

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES		
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS		SHIELD BLDG PENETRATION	
<p>EL 764'7.5" AZ 285°</p>	44N250	-	A	C	AB	EQUIPMENT HATCH	-	-	-	D	M	LM	-	-	-	C	V	C	-	C	-	N	AB	N	-	
<p>EL 719'3.63" AZ 62°</p>	44N240	-	A	C	AD	PERSONNEL AIR LOCK	IN OUT	- -	- -	D D	M M	LM LM	- -	- -	- -	C C	O O	C C	- -	O C	Y Y	N N	AB AB	N N	MK40	
<p>EL 760'3.63" AZ 255°</p>	44N240	-	A	C	AD	PERSONNEL AIR LOCK	IN OUT	- -	- -	D D	M M	LM LM	- -	- -	- -	C C	O O	C C	- -	O C	Y Y	N N	AB AB	N N	MK40	

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							CB	SB	AB	D												C	Y	N	AC	AB	N					
<p>REACTOR CAVITY FUEL TRANSFER TUBE FUEL STORAGE POOL</p> <p>CB SB AB</p> <p>X3</p> <p>EL 711'3" AZ 261° 50'</p>	47W455-1	56	W	C	AB	FUEL TRANSFER TUBE	AB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N		MK62						
<p>CB SB</p> <p>30-56 4 30-57</p> <p>30-555</p> <p>EL 735 AZ 36° 30'</p>	47W866-1	56	A	C	AB	LOWER COMPARTMENT PURGE AIR EXHAUST (30)	CB	56	A	BF	AO	AT	RM	CV	4.0	V	O	C	C	C	Y	N	AC	N		F-005	3, 6, 14					
<p>CB SB</p> <p>30-58 5 30-59</p> <p>30-554</p> <p>EL 739'8" AZ 116°</p>	47W866-1	56	A	C	AB	INST RM PURGE AIR EXHAUST (30)	CB	58	B	BF	AO	AT	RM	CV	4.0	V	O	C	C	C	Y	N	AC	N		F-005	3, 6, 14					

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<p>EL 749'3" AZ 293°</p>	47W866-1	56	A	C	AB CE	UPPER COMPARTMENT PURGE AIR EXHAUST (30)	CB SB	50 51	B A	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N	F-005	3, 6, 14
<p>EL 751'4" AZ 249°30'</p>	47W866-1	56	A	C	AB CE	UPPER COMPARTMENT PURGE AIR EXHAUST (30)	CB SB	52 53	A B	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N	F-005	3, 6, 14
<p>X-8</p> <p>EL 790'0" AZ 266°</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	

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<p>EL 737'</p>	47W803-1,2	57	W	H	BC E	FEEDWATER BYPASS (3)	AB	236	A,B	GL	AO	AT	LM	FW	-	O	C	C	C	C	Y	N	A	N	MK112	22,23,25
<p>EL 737'</p>	47W803-1,2	57	W	H	BC E	FEEDWATER BYPASS (3)	AB	239	A,B	GL	AO	AT	LM	FW	-	O	C	C	C	C	Y	N	A	N	MK113	22,25
<p>EL 737'</p>	47W803-1,2	57	W	H	BC E	FEEDWATER BYPASS (3)	AB	242	A,B	GL	AO	AT	LM	FW	-	O	C	C	C	C	Y	N	A	N	MK114	22,25

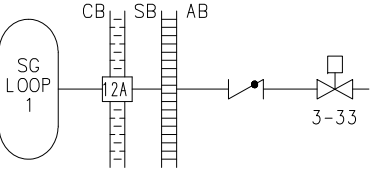
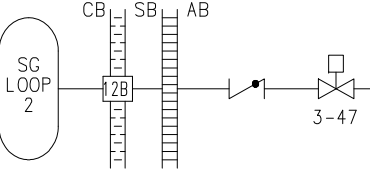
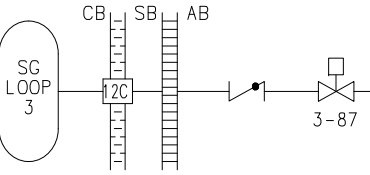
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

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<p>EL 737'</p>	47W803-1,2	57	W	H	BC E	FEEDWATER BYPASS (3)	AB 245 175 171 171A	A,B A B A	GL GL GL A	AO AO AO AO	AT RM RM RM	LM LM LM LM	FW - - -	- - - -	O C C C	C C V C	C C O C	C C C C	Y N Y Y	N N N N	A A A A	N	MK115	22, 23, 25	
<p>EL 798'11" AZ 289°</p>	47W866-1	56	A	C	AB CE	UPPER COMPARTMENT PURGE AIR SUPPLY (30)	CB SB 8 7	B A	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N	F-002	3,6,14
<p>EL 798'11" AZ 261°</p>	47W866-1	56	A	C	AB CE	UPPER COMPARTMENT PURGE AIR SUPPLY (30)	CB SB 10 9	A B	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N	F-002	3,6,14

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<p>EL 737 AZ 301°</p>	47W866-1	56	A	C	AB CE	LOWER COMPARTMENT PURGE AIR SUPPLY (30)	CB SB	15 14	B A	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N	F-002	3,6,14
<p>EL 737 AZ 236° 30'</p>	47W866-1	56	A	C	AB CE	LOWER COMPARTMENT PURGE AIR SUPPLY (30)	CB SB	17 16	A B	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	C C	C C	C C	C C	Y Y	N N	AC AC	N	F-002	3,6,14
<p>EL 728' 6" AZ 57°</p>	47W866-1	56	A	C	AB CE	INST RM PURGE AIR SUPPLY (30)	CB SB	20 19	A B	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N	F-002	3,6,14

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																				Y	N	A						N
 <p>SG LOOP 1 EL 731 AZ 7°40'</p>	47W803-1	57	W	H	BC E	FEEDWATER (3)	AB	33	A	GA	MO	AT	LM	FW	-	O	C	C	AI	C	Y	N	A	N	N	MK70	22	
 <p>SG LOOP 2 EL 731 AZ 172°20'</p>	47W803-1	57	W	H	BC E	FEEDWATER (3)	AB	47	B	GA	MO	AT	LM	FW	-	O	C	C	AI	C	Y	N	A	N	N	MK69	22	
 <p>SG LOOP 3 EL 731 AZ 187°40'</p>	47W803-1	57	W	H	BC E	FEEDWATER (3)	AB	87	A	GA	MO	AT	LM	FW	-	O	C	C	AI	C	Y	N	A	N	N	MK68	22	

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																					Y	N		A				N
<p>SG LOOP 4 EL 731 AZ 352°20'</p>	47W803-1	57	W	H	BC E	FEEDWATER (3)	AB	100	B	GA	MO	AT	LM	FW	-	O	C	C	AI	C	Y	N	A	N	MK67	22		
<p>SG LOOP 1 EL 737 AZ 4°31'</p>	47W801-1 47W803-2	57	S	H	BC E	MAIN STEAM (1)	AB	4	A, B	GL	AO	AT	LM	MS	-	O	C	C	C	C	Y	N	A	N	MK66	22		
<p>SG LOOP 2 EL 737 AZ 175°29'</p>	47W801-1	57	S	H	BC E	MAIN STEAM (1)	AB	11	A, B	GL	AO	AT	LM	MS	-	O	C	C	C	C	Y	N	A	N	MK65	22		
							AB	5	A, B	RV	AO	AT	RM	-	C	C	C	C	C	C	Y	N	A					
							AB	15	A	GA	MO	AT	RM	-	O	C	V	AT	C	C	N	N	A					
							AB	147	A	GA	AO	AT	RM	MS	C	V	C	C	C	C	N	N	A					
							AB	522	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	523	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	524	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	525	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	526	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	536	-	GL	M	LM	-	-	C	V	C	-	C	N	N	A						
							AB	12	A, B	RV	AO	AT	RM	-	C	C	C	C	C	C	Y	N	A					
							AB	148	B	GA	AO	AT	RM	MS	C	V	C	C	C	C	Y	N	A					
							AB	517	-	GA	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	518	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	519	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	520	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	521	-	RV	-	SA	-	-	C	C	C	-	C	C	N	N	A					
							AB	534	-	GL	M	LM	-	-	C	V	C	-	C	N	N	A						

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																						POS/IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
	47W801-1	57	S	H	BC E	MAIN STEAM (1)	AB 22	A, B	GL	AO	AT	LM	MS	-	O	C	C	C	C	Y	N	A	N	MK64	22
							AB 23	A, B	RV	AO	AT	RM	-	-	C	C	C	C	C	Y	N	A	N	MK64	22
							AB 149	A	GA	AO	AT	RM	MS	-	C	V	C	C	C	Y	N	A	N	MK64	22
							AB 512	-	GA	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK64	22
							AB 513	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK64	22
							AB 514	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK64	22
							AB 515	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK64	22
							AB 516	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK64	22
							AB 532	-	GL	M	LM	-	-	-	C	V	C	-	C	N	N	A	N	MK64	22
	47W801-1 47W803-2	57	S	H	BC E	MAIN STEAM (1)	AB 29	A, B	GL	AO	AT	LM	MS	-	O	C	C	C	C	Y	N	A	N	MK63	22
							AB 16	A, B	GA	MO	AT	RM	-	-	C	C	V	AI	C	Y	N	A	N	MK63	22
							AB 30	A, B	RV	AO	AT	RM	-	-	C	V	C	C	C	Y	N	A	N	MK63	22
							AB 150	B	GL	AO	AT	RM	MS	-	C	-	C	C	C	Y	N	A	N	MK63	22
							AB 527	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK63	22
							AB 528	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK63	22
							AB 529	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK63	22
							AB 530	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK63	22
							AB 531	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A	N	MK63	22
						AB 538	-	GL	M	LM	-	-	-	C	V	C	-	C	N	N	A	N	MK63	22	
	47W801-2	57	W	H	BE	STEAM GENERATOR BLOWDOWN (1)	AB 14	A	GL	SO	AT	RM	PA	15.0	O	C	C	C	C	Y	N	A	N	AS14A	22

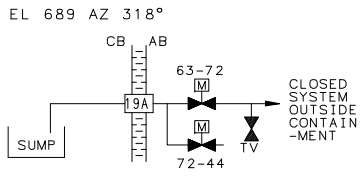
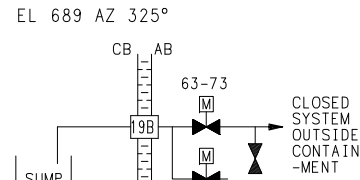
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<p>SG LOOP 4 TO X-27D EL 739'6" AZ 350°30'</p>	47W801-2	57	W	H	BE	STEAM GENERATOR BLOWDOWN (1)	AB	32	A	GL	SO	AT	RM	PA	15.0	O	C	C	C	C	Y	N	A	N	AS14B	22
<p>SG LOOP 3 TO X-27C EL 734'5" AZ 9°30'</p>	47W801-2	57	W	H	BE	STEAM GENERATOR BLOWDOWN (1)	AB	25	B	GL	SO	AT	RM	PA	15.0	O	C	C	C	C	Y	N	A	N	AS14C	22
<p>SG LOOP 1 TO X-27A EL 734'5" AZ 350°30'</p>	47W801-2	57	W	H	BE	STEAM GENERATOR BLOWDOWN (1)	AB	7	B	GL	SO	AT	RM	PA	15.0	O	C	C	C	C	Y	N	A	N	AS14D	22

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																					Y	N	AC				
<p>EL 733 AZ 301°</p>	47W809-1	55	W	H	BD	CVCS LETDOWN (62)	CB 72	A	GL	AO	AT	RM	PA	10.0	C	V	C	C	C	Y	N	AC	N	AS15	4		
							CB 73	A	GL	AO	AT	RM	PA	10.0	O	V	C	C	C	C	Y	N				AC	
							CB 74	A	GL	AO	AT	RM	PA	10.0	C	V	C	C	C	C	Y	N				AC	
							CB 662	-	RV	-	SA	-	-	-	C	C	C	C	C	C	Y	N				AC	
							CB 76	A	GL	AO	AT	RM	PA	10.0	C	C	C	C	C	C	Y	N				AC	
							AB 77	B	GL	AO	AT	RM	PA	10.0	O	V	C	C	C	C	Y	N				AC	
<p>EL 730'6" AZ 299°30'</p>	47W809-1	55	W	C	AD	CVCS NORMAL CHARGING (62)	CB 543	-	CK	-	SA	RM	-	-	O	V	C	-	-	N	N	A	N	MK19			
<p>EL 732 AZ 281°30'</p>	47W811-1 47W810-1	55	W	C	BD	RHR HOT LEG INJECTION (63)	CB 640	-	CK	-	SA	-	-	-	C	V	C	-	-	N	Y	A	E	MK27			
							CB 643	-	CK	-	SA	-	-	-	C	V	C	-	-	N	Y	A					
							CB 158	-	GL	AO	RM	-	RM	-	V	V	C	-	C	Y	Y	A					

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X-18 EL 740 AZ 145	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EL 689 AZ 318° 	47W811-1 47W812-1	-	W	H	D	SUMP SUCTION TO RHR PUMP 1A-A (63,72)	AB AB	72 44	A A	GA GA	MO MO	RM RM	LM LM	- -	- -	C C	C C	V V	AI AI	C C	Y Y	Y Y	A A	E	-	-
EL 689 AZ 325° 	47W811-1 47W812-1	-	W	H	D	SUMP SUCTION TO RHR PUMP 1B-B (63,72)	AB AB	73 45	B B	GA GA	MO MO	RM RM	LM LM	- -	- -	C C	C C	V V	AI AI	C C	Y Y	Y Y	A A	E	-	-

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DETAILS	PENETRATION DATA										VALVE DATA														NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS					APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																					Y	N	A	E				
	47W811-1	55	W	C	B D	RHR PUMP DISCHARGE TR B (63)	CB 112 CB 635 CB 633	- - -	GL CK CK	AO - -	RM SA SA	- - -	- - -	- - -	V C C	V C C	C V V	C - -	C - -	Y N N	N Y Y	A A A	E	AS20A				
		47W811-1	55	W	C	BD	RHR PUMP DISCHARGE TR A (63)	CB 111 CB 632 CB 634	- - -	GL CK CK	AO - -	RM SA SA	- - -	- - -	V C C	V C C	C V V	C - -	C - -	Y N N	N Y Y	A A A	E	AS20B				
			47W811-1	56	W	C	BD	SIS PUMP DISCHARGE TO HOT LEGS TR B (63)	CB 167 CB 547 CB 549	- - -	GL CK CK	AO - -	RM SA SA	- - -	- - -	C - -	C - -	V - -	C - -	C - -	Y N N	N Y Y	A A A	E	AS21			

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
<p>63-174 63-581 22 CB SB CLOSED SYSTEM OUTSIDE CONTAINMENT EL 730'3" AZ 294°45'</p>	47W811-1	55	W	C	BD	SIS CHARGING PUMP DISCHARGE (63)	CB CB	174 581	- -	GL CK	AO -	RM SA	- -	- -	V -	V -	C -	C -	C -	Y N	N Y	A A	E	AS22	
<p>X-23 EL 729' AZ 283°</p>	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
<p>88-559 TV TV 24 CB SB AB CLOSED SYSTEM OUTSIDE CONTAINMENT EL 727'6" AZ 301°</p>	47W813-1 47W811-1 47W812-1	56	W	H	BD	RELIEF VALVE DISCHARGE (68)	CB	559	-	CK	-	SA	-	-	C	C	C	-	-	N	Y	A	E	AS24	25

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA											VALVE DATA											NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
<p>EL 723'6" AZ 294°</p>	47W625-1	55	W	H	AD	PRESSURIZER LIQUID SAMPLE (43)	CB SB	11 12	B A	GL GL	SO AO	AT AT	RM RM	PA PA	5.0 5.0	V V	V V	C C	C C	C C	Y Y	N N	AC AC	N	MK44H	15
<p>X-25B</p> <p>EL 723'6" AZ 294°</p>	47W600-89	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-
<p>X-25C</p> <p>EL 723'6" AZ 294°</p>	47W600-89	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA											VALVE DATA											NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
VALVE STATUS																										
<p>EL 723'6" AZ 294°</p>	47W625-1	55	S	H	AD	PRESSURIZER STEAM SAMPLE (43)	CB SB	2 3	B A	GL GL	SO AO	AT AT	RM RM	PA PA	5.0 5.0	V V	V V	C C	C C	C C	Y Y	N N	AC AC	N	MK44D	15

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
VALVE STATUS																										
<p>EL 723'6" AZ 293°</p>	47W331-3	56	A	C	B	ILRT SENSOR LINE (52) TEST INSTRUMENTATION	CB SB	505 501	- -	GL GL	M M	LM LM	- -	- -	- -	C C	V V	C C	- -	O O	N N	N N	AC AC	N N	- -	
<p>EL 723'6" AZ 293°</p>	47W331-3	56	A	C	B	ILRT SENSOR LINE (52) TEST INSTRUMENTATION	CB SB	504 500	- -	GL GL	M M	LM LM	- -	- -	- -	C C	V V	C C	- -	O O	N N	N N	AC AC	N N	- -	
<p>EL 723'6" AZ 293°</p>	47W600-89 47W331-3	-	A	C	B	dP SENSOR (30)	SB SB SB SB SB SB	SNSR 43B/1 43B/2 310B/1 310B/2 43A 310A	- - - - - -	- GL GL GL GL GL	- M M M M M	- LM LM LM LM LM	- - - - - -	- - - - - -	O C C C C O O	- V V V V V V V	O C C C C O O	- - - - - - -	C C C C C O O	N N N N N N N	N N N N N N N	A A A A A A A	E E E E E E E	E E E E E E E	12,13	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA												NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
<p>EL 723'6" AZ 292°</p>	47W625-2	56	W	H	A B D	STM GEN NO. 1 SAMPLE (43) SAMPLE AND WATER QUALITY	SB	55	A	GL	AO	AT	RM	PA	10.0	V	V	C	C	C	Y	N	A	N	MK046M	22
<p>EL 723'6" AZ 292°</p>	47W625-2	56	W	H	A B D	STM GEN NO. 2 SAMPLE (43)	SB	58	A	GL	AO	AT	RM	PA	10.0	V	V	C	C	C	Y	N	A	N	MK46M	22
<p>EL 723'6" AZ 292°</p>	47W625-2	56	W	H	A B D	STM GEN NO. 3 SAMPLE (43)	SB	61	A	GL	AO	AT	RM	PA	10.0	V	V	C	C	C	Y	N	A	N	MK46M	22

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA												NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
<p>EL 723' 6" AZ 292°</p>	47W625-2	56	W	H	AB D	STM GEN NO. 4 SAMPLE (43)	SB	64	A	GL	AO	AT	RM	PA	10.0	V	V	C	C	C	Y	N	A	N	MK46M	22
<p>X-28</p> <p>EL 721' AZ 287°30'</p>	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
<p>EL 720 AZ 288° 30'</p>	47W859-2 47W859-3	56	W	C	AD	CCS FROM RC PUMP COOLERS (70)	CB	89	B	BF	MO	AT	-	PB	66.0	O	O	C	AI	C	Y	N	AC	N	MK50	8

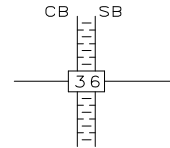
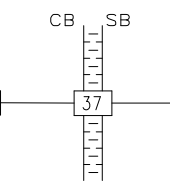
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
<p>EL 720'6" AZ 291°30'</p>	47W811-1	56	W	C	BD	ACCUM TO HOLDUP TANKS (63)	CB 71 AB 84 AB 23 AB 28	A B B -	GL GL GL RV	AO AO AO -	AT AT AT SA	RM - - -	PA PA PA -	10.0 10.0 10.0 -	V V V C	V V V C	C C C -	C C C C	Y Y Y N	N N N N	AC AC AC AC	N		AS30	9	
<p>EL 722 AZ 289°30'</p>	47W850-9	56	A	C	AB D	FIRE PROECTION (26)	CB 1296 AB 243	- A	CK GA	- MO	SA AT	- RM	- PA	- 20.0	O O	O O	C C	- C	C C	N Y	N N	AC AC	N		MK49	
<p>EL 720'6" AZ 282°30'</p>	47W811-1	55	W	C	BD	SITO HOT LEGS (63)	CB 545 CB 543 CB 21	- - -	CK CK GL	- - AO	SA SA RM	- - -	- - -	C C V	C C V	V V C	- - C	- - C	N N Y	Y Y N	A A A	E		AS32		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES								
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		VALVE STATUS				APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
																						POS IN D	ESF	Y	A				
<p>EL 720'6" AZ 277°30'</p>	47W811-1	55	W	C	BD	SI TO LOW HEAD SI (63)	CB 553	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A	E	AS33					
							CB 551	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A							
							CB 557	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A							
							CB 555	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A							
							CB 121	-	GL	AO	RM	-	-	-	V	V	C	-	-	Y	N	A							
<p>EL 720'6" AZ 299°30'</p>	47W848-1	56	A	C	AB D	CONTROL AIR I & C (32)	CB 343	-	CK	-	SA	-	-	-	O	O	C	-	-	N	N	AC	N	MK43	10				
							SB 111	A	GL	AO	AT	RM	PB	10.0	O	O	C	C	C	C	AI	C				Y	N	AC	
							SB 338	-	GL	M	LM	-	-	-	C	C	C	-	-	-	-	-				-	N	N	AC
<p>EL 720'6" AZ 301°30'</p>	47W859-2, 3	57	W	C	AD	CCS FROM EXCESS LETDN HX (70)	CB 703	-	RV	-	SA	-	-	-	V	V	V	C	C	N	N	AC	N	MK42	11				
							AB 85	B	BF	AO	AT	RM	PA	10.0	V	V	C	C	C	C	C	Y				N	AC		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA															NOTES
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION		
 <p>EL 742'6" AZ 280°</p>	72-4333-310	-	A	C	AB	SG. CHEM. CLEANING	SB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	MK20	
 <p>EL 771'6" AZ 265°</p>	47W301-1	-	A	C	AB	MAINT. PORT	CB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	MK14	
<p>X-38</p> <p>EL 771'6" AZ 268°</p>	48N406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	

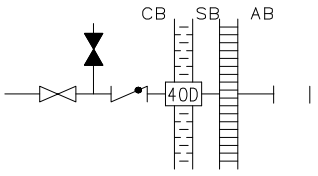
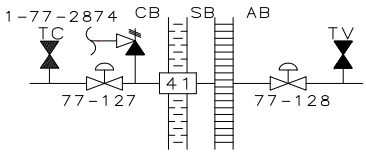
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES	
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION		
<p>EL 720'6" AZ 280°</p>	47W830-6	56	N2	C	AD	N2 TO ACCUM (63)	CB AB	868 64	- A	CK GL	- AO	SA AT	- RM	- PA	- 10.0	O V	O O	C C	- C	- C	N Y	N N	AC AC	N	MK55M	
<p>EL 720'6" AZ 280°</p>	47W830-6	56	N2	C	AD	N2 TO PRESS RELIEF TK (68)	CB AB	849 305	- A	CK DI	- AO	SA AT	- RM	- PA	- 10.0	O O	O O	C C	- C	- C	N Y	N N	AC AC	N	MK55M	
<p>X-39C</p> <p>EL 720'6" AZ 280°</p>	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA												NOTES				
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
X-39D EL 720'6" AZ 280°	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-		
<p>EL 750'3" AZ 301° 30'</p>	47W803-2	57	W	C	BC E	AUX FW (3)	AB	156	A	GL	AO	RM	LM	-	-	C	C	V	O	C	Y	N	A	E	MK9	22	
							AB	156A	A	A	AO	RM	LM	-	-	C	C	V	C	C	C	C	Y	N			A
							AB	173	B	GL	AO	RM	LM	-	-	C	C	V	C	C	C	C	Y	N			A
<p>EL 748'3" AZ 301° 30'</p>	47W803-2	57	W	C	BC E	AUX FW (3)	AB	148	B	GL	AO	RM	LM	-	-	C	C	V	O	C	Y	N	A	E	MK11	22	
							AB	148A	B	A	AO	RM	LM	-	-	C	C	V	C	C	C	C	Y	N			A
							AB	172	A	GL	AO	RM	LM	-	-	C	C	V	C	C	C	C	Y	N			A

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES	
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS		SHIELD BLDG PENETRATION
<p>X-400</p> <p>EL 750'3" AZ 299°30'</p>	48N406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
 <p>EL 748'3" AZ 299°30'</p>	47W846-2 47W492-2	-	A	C	AD	SERVICE AIR (33)	AB	-	-	BL	M	LM	-	-	-	C	C	C	-	C	-	N	AB	N	MK12	
 <p>EL 719'6" AZ 294°</p>	47W851-1	56	W	C	AD	FL SUMP PUMP DISCH (77)	CB AB CB	127 128 2874	B A -	BA BA RV	AO AO -	AT AT -	RM RM -	PA PA -	10.0 10.0 -	O O C	O O C	C C V	C C C	Y Y N	N N N	AC AC AC	N	MK47		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
VALVE STATUS																										
<p>EL 723'6" AZ 301°</p>	47W819-1	56	W	C	ABD	PRESS RLF TK MAKE-UP (81)	CB AB	502 12	- A	CK DI	- AO	SA AT	- RM	- PA	- 10.0	V V	C C	C C	- C	- C	N Y	N N	AC AC	N	MK39	
<p>EL 728'6" AZ 293°30'</p>	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	562	-	CK	-	SA	-	-	-	O	C	C	-	-	N	N	A	N	MK31	
<p>EL 728'6" AZ 292°</p>	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	561	-	CK	-	SA	-	-	-	O	C	C	-	-	N	N	A	N	MK29	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES		
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION			
																						VALVE STATUS				
<p>EL 727 AZ 293° 30'</p>	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	563	-	CK	-	SA	-	-	-	O	C	C	-	-	N	N	A	N	MK28	
<p>EL 727 AZ 292°</p>	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	560	-	CK	-	SA	-	-	-	O	C	C	-	-	N	N	A	N	MK30	
<p>EL 727' 6" AZ 281° 30'</p>	47W809-1	55	W	C	AD	FROM RCP SEALS (62)	CB AB CB	61 63 639	B A -	GA CA CK	MO MO -	AT AT SA	RM RM -	PA PA -	10.0 10.0 -	O O O	V V O	C C V	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK37	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES							
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION		VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE		ILRT	VALVE STATUS			APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
							CB	AB															Y	N	AC			
<p>EL 723 AZ 281° 30'</p>	47W830-1	56	N2	C	BD	RC DRAIN TK AND PRT TO VH (77)	CB	18	B	DI	AO	AT	RM	PA	10.0	O	O	C	C	C	Y	N	AC	N	AS45			
							AB	19	A	DI	AO	AT	RM	PA	10.0	O	O	C	C	C	Y	N	AC					
							AB	20	A	DI	AO	AT	RM	PA	10.0	V	O	C	C	C	Y	N	AC					
<p>EL 723 AZ 278°</p>	47W830-1 47W809-7	56	W	C	BD	RC DRAIN TK PUMP DISCHARGE (77/84)	CB	9	B	DI	AO	AT	RM	PA	10.0	O	O	C	C	C	Y	N	AC	N	AS46	18		
							AB	10	A	DI	AO	AT	RM	PA	10.0	O	O	C	C	C	Y	N	AC					
							AB	530	-	GL	M	LM	-	-	-	C	C	C	-	C	N	N	AC					
<p>EL 808' 6" AZ 293°</p>	47W814-2	56	G	C	BD	GLYCOL SUPPLY (61)	CB	192	B	DI	AO	AT	RM	PA	30.0	O	O	C	C	O	Y	N	AC	N	MK25	8		
							AB	191	A	DI	AO	AT	RM	PA	30.0	O	O	C	C	O	Y	N	AC					
							CB	533	-	CK	-	SA	-	-	-	O	O	V	-	O	N	N	AC					

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS				ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
																					Y	N	AC						N
<p>EL 808' 6" AZ 296° 30'</p>	47W814-2	56	G	C	BD	GLYCOL RETURN (61)	CB AB CB	194 193 680	B A -	DI DI CK	AO AO -	AT AT SA	RM RM -	PA PA -	30.0 30.0 -	O O O	O O O	C C V	C C -	O O N	Y Y N	N N N	AC AC AC	N		MK26			
<p>EL 855' 8" AZ 301° 30'</p>	47W812-1	56	W	C	AD	CONT. SPRAY (72)	CB	548	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A	E		MK4	26		
<p>EL 853' 8" AZ 304°</p>	47W812-1	56	W	C	AD	CONT. SPRAY (72)	CB	549	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A	E		MK3	26		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES		
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
VALVE STATUS																										
<p>EL 855' 8" AZ 306°</p>	47W812-1	56	W	C	AD	RHR SPRAY (72)	CB	562	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A	E	MK2	26
<p>EL 853' 8" AZ 308°</p>	47W812-1	56	W	C	AD	RHR SPRAY (72)	CB	563	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A	E	MK1	26
<p>EL 734' 6" AZ 300° 30'</p>	47W859-3 47W859-2	56	W	C	AD	RCP THERM BARRIER RETURN (70)	CB	87	B	GA	MO	AT	RM	PB	66.0	O	O	C	AI	C	Y	N	AC	N	MK16	8
							AB	90	A	GA	MO	AT	RM	PB	66.0	O	O	C	AI	C	Y	N	AC			
							CB	687	-	CK	-	-	-	-	-	O	O	V	-	-	N	N	AC			

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES							
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		VALVE STATUS				APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																						Y	N	AC	N			
<p>EL 734'6" AZ 299°30'</p>	47W859-3 47W859-2	56	W	C	AD	RCP THERM BARRIER SUPPLY (70)	CB AB	679 134	- B	CK GA	- MO	SA AT	- RM	- PB	66.0	O O	O O	C C	- AI	- C	N Y	N N	AC AC	N	MK17			
<p>X-51</p> <p>EL 728'6" AZ 286°30'</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			
<p>EL 722'6" AZ 299°30'</p>	47W859-2 47W859-3	56	W	C	AD	CCS TO RCP COOLERS (70)	AB CB CB	140 100 790	B A -	BF BF CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O V	C C C	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK40	8		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA												NOTES				
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
<p>TO X-35 CLOSED SYSTEM INSIDE CONTAINMENT</p> <p>EL 721'6" AZ 301°</p>	47W859-2 47W859-3	57	W	C	AD	CCS TO EXCESS COOLERS LETDN HX (70)	AB	143	A	BF	MO	AT	RM	PA	66.0	V	C	C	AI	C	Y	N	AC	N	MK41	11	
<p>EL 740 AZ 90°</p>	72-4333-315	-	A	C	BC	IITA RENEWAL	- SB AB	-	-	-	BL BL	M M	LM LM	-	-	-	C	V	C	-	O	N	N	AB	N	MK72	16
<p>X-55</p> <p>EL 771'6" AZ 262°</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	

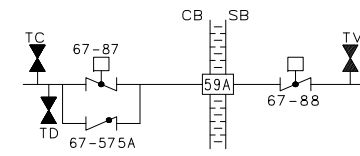
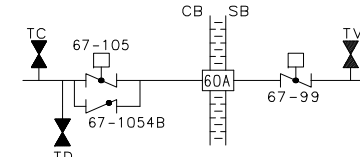
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES	
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	VALVE STATUS		
																										SB
<p>EL 720 AZ 353°</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW SUPPLY (67)	SB CB CB	107 113 1054D	A B -	BF BF CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O O	C C V	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK80	8
<p>X-56B</p> <p>EL 720 AZ 355° 30'</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
<p>EL 720 AZ 351° 30'</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW RETURN (67)	CB SB CB	111 112 575D	B A -	BF BF CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O O	C C V	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK81	8

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS					APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																					OPEN	FAIL TO OPEN	FAIL TO CLOSE	FAIL TO LOCK				
<p>EL 720' AZ 354° 15'</p>	47W600-89	-	A	C	B	dP SENSOR (30)	SB	SNSR	-	-	-	-	-	-	O	O	O	-	-	N	A	E	-	-	-	12		
<p>EL 720' AZ 7°</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW SUPPLY (67)	CB	1054A	-	CK	-	SA	-	-	O	O	V	-	N	N	AC	N	MK79	-	-	-		
<p>X-58B</p> <p>EL 720 AZ 13°</p>	47W600-75	54	W	C	BD	RCS PRESSURE SENSOR (68)	-	-	-	-	-	-	-	-	-	O	O	O	-	N	N	N	A	MK126	-	-	28	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS					APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																					Y	N	AC	N				
 <p>EL 720 AZ 8° 30'</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW RETURN (67)	CB SB CB	87 88 575A	A B -	BF BF CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O O	C C V	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK78	8		
<p>X-59B</p> <p>EL 720 AZ 14° 30'</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-		
 <p>EL 720 AZ 173°</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW SUPPLY (67)	CB SB CB	1054B 99 105	- A B	CK BF BF	- MO MO	SA AT AT	- RM RM	- PB PB	- 66.0 66.0	O O O	O O O	V C C	- AI AI	- C C	N Y Y	N N N	AC AC AC	N	MK77	8		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES						
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION		
<p>EL 720'-6" AZ 174° 15'</p>	47W600	-	A	C	B	dP SENSOR (30)	SB SB SB	SNSR 42B/1 42B/2 42A	- - - -	- GL GL GL	- M M M	- LM LM LM	- - - -	- - - -	O C C O	O V V O	O C C O	- - - -	- C C O	- N N N	- N N N	- A A A	- E	-	12		
<p>EL 720' AZ 171° 30'</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW RETURN (67)	CB SB CB	103 104 575B	B A -	BF BF CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O V	C C V	AI AI -	C C N	Y Y N	N N N	AC AC AC	- N	MK76	8	
<p>X-61B</p> <p>EL 720 AZ 175° 30'</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES							
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		VALVE STATUS				APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																						AC	Y	N	AC			
<p>EL 720 AZ 187°</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW SUPPLY (67)	CB SB CB	1054C 91 97	- B A	CK BF BF	- MO MO	SA AT AT	- RM RM	- PB PB	66.0 66.0	O O O	O O O	V C C	- AI AI	- C C	N Y Y	N N N	AC AC AC	N	MK74	8		
<p>X-62B</p> <p>EL 720 AZ 193°</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			
<p>EL 720 AZ 189° 30'</p>	47W845-3	56	W	C	AB DE	LWR CONT ERCW RETURN (67)	CB SB CB	95 96 575C	A B -	BF BF CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0	O O O	O O O	C C V	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK75	8		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES		
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUT/DOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
<p>X-63B</p> <p>EL 720 AZ 194° 30'</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
<p>EL 737 AZ 65°</p>	47W865-5	56	W	C	AB D	INST RM CHILL H2O RETURN (31)	CB SB CB	306 305 3421	A B -	GL GL CK	AO AO -	AT AT SA	RM RM -	PA PA -	10.0 10.0 -	O O O	O O O	C C V	C C -	C C -	Y Y N	N N N	AC AC AC	N	MK92	8
<p>EL 738 AZ 65°</p>	47W865-5	56	W	C	AB D	INST RM CHILL H2O SUPPLY (31)	CB SB CB	308 309 3407	A B -	GL GL CK	AO AO -	AT AT SA	RM RM -	PA PA -	10.0 10.0 -	O O O	O O O	C C V	C C -	C C -	Y Y N	N N N	AC AC AC	N	MK90	8

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS				ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
																					Y	N	AC						N
<p>EL 737 AZ 104°</p>	47W865-5	56	W	C	AB D	INST RM CHILL H2O RETURN (31)	CB SB CB	327 326 3392	B A -	GL GL CK	AO AO -	AT AT SA	RM RM -	PA PA -	10.0 10.0 -	O O O	O O O	C C V	C C -	C C O	Y Y N	N N N	AC AC AC	N		MK93	8		
	<p>EL 738 AZ 104°</p>	47W865-5	56	W	C	AB D	INST RM CHILL H2O SUPPLY (31)	CB SB CB	329 330 3378	B A -	GL GL CK	AO AO -	AT AT SA	RM RM -	PA PA -	10.0 10.0 -	O O O	O O O	C C V	C C -	C C O	Y Y N	N N N	AC AC AC	N		MK91	8	
		<p>EL 794'6" AZ 301° 15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW SUPPLY (67)	CB SB	580D 141	- B	CK PG	- MO	SA AT	- RM	- PB	- 66.0	- O	- O	- C	- AI	- C	N Y	N N	AC AC	N		MK88	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES	
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION		
<p>EL 796'6" AZ 301° 15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW SUPPLY (67)	CB SB	580A 130	- A	CK PG	- MO	SA AT	- RM	- PB	66.0	- O	- O	- C	- AI	- C	N Y	N N	AC AC	N	MK86	
<p>EL 798'6" AZ 301° 15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW RETURN (67)	CB SB CB	297 139 585B	B A -	PG PG CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O V	C C -	AI AI -	C C N	Y Y N	N N N	AC AC AC	N	MK84	8
<p>EL 800'6" AZ 301° 15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW RETURN (67)	CB SB CB	296 134 585C	A B -	PG PG CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O V	C C -	AI AI -	C C N	Y Y N	N N N	AC AC AC	N	MK82	8

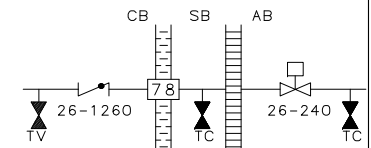
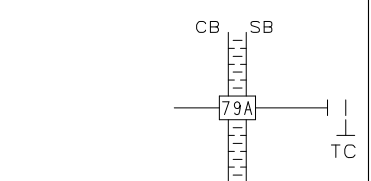
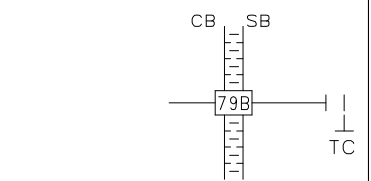
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS					APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																					Y	N	AC	N				
<p>EL 793'6" AZ 301° 15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW RETURN (67)	CB SB CB	298 142 585D	B A -	PG PG CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O O	C C V	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK89	8		
<p>EL 795'6" AZ 301° 15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW RETURN (67)	CB SB CB	295 131 585A	A B -	PG PG CK	MO MO -	AT AT SA	RM RM -	PB PB -	66.0 66.0 -	O O O	O O V	C C -	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK87	8		
<p>EL 797'6" AZ 301° 15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW SUPPLY (67)	CB SB	580B 138	- B	CK PG	- MO	SA AT	- RM	- PB	- 66.0	O O	O O	C C	- AI	- C	N Y	N N	AC AC	N	MK85			

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA															NOTES	
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION			
																										VALVE STATUS	
<p>EL 799'6" AZ 301°15'</p>	47W845-3	56	W	C	AB DE	UPPER CONT ERCW SUPPLY (67)	CB SB	580C 133	- A	CK PG	- MO	SA AT	- RM	- PB	- 66.0	O O	O O	C C	- AI	- C	N Y	N N	AC AC	N	MK83		
<p>EL 711 AZ 300°</p>	47W846-2	56	A	C	AD	SERVICE AIR (33)	CB AB	733 732	- -	DI DI	M M	LM LM	- -	- -	- -	C C	O O	C C	- -	C C	N N	N N	AC AC	N	MK97		
<p>EL 710'6" AZ 299°</p>	47W856-1	56	W	C	AD	DEMIN WATER (59)	CB AB	698 522	- -	DI DI	M M	LM LM	- -	- -	- -	C C	O O	C C	- -	C C	N N	N N	AC AC	N	MK96		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
 <p>EL 798' 9" AZ 301°</p>	47W850-9	56	A	C	AB D	FIRE PROTECTION (26)	CB AB	1260 240	- A	CK GA	- MO	SA AT	- RM	- PA	- 20.0	O O	O O	C C	- AI	- C	N Y	N N	AC AC	N	MK98	
 <p>EL 808 AZ 289°</p>	47W814-1 47W462-7	56	I	C	AB	ICE BLOWING (61)	SB			BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	MK23	
 <p>EL 809 AZ 290°</p>	47W814-1 47W462-7	56	I	C	AB	NEGATIVE RETURN (61)	SB			BL	M	LM	-	-	-	C	V	C	-	C	N	Y	AB	N	MK24	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
<p>EL 720 AZ 286°30'</p>	47W866-1	56	A	C	AB CE	LWR COMP PRESS RELIEF (30)	CB SB	40 37	A B	BF BF	AO AO	AT AT	RM RM	CV CV	4.0 4.0	V V	C C	C C	C C	C C	Y Y	N N	AC AC	N N	MK71	3,6,14
<p>EL 718 AZ 287°</p>	47W830-1	56	A	C	AD	RC DR TK TO GAS ANALYZER (77)	CB AB	16 17	B A	DI DI	AO AO	AT AT	RM RM	PA PA	10.0 10.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N N	AS081	
<p>EL 718 AZ 282°30'</p>	47W855-1	56	W	C	AB D	REFUEL CAV PRFCN PUMP SUCT (78)	CB AB	560 561	- -	DI DI	M M	LM LM	- -	- -	C C	V V	C C	- -	C C	N N	N N	AC AC	N N	MK94		

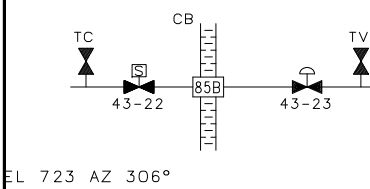
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS					APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																					POS IND IN MCR	ESF	AC	N				
<p>EL 733 AZ 294°</p>	47W855-1	56	W	C	AB D	REFUEL CAV PRFCN PUMP SUCT (78)	CB AB	558 557	- -	DI DI	M M	LM LM	- -	- -	- -	C C	V V	C C	- -	C C	N N	N N	AC AC	N N		MK95		
<p>EL 723 AZ 307° 30'</p>	47W625-8	56	N	C	AD	P.R.T. TO GAS ANALYZER (68)	CB SB	308 307	B A	GL GL	AO AO	AT AT	RM RM	PA PA	10.0 10.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N N		MK99M		
<p>X-84B</p> <p>EL 723 AZ 307° 30'</p>	47W600-292	-	W	C	BD	RVLIS (68)	-	-	-	-	-	-	-	-	-	O	O	O	-	-	N	N	A	E		MK101	21	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES				
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR		ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
X-84C EL 723 AZ 307° 30'	47W600-292	-	W	C	BD	RVLIS (68)	-	-	-	-	-	-	-	-	O	O	O	-	-	N	N	A	E	MK101	21
X-84D EL 723 AZ 307° 30'	47W600-292	-	W	C	BD	RVLIS (68)	-	-	-	-	-	-	-	-	O	O	O	-	-	N	N	A	E	MK101	21
X-85A EL 723' AZ 306°	47W625-7	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA											VALVE DATA											NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IN D IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
 <p>EL 723 AZ 306°</p>	47W625-1	55	W	H	AB D	HOT LEG SAMPLE LOOPS 1 & 3 (43)	CB SB	22 23	B A	GL GL	SO AO	AT AT	RM RM	PA PA	10.0 10.0	V V	V V	C C	C C	C C	Y Y	N N	AC AC	N	MK100M	15
<p>X-85C</p> <p>EL 723' AZ 306°</p>	47W600-89	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
<p>X-85D</p> <p>EL 723 AZ 306°</p>	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
X-86A EL 721'-6" AZ 307°30'	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
X-86B EL 721'-6" AZ 307°30'	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
X-86C EL 721'-6" AZ 307°30'	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	

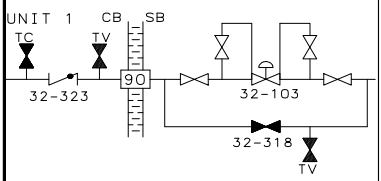
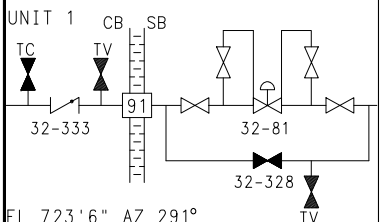
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		POS IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
X-86D EL 721'6" AZ 307° 30'	2-47W600-89	-	A	C	B	dP SENSOR (30)	SB SB SB	SNSR. 45B/1 45B/2	- - -	- GL GL	M M M	LM LM LM	- - -	- - -	O C C	O V V	O C C	- - -	- C C	- N N	- N N	A A -	E	-	-	12
X-87A EL 721'6" AZ 306°	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-
X-87B EL 721'6" AZ 306°	47W600-292 47W331-2	-	W	C	BD	RVLIS (68)	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	A	E	-	-	21

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES		
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
X-87C EL 721'6" AZ 306°	47W600-292 47W331-2	-	W	C	BD	RVLIS (68)	-	-	-	-	-	-	-	-	-	-	-	N	N	A	E	MK102	21
X-87D EL 721'6" AZ 306°	47W600-292 47W331-2	-	W	C	BD	RVLIS (68)	-	-	-	-	-	-	-	-	-	-	-	N	N	A	E	MK102	21
X-88 EL 733 AZ 277° 30'	48W406 47W850-9	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	MK-103	29

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR		ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
X-89 EL 732 AZ 278° 30'	48W406 47W850-9	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	MK-104	30	
 EL 729' 6" AZ 280° 30'	47W848-1	56	A	C	AB D	CONTROL AIR TR-B (32)	CB SB SB	323 103 318	- B -	CK GL GA	- AO M	SA AT LM	- RM -	- PB -	10.0 -	O O C	O O C	C C C	- C C	- C C	N Y N	N N N	AC AC AC	N	MK105	10
 EL 723' 6" AZ 291°	47W848-1	56	A	C	AB D	CONTROL AIR TR-A (32)	CB SB SB	333 81 328	- A -	CK GL GA	- AO M	SA AT LM	- RM -	- PB -	10.0 -	O O C	O O C	C C C	- C C	- C C	N Y N	N N N	AC AC AC	N	MK56	10

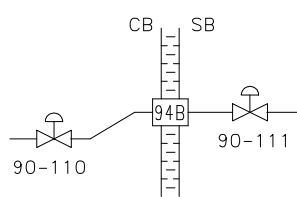
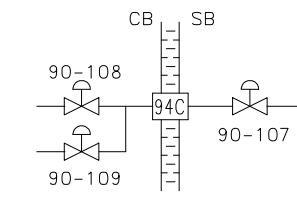
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
X-92A EL 723 AZ 290°	47W625-11	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	Unit 2
X-92B EL 723 AZ 290°	47W625-11	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	Unit 2
X-92C EL 723'-6" AZ 290°	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	

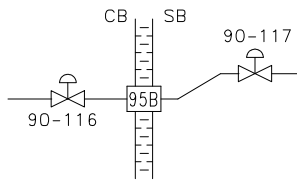
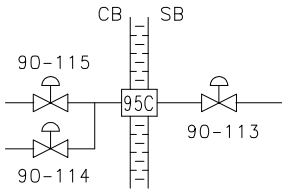
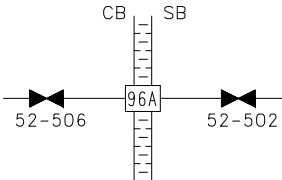
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA											NOTES							
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR ESF	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION					
		VALVE STATUS																											
<p>X-92D</p> <p>EL 723'6" AZ 290°</p>	47W331-3	-	-	-	-	SPARE																				A	-	-	
<p>EL 723'6" AZ 289°</p>	47W625-2	56	W	C	AB D	ACCUM SAMPLE (43)	CB SB	34 35	B A	GL GL	SO AO	AT AT	RM RM	PA PA	5.0 5.0	V V	C C	C C	C C	C C	Y Y	N N	AC AC			N		MK58	
<p>X-94A</p> <p>EL 741 AZ 294°</p>	47W600-105 48W406	-	A	C	-	SPARE																				A	-	-	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	VALVE STATUS				POS/IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
																					Y	N	AC						AC
 <p>EL 741 AZ 294°</p>	47W600-105	56	A	C	AB D	LOWER COMP AIR MON INTAKE (90)	CB SB	110 111	B A	GL GL	AO AO	AT AT	RM RM	CV CV	5.0 5.0	O O	O O	C C	C C	C C	Y Y	N N	AC AC	AC AC	N		MK59M		
 <p>EL 741 AZ 294°</p>	47W600-105	56	A	C	AB D	LOWER COMP AIR MON RETURN (90)	CB SB CB	108 107 109	B A B	GL GL GL	AO AO AO	AT AT AT	RM RM RM	CV CV CV	5.0 5.0 5.0	O O O	O O O	C C C	C C C	C C C	Y Y Y	N N N	AC AC AC	AC AC AC	N		MK59M		
<p>X-95A</p> <p>EL 741 AZ 293°</p>	47W600-105	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES		
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS		SHIELD BLDG PENETRATION	
 <p>EL 741 AZ 293°</p>	47W600-105	56	A	C	AB D	UPPER COMP AIR MON INTAKE (90)	CB SB	116 117	B A	GL GL	AO AO	AT AT	RM RM	CV CV	5.0 5.0	O O	O O	C C	C C	C C	Y Y	N N	AC AC	N	MK60M	
 <p>EL 741 AZ 293°</p>	47W600-105	56	A	C	AB D	UPPER COMP AIR MON RETURN (90)	CB SB CB	114 113 115	B A B	GL GL GL	AO AO AO	AT AT AT	RM RM RM	CV CV CV	5.0 5.0 5.0	O O O	O O O	C C C	C C C	O O O	Y Y Y	N N N	AC AC AC	N	MK60M	
 <p>EL 741 AZ 292°</p>	47W331-3	56	A	C	B	ILRTZ SENSOR LINE (52)	CB SB	506 502	- -	GL GL	M M	LM LM	- -	- -	C C	V V	C C	- -	O O	N N	N N	AC AC	N	-		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES					
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT		VALVE STATUS				
																						POS/IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
<p>EL 741 AZ 292°</p>	47W331-3	56	A	C	B	ILRTZ SENSOR LINE (52)	CB SB	507 503	-	GL GL	M M	LM LM	-	-	-	C C	V V	C C	-	O O	N N	N N	AC AC	N	-	
<p>X-96C</p> <p>741 AZ 292°</p>	47W600-89	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
<p>EL 741 AZ 291°</p>	47W866-1 2-47W600-89	-	A	C	B	dP SENSOR (30)	SB SB SB	SNSR 133B/1 133B/2 133A	-	- GL GL	- M M	- LM LM	-	-	-	O LC LC	O V V	O LC LC	-	- LC LC	-	N N N	A A A	N	-	12

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA															NOTES
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUT/DOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION		
	2-47W600-89	-	A	C	B	dP SENSOR (30)	SB SB SB	- 30CB/1 30CB/2	- GL GL	M M	LM LM	- -	- -	- -	O C C	O V V	O C C	- C C	- N N	N N N	A A -	N	-	-	-	12
	47W625-11	56	A	C	BD	HYDROGEN ANALYZER (43)	CB SB	202 434	A A	GL GL	SO SO	RM RM	- -	- -	C C	C C	O O	C C	O O	Y Y	N N	AC AC	E E	MK-54 -	-	15
	47W625-11	56	A	C	BD	HYDROGEN ANALYZER (43)	CB SB	201 433	A A	GL GL	SO SO	RM RM	- -	- -	C C	C C	O O	C C	O O	Y Y	N N	AC AC	E E	MK-54 -	-	15

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA													VALVE DATA												
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
X-101 EL 723'6" AZ 288°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-
<p>EL 728' AZ 236°</p>	47W600	-	A	C	B	dP SENSOR (30)	SB SNSR 45B/1 SB 45B/2 SB 45A	-	-	-	-	-	-	O	O	O	-	-	-	N	A	E	-	-	12	
X-103 EL 723'6" AZ 287°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA													VALVE DATA												NOTES	
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION					
X-104 EL 728' AZ 237°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
X-105 EL 722'-6" AZ 288°	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-		
X-106 EL 727' AZ 236°	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-		

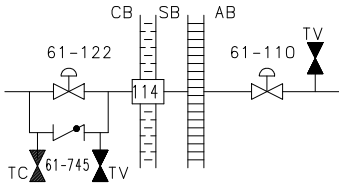
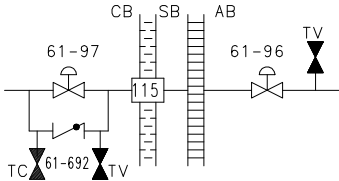
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA														NOTES
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUT/DOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
VALVE STATUS																									
C Y N A E																									
<p>EL 717'11.5" AZ 300°30'</p>	47W810-1 47W432-2	55	W	H	BD	RHR SUPPLY TO PUMPS (74.63)	CB	2	B	GA	MO	RM	LM	-	-	C	V	V	AI	C	Y	N	A	E	MK38
							CB	8	A	GA	MO	RM	LM	-	-	C	V	V	AI	C	Y	N	A		
							CB	505	-	RV	-	-	-	-	-	C	C	V	C	C	N	N	-		
							CB	185	A	GL	AO	RM	-	PA	10.0	V	V	C	C	Y	N	N	A		
<p>EL 711'6" AZ 218°</p>	47W435-18 -22	-	A	C	AB D	MAINT PORT	AB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	AS108
<p>EL 711'6" AZ 222°</p>	47W435-18 -22	-	A	C	AB D	MAINT PORT	AB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	AS109

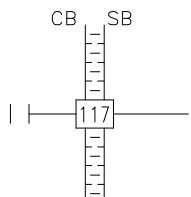
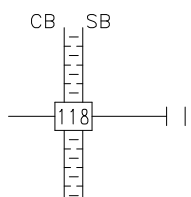
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	ESF		APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
X-110 EL 711'6" AZ 209°	48N406 47W435-22	-	-	-	B	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	MK32	
X-111 EL 845'9" AZ 90°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
X-112 EL 845'9" AZ 270°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES						
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS		SHIELD BLDG PENETRATION					
<p>X-113</p> <p>EL 740 AZ 216°</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
 <p>EL 775 AZ 300°</p>	47W814-2	56	G	C	AB D	GLYCOL FLOOR COOLING (61)	CB	122	B	DI	AO	AT	RM	PA	30.0	O	O	C	C	O	Y	Y	AC	N	MK110	8				
							AB	110	A	DI	AO	AT	RM	PA	30.0	O	O	C	C	O	Y	Y	AC							
							CB	745	-	CK	-	SA	-	-	-	O	O	V	-	O	N	Y	AC							
 <p>EL 771'6" AZ 300°</p>	47W814-2	56	G	C	AB D	GLYCOL FLOOR COOLING (61)	CB	97	B	DI	AO	AT	RM	PA	30.0	O	O	C	C	O	Y	Y	AC	N	MK111	8				
							AB	96	A	DI	AO	AT	RM	PA	30.0	O	O	C	C	O	Y	Y	AC							
							CB	692	-	CK	-	SA	-	-	O	O	V	-	O	N	Y	AC								

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA													NOTES		
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
<p>X-116</p> <p>EL 760 AZ 300°</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	MK7	
 <p>EL 758 AZ 300°</p>	47W301-1	-	A	C	AB	MAINT PORT	CB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	MK8	
 <p>EL 708'6" AZ 209°</p>	72-4333-318 47W862-1	-	W	C	AB C	LAYUP WATER TREATMENT (41) AND ANNULUS FLOOD MODE DRAIN	CB SB	-	-	BL BL	M M	LM LM	-	-	-	C	O	C	-	O	N	N	AB AB	N	MK18	27

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA										NOTES			
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS/IND IN MCR	APP J TEST		ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
X-119 EL 844'5" AZ 90°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	
X-120 EL 844'5" AZ 270°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	