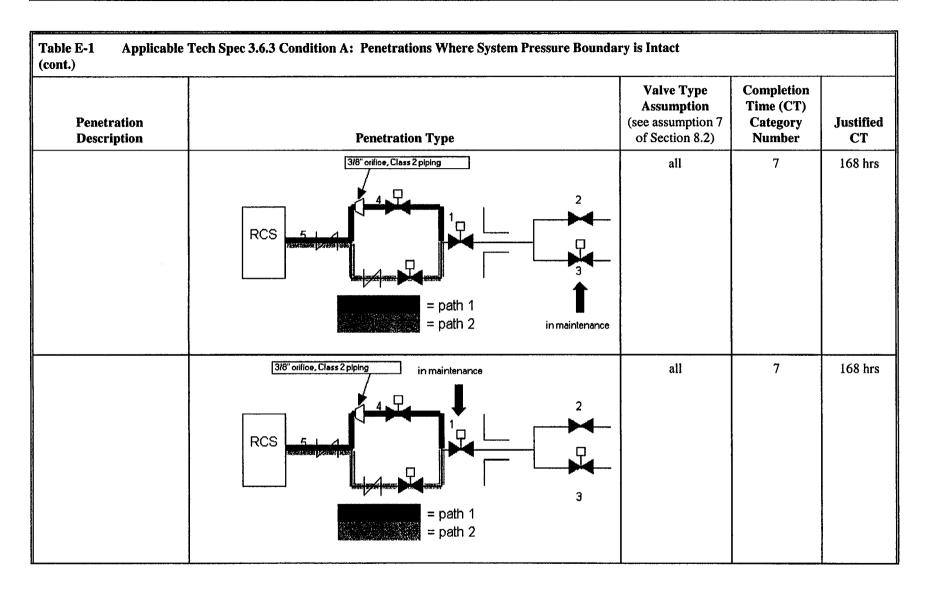
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		all	7	168 hrs
	in maintenance			
	in maintenance	all	7	168 hrs
general penetration type		SOV	7	168 hrs
	1 1	MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
	in maintenance	SRV	7	168 hr

Table E-1 Applicable 7 (cont.)	Fech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bounda	ry is Intact	<u>Ulgingi,</u>	
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		SOV	7	168 hrs
	in maintenance	MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
	Ι	SRV	7	168 hrs
general penetration type	in maintenance	SOV	7	168 hrs
	, I	MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
	·	SRV	7	168 hrs
	<u> </u>	SOV	7	168 hrs
		MOV	7	168 hrs
		AOV	7	168 hrs
	Ĩ	Check	7	168 hrs
	in maintenance	SRV	7	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
	in maintenance	SOV	7	168 hr
	I .	MOV	7	168 hr
		AOV	7	168 hr
		Check	7	168 hr
		SRV	7	168 hr
eneral penetration type	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	all	7	168 hr
	in maintenance	all	7	168 h

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV	7	168 hrs
		MOV	7	168 hrs
		AOV	7	168 hrs
	n maintenance	Check	7	168 hrs
		SRV	7	168 hrs
	in maintenance	SOV	7	168 hrs
	ρ ↓	MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
		SRV	7	168 hrs
general penetration type	in maintenance	all	7	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	n maintenance	all	7	168 hrs
ECCS Test Line Return - High Pressure Coolant Injection System	RCS 5 1 1 2 2	all	7	168 hrs



Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Pressurizer Vapor Sample Line	in maintenance 2 RCS RCS 3	all	7	168 hrs
Pressurizer Liquid Sample Line	valve 2 or 4 in maintenance	SOV MOV AOV Check	7 7 7 7	168 hrs 168 hrs 168 hrs 168 hrs

Table E-1 Applicable T (cont.) (cont.)	Fech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bounda	ry is Intact	, ,	
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Post Accident Sample Line	valve 2 or 3 in maintenance	all	7	168 hrs
	RCS I I I I I I I I I I I I I I I I I I I	all	7	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
RVLIS Sample Line - Reactor Coolant System	In maintenance	LISs	7	168 hrs
	in maintenance	sensors	7	168 hrs
Centrifugal Charging Pumps (High Head) - Cold Leg Injection, Recirc to Cold Legs	RCS Cold Leg valve 6 or 7 in maintenance	all	7	168 hrs

.....

Table E-1 Applicable (cont.)	Tech Spec 3.6.3 Condition A: Penetrations Where System Pressure Bounds	ary is Intact	<u></u>	
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	$\begin{array}{c c} RCSColdLeg \\ \hline Loop2 & 2 \\ \hline Loop3 & 3 \\ \hline Loop3 & 3 \\ \hline Loop1 & 4 \\ \hline Loop4 & 5 \\ \hline \end{array}$	all	7	168 hrs
Centrifugal Charging Pumps (High Head) - Injection to Cold Legs, Recirc to Cold Legs	RCS Cold Legs Leg A 1 4 RC Leg B 2 5 S Leg C 3 6 Leg C 3 6	all	7	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	valve 4, 5 or 6 in maintenance RCS Cold Legs Leg A 1 4 RC Leg B 2 5 Leg C 3 6 Leg C 3 6	all	7	168 hrs
Chemical & Volume Control System -Normal Letdown Legs		SOV MOV AOV Check	7 7 7 7 7	168 hrs 168 hrs 168 hrs 168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Chemical & Volume	n maintenance	SOV	7	168 hrs
Control System -Normal Letdown Legs		MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs
Chemical & Volume	in maintenance	SOV	7	168 hrs
Control System - Charging Line	L	MOV	7	168 hrs
	RC 12 14 RC 14	AOV	7	168 hrs
		Check	7	168 hrs
	in maintenance	SOV	7	168 hrs
		MOV	7	168 hrs
		AOV	7	168 hrs
		Check	7	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	$ \begin{array}{c c} & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & $	SRV	8	4 hrs
general penetration type	in maintenance	all	8	4 hrs
general penetration type	in maintenance	SOV MOV	8 8	4 hrs 4 hrs
		AOV Check	8	4 hrs 4 hrs
		SRV	8	4 hrs

a second a second a

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
general penetration type	in maintenance	all	8	4 hrs
general penetration type	in maintenance	SOV MOV AOV Check SRV	8 8 8 8 8 8	4 hrs 4 hrs 4 hrs 4 hrs 4 hrs 4 hrs
Residual Heat Removal System (Low Head) - Cold Leg Injection, Recirc to Cold Leg	in maintenance RCS Cold Leg 1 2 Loop 1 or 3 RC S Loop 2 or 4 3 4	SOV MOV AOV Check	8 8 8 8	4 hrs 4 hrs 4 hrs 4 hrs 4 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
	RCS Cold Leg 1 2	SOV	8	4 hrs
		MOV	8	4 hrs
		AOV	8	4 hrs
	3 4	Check	8	4 hrs
	in maintenance			
	valve 2 or 4 in maintenance	SOV	8	4 hrs
	↓ ,	MOV	8	4 hrs
		AOV	8	4 hrs
		Check	8	4 hrs
afety Injection Pump	Accumulator Inj	SOV	8	4 hrs
ntermediate head) - Cold eg Injection, Recirc to	Cold Leg 2 in maintenance	MOV	8	4 hrs
Cold Leg		AOV	8	4 hrs
	$\begin{array}{c c} & & & & \\ \hline \\ RCS \\ \hline \\ Loop 4 \\ \hline \\ Loop 3 \\ \hline \\ Loop 3 \\ \hline \\ 174 \\ \hline \\ 81 \\ \hline \\ \hline \\ 10 \\ \hline 10$	Check	8	4 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
	Accumulator inj	SOV	8	4 hrs
	Cold Leg 2	MOV	8	4 hrs
	Loop 1 31 41 9	AOV	8	4 hrs
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Check	8	4 hrs
	in maintenance			
	valve 2, 4, 6, 8 in maintenance	SOV	8	4 hrs
		MOV	8	4 hrs
		AOV	8	4 hrs
		Check	8	4 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Residual Heat Removal System (Low Head) - Hot Leg to RHR Pumps, RHR Shutdown Lines	in maintenance	ail	8	4 hrs
general penetration type	in maintenance	all	8	4 hrs
general penetration type		SOV	8	4 hrs
	in maintenance	MOV	8	4 hrs
		AOV	8	4 hrs
		Check	8	4 hrs
	- 1	SRV	8	4 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 3 2 in maintenance	SRV	9	8 hrs
general penetration type	in maintenance	all	9	8 hrs
general penetration type		SOV	9	8 hrs
	1	MOV	9	8 hrs
		AOV	9	8 hrs
		Check	9	8 hrs
	in maintenance	SRV	9	8 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		all	9	8 hrs
	in maintenance			
general penetration type		SOV	9	8 hrs
		MOV	9	8 hrs
		AOV	9	8 hrs
		Check	9	8 hrs
	in maintenance	SRV	9	8 hrs
general penetration type		all	9	8 hrs
	in maintenance			

.....

Table E-2Applicable 7(cont.)	Fech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ry is Not Intact		<u> </u>
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV	9	8 hrs
		MOV	9	8 hrs
		AOV	9	8 hrs
		Check	9	8 hrs
	in maintenance	SRV	9	8 hrs
general penetration type		SOV	9	8 hrs
	in maintenance	MOV	9	8 hrs
		AOV	9	8 hrs
		Check	9	8 hrs
	·	SRV	9	8 hrs
		SOV	9	8 hrs
	in maintenance	MOV	9	8 hrs
		AOV	9	8 hrs
		Check	9	8 hrs
		SRV	9	8 hrs

Table E-2 Applicable Tech Sp (cont.)	pec 3.6.3 Condition B: Penetrations where System Pressure B			
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	SRV	10	12 hrs
	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	SRV	10	12 hrs
general penetration type	1	SOV	10	12 hrs
	2 in maintenance	AOV	10	12 hrs

Table E-2 Applicable (cont.)	Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ry is Not Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	1 3 yalve 1 or 2 in maintenance	SRV	10	12 hrs
general penetration type	in maintenance	all	10	12 hrs
general penetration type		SOV	10	12 hrs
		MOV	10	12 hrs
		AOV	10	12 hrs
	in maintenance	Check	10	12 hrs

Table E-2 Applicable (cont.)	e Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ry is Not Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	↓ ↓	SRV	10	12 hrs
general penetration type	in maintenance	SRV	10	12 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	SRV	10	12 hrs
general penetration type	in maintenance	SRV	10	12 hrs
general penetration type	in maintenance	SRV	10	12 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	in maintenance	SRV	10	12 hrs
	1 2			
general penetration type	1 2	SOV	11	24 hrs
		AOV	11	24 hrs
	in maintenance			
		SOV	11	24 hrs
		AOV	11	24 hrs
	in maintenance			

Table E-2Applicable(cont.)	Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ry is Not Intact	<u>, , , , , , , , , , , , , , , , , , , </u>	
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 3 2 in mainlenance	all	11	24 hrs
general penetration type	1	MOV	11	24 hrs
	2 in maintenance	Check	11	24 hrs
	1	SOV	11	24 hrs
		AOV	11	24 hrs
	valve 1 or 2 in maintenance			

٠.

• • •

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	→ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	SOV AOV	11 11	24 hrs 24 hrs
general penetration type	valve 3 or 4 in maintenance	all	11	24 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	valve 1 or 2 in maintenance	all	11	24 hrs
general penetration type	in maintenance	SOV AOV	11 11	24 hrs 24 hrs
	in maintenance	SOV AOV	11	24 hrs 24 hrs

Appendix E

May 2002

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	SOV	11	24 hrs
	_ ↓	AOV	11	24 hrs
		SRV	11	24 hrs
	in maintenance	SOV	11	24 hrs
	ļ	AOV	11	24 hrs
		SRV	11	24 hrs
eneral penetration type	1 2	SRV	11	24 hrs
	in maintenance			

......

Table E-2 Applicable (cont.)	Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ry is Not Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	sov	11	24 hrs
		AOV	11	24 hrs
general penetration type	in maintenance	SRV	11	24 hrs
		SOV	11	24 hrs
		AOV	11	24 hrs
	in maintenance	SRV	11	24 hrs

Table E-2Applicable(cont.)	e Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ary is Not Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	SOV	11	24 hrs
		AOV	11	24 hrs
general penetration type	n maintenance	SRV	11	24 hrs
	in maintenance	SOV	11	24 hrs
		AOV	11	24 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Pressurizer Liquid Sample Line	RCS 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SOV AOV	11	24 hrs 24 hrs
	n maintenance	SOV AOV	11 11	24 hrs 24 hrs
Post Accident Sample Line	n maintenance	all	11	24 hrs

.

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Chemical & Volume	in maintenance	SOV	11	24 hrs
Control System -Normal Letdown Legs	Ļ	MOV	11	24 hrs
		AOV	11	24 hrs
		Check	11	24 hrs
		SOV	11	24 hrs
		AOV	11	24 hrs
	in maintenance			

Table E-2Applicable Te(cont.)	ech Spec 3.6.3 Condition B: Penetrations where System Pressure Bou	ndary is Not Intact	<u></u>	4 <u>4499</u> 777777777777777777777777777777777
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Chemical & Volume		SOV	11	24 hrs
Control System -Normal Letdown Legs	in maintenance	MOV	11	24 hrs
		AOV	11	24 hrs
		Check	11	24 hrs
		SOV	11	24 hrs
		AOV	11	24 hrs
	n maintenance			
			• • • • • • • • • • • • • • • • • • •	

•

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 2 in maintenance	all all	12	48 hrs 48 hrs
	in maintenance			
general penetration type		MOV Check	12 12	48 hrs 48 hrs

Table E-2Applicable Tech Sp(cont.)	pec 3.6.3 Condition B: Penetrations where System Pressure 1	Boundary is Not Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	1 2 	MOV Check	12 12	48 hrs 48 hrs
general penetration type	1 3 2 2 valve 1 or 2 in maintenance	all	12	48 hrs
general penetration type	1 3 	MOV Check	12 12	48 hrs 48 hrs

E-74

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	4 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4	all	12	48 hrs
general penetration type	→ → → → → → → → → → → → → →	MOV Check	12 12	48 hrs 48 hrs

Table E-2 Applicable (cont.)	e Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ry is Not Intact	<u></u>	
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		MOV Check	12 12	48 hrs 48 hrs
	in maintenance			
		MOV Check	12 12	48 hrs 48 hrs
	in maintenance			
	in maintenance	MOV Check	12 12	48 hrs 48 hrs

Appendix E

. ... · .

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	MOV	12	48 hrs
	$ \begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Check	12	48 hrs
general penetration type	in maintenance	all	12	48 hrs
general penetration type	in maintenance	MOV	12	48 hrs
		Check	12	48 hrs

Table E-2 Applicable (cont.)	Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Bounda	ry is Not Intact		
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	$-\frac{1}{2}$	MOV Check	12 12	48 hrs 48 hrs
	in maintenance	MOV	12	48 hrs
		Check	12	48 hrs
general penetration type		all	12	48 hrs
Perioral boundation ()bo		411	12	70 113

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	in maintenance	MOV	12	48 hrs
		Check	12	48 hrs
ECCS Test Line Return - High Pressure Coolant Injection System	n maintenance	all	12	48 hrs
Pressurizer Vapor Sample Line		all	12	48 hrs
	in maintenance			

•#3

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		all	12	48 hrs
	n maintenance			
Pressurizer Liquid Sample Line	RCS 4	MOV Check	12	48 hrs 48 hrs
	n maintenance	MOV	12	48 hrs
		Check	12	48 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Chemical & Volume Control System -Normal Letdown Legs	in maintenance	MOV Check	12 12	48 hrs 48 hrs
Chemical & Volume Control System -Normal Letdown Legs	n maintenance	MOV Check	12 12	48 hrs 48 hrs
general penetration type	1 3	sov	13	72 hrs
		AOV SRV	13 13	72 hrs 72 hrs
	in maintenance			

• --

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV AOV	13 13	72 hrs 72 hrs
		SRV	13	72 hrs
	in maintenance			
general penetration type	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	all	13	72 hrs
general penetration type		SOV MOV	13 13	72 hrs 72 hrs
		AOV	13	72 hrs
	in maintenance	Check	13	72 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	in maintenance	SOV	13	72 hrs
	l	MOV	13	72 hrs
		AOV	13	72 hrs
		Check	13	72 hrs
	ţ	SRV	13	72 hrs
		SOV	13	72 hrs
		MOV	13	72 hrs
		AOV	13	72 hrs
	≜	Check	13	72 hrs
	in maintenance			
general penetration type		all	13	72 hrs
	n maintenance			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV MOV AOV	13 13 13	72 hrs 72 hrs 72 hrs
	n maintenance	Check	13	72 hrs
Residual Heat Removal System (Low Head) - Hot Leg Injection, Recirc to Hot Leg OR Safety Injection Pump (Intermediate Head) - Hot Leg Injection, Recirc to Hot Leg	valve 5 or 6 in maintenance (RHR / SI Pump) SIS Hot Leg / RCS Hot Leg 1 2 Loop 2 / Loop 1 /	all	13	72 hrs
Centrifugal Charging Pumps (High Head) - Recirc to Hot Legs	RCSHotLegs Leg A $1 + 4$ in maintenance RC Leg B $12 + 5$ S Leg C $13 + 6$	all	13	72 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
			· .	
general penetration type	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	all	14	168 hrs
	1 2 2 in maintenance	all	14	168 hrs
general penetration type		SOV	14	168 hrs
	1 다 2	MOV	14	168 hrs
		AOV	14	168 hrs
	Ĩ	Check	14	168 hrs
	in maintenance	SRV	14	168 hr

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
		SOV	14	168 hrs
		MOV	14	168 hrs
		AOV	14	168 hr
	in maintenance	Check	14	168 hr
		SRV	14	168 hr
general penetration type	1 3	all	14	168 hr
	2 in maintenance			
	1 3	all	14	168 hr
	valve 1 or 2 in maintenance			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	1 3	MOV	14	168 hrs
		Check	14	168 hrs
	in maintenance			
	1 3	SOV	14	168 hrs
		MOV	14	168 hrs
		AOV	14	168 hrs
	2	Check	14	168 hrs
	valve 1 or 2 in maintenance	SRV	14	168 hrs
general penetration type		all	14	168 hrs
	in maintenance			

Table E-2 Applicable Tech (cont.)	h Spec 3.6.3 Condition B: Penetrations where System Pressure Bound	ary is Not Intact	<u> </u>	<u></u>
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	4 2 3 3 4 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	all		168 hrs
general penetration type	→ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	MOV Check	14 14	168 hrs 168 hrs
	4 4 4 4 4 4 4 4 4 4 4 4 4 4	SOV MOV AOV Check SRV	14 14 14 14 14	168 hrs 168 hrs 168 hrs 168 hrs 168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type		SOV	14	168 hrs
	1 2	MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs
	in maintenance	SRV	14	168 hrs
		SOV	14	168 hrs
	1 2	MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs
	in maintenance	SRV	14	168 hrs
general penetration type		SOV	14	168 hrs
	¹ 2	MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs
	in maintenance	SRV	14	168 hr

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
		SOV	14	168 hrs
		MOV	14	168 hrs
		AOV	14	168 hr
		Check	14	168 hrs
	in maintenance	SRV	14	168 hr:
general penetration type	2	all	14	168 hr:
	in maintenance			
	in maintenance	all	14	168 hr

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	2	SOV	14	168 hrs
		MOV	14	168 hrs
		AOV	14	168 hrs
	in maintenance	Check	14	168 hrs
		SRV	14	168 hrs
		SOV	14	168 hrs
	in maintenance	MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs
	·	SRV	14	168 hrs
general penetration type	in maintenance	SOV	14	168 hrs
	, I	MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs
	I	SRV	14	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justifie CT
		SOV	14	168 hrs
		MOV	14	168 hrs
		AOV	14	168 hrs
	1	Check	14	168 hrs
	in maintenance	SRV	14	168 hr:
	in maintenance	SOV	14	168 hr
	I .	MOV	14	168 hrs
		AOV	14	168 hr:
		Check	14	168 hrs
	I	SRV	14	168 hrs
general penetration type	1 _ 2	all	14	168 hrs
	in maintenance			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	in maintenance	all	14	168 hrs
eneral penetration type	<u></u>	SOV	14	168 hr
		MOV	14	168 hr
		AOV	14	168 hr
	n maintenance	Check	14	168 hr
		SRV	14	168 hr
	in mainlenance	SOV	14	168 hi
		MOV	14	168 h
		AOV	14	168 h
		Check	14	168 h
		SRV	14	168 h

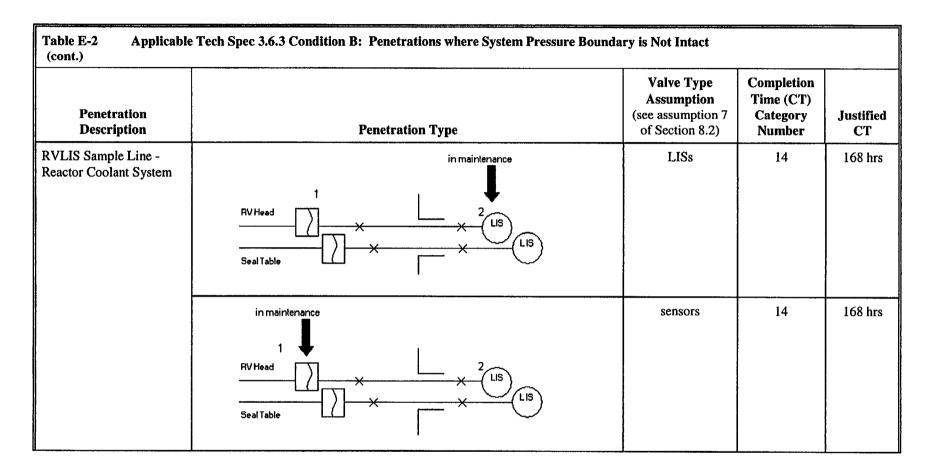
.

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
general penetration type	in maintenance	all	14	168 hrs
	in maintenance	ail	14	168 hrs
ECCS Test Line Return - High Pressure Coolant Injection System	RCS	all	14	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	RCS $5 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + $	all	14	168 hrs
Pressurizer Vapor Sample Line	in maintenance	all	14	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Pressurizer Liquid Sample	valve 2 or 4 in maintenance	SOV	14	168 hrs
Line	Ļ	MOV	14	168 hrs
	2	AOV	14	168 hrs
		Check	14	168 hrs
Post Accident Sample Line	valve 2 or 3 in maintenance	all	14	168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	RCS 1 4 4 in mainlenance	all	14	168 hrs
Residual Heat Removal System (Low Head) - Hot Leg Injection, Recirc to Hot Leg OR Safety Injection Pump (Intermediate Head) - Hot Leg Injection, Recirc to Hot Leg	valve 2 or 4 in maintenance 1^2 1^2 1^2 1^4 1^4 1^6 1^6	all	14	168 hrs



Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Centrifugal Charging Pumps (High Head) - Recirc to Hot Legs	valve 4, 5 or 6 in maintenance	all	14	168 hrs
Centrifugal Charging Pumps (High Head) - Cold Leg Injection, Recirc to Cold Legs	RCS Cold Leg valve 6 or 7 in maintenance	all	14	168 hrs

Table E-2 (cont.) Applicable Tech Spec 3.6.3 Condition B: Penetrations where System Pressure Boundary is Not Intact							
Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT			
	in maintenance	all	14	168 hrs			
Centrifugal Charging Pumps (High Head) - Injection to Cold Legs, Recirc to Cold Legs	$\begin{array}{c} \text{RCSColdLegs} \\ \hline Leg A 1 4 7 \text{ or 8 in maintenance} \\ \hline RC \\ S \\ \hline Leg C 3 1 6 \\ \hline Leg C 3 1 6 \\ \hline \end{array}$	all	14	168 hrs			

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
	valve 4, 5 or 6 in maintenance	all	14	168 hrs
Chemical & Volume Control System -Normal Letdown Legs	RC 1 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SOV MOV AOV Check	14 14 14 14	168 hrs 168 hrs 168 hrs 168 hrs

Penetration Description	Penetration Type	Valve Type Assumption (see assumption 7 of Section 8.2)	Completion Time (CT) Category Number	Justified CT
Chemical & Volume	in maintenance	SOV	14	168 hrs
Control System -Normal Letdown Legs	I	MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs
Chemical & Volume Control System -	in maintenance	SOV	14	168 hrs
Charging Line		MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs
	in maintenance	SOV	14	168 hrs
		MOV	14	168 hrs
		AOV	14	168 hrs
		Check	14	168 hrs