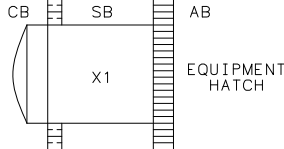
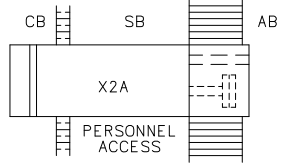
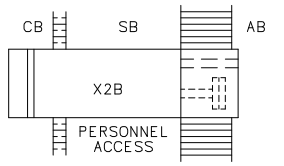
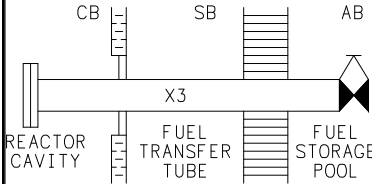
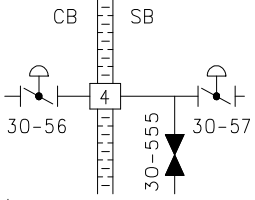
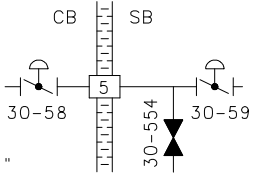


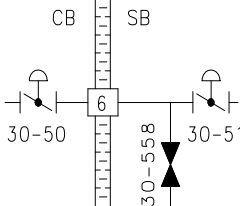
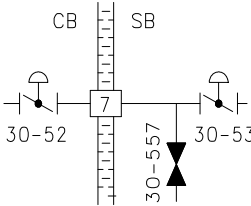
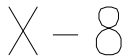
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																				NOTES
DETAILS	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	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
																	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	OPEN	FAIL	TEST	ESF				
 <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					

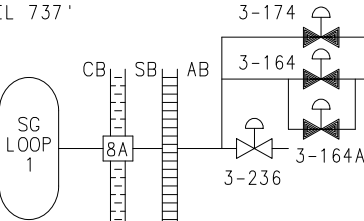
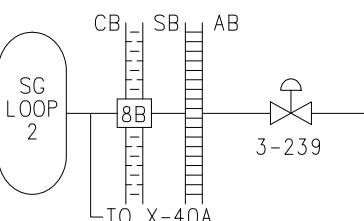
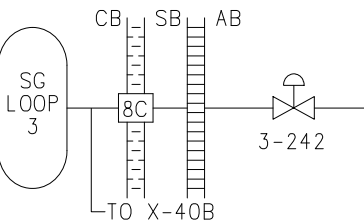
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

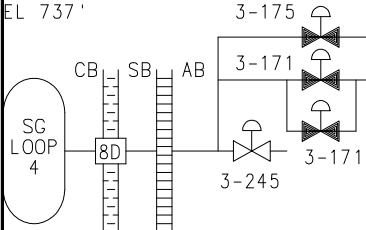
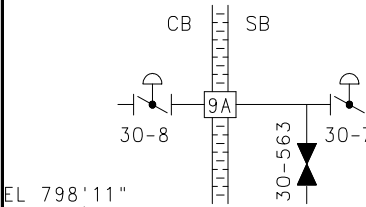
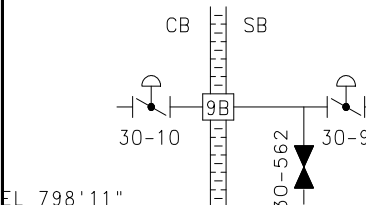
PENETRATION DATA										VALVE DATA																	
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	VALVE STATUS										NOTES
																	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION			
 <p>REACTOR CAVITY FUEL TRANSFER TUBE FUEL STORAGE POOL</p> <p>EL 711'3" AZ 261°50'</p>	47W455-1 72-4333 -PS1 (CB & 1 CONTRACT #75320)	56	W	C	AB D	FUEL TRANSFER TUBE	AB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	MK62		
 <p>EL 735 AZ 36°30'</p>	47W866-1	56	A	C	AB CE	LOWER COMPARTMENT PURGE AIR EXHAUST (30)	CB SB	56 57	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>EL 739'8" AZ 116°</p>	47W866-1	56	A	C	AB CE	INST RM PURGE AIR EXHAUST (30)	CB SB	58 59	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	

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

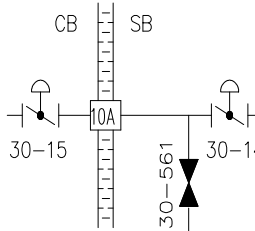
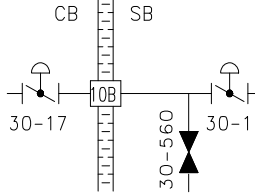
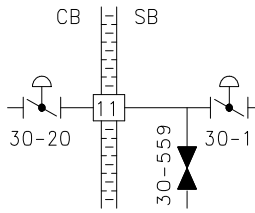
DETAILS	PENETRATION DATA										VALVE DATA																						
	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES				
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	N	Y					C	O	V	
 <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>EL 790'0" AZ 266°</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-								

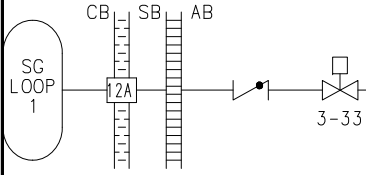
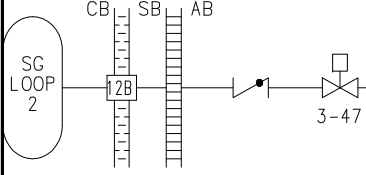
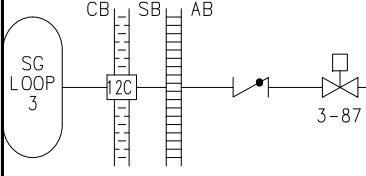
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																						
DETAILS	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	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																					ILRT	POS IND IN MCR	Y	N	A	N	A	Y				
<div>EL 737'</div> <div></div>	47W803 -1,2	57	W	H	BC E	FEEDWATER BYPASS (3)	AB	236 174 164 164A	A,B B A A	GL GL GL A	AO AO AO AO	AT RM RM RM	LM LM LM LM	FW - - -	- - - -	O C C C	C C C C	C V V V	C C C C	C C C C	Y Y Y Y	N N N N	A A A A	N	MK112	22,23,25						
<div>EL 737'</div> <div></div>	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						
<div>EL 737'</div> <div></div>	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						

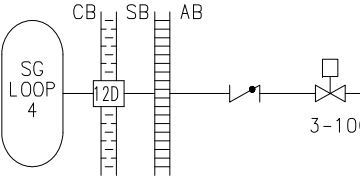
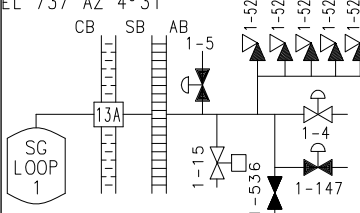
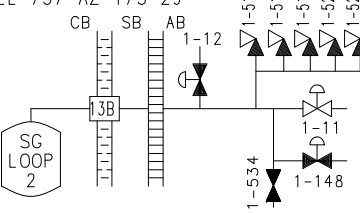
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																												
PENETRATION DATA													VALVE DATA															
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	VALVE STATUS					APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																				POS IND IN MCR	ESF	Y	N	A				
<div>EL 737'</div> 	47W803-1,2	57	W	H	BC E	FEEDWATER BYPASS (3)	AB	245 175 171 171A	A,B A B B	GL GL GL AO	AO AO AO RM	AT RM RM LM	LM LM LM LM	FW - - -	- - - -	O C C C	C C C C	C V V C	C C O C	C C C C	Y Y Y Y	N N N N	A A A A	N	MK115	22, 23, 25		
<div>EL 798'11" AZ 289°</div> 	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		
<div>EL 798'11" AZ 261°</div> 	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		

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

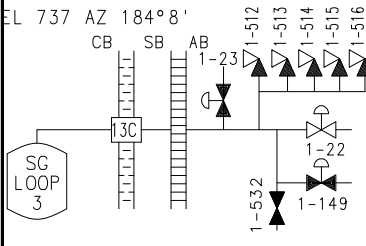
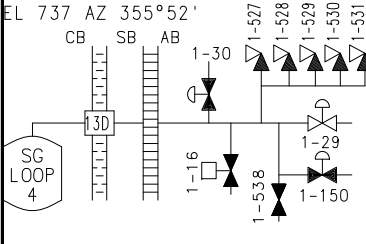
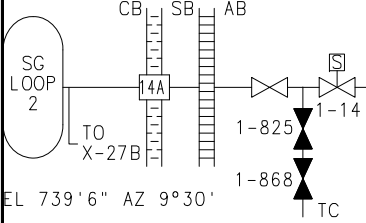
PENETRATION DATA										VALVE DATA																					
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	C	C	C	C	Y				
 <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					

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																											
PENETRATION DATA														VALVE DATA													
DETAILS	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	VALVE STATUS				APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																				ILRT	POS IND IN MCR	ESF	A				
 EL 731 AZ 7°40'	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	MK70	22	
 EL 731 AZ 172°20'	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	MK69	22	
 EL 731 AZ 187°40'	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	MK68	22	

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

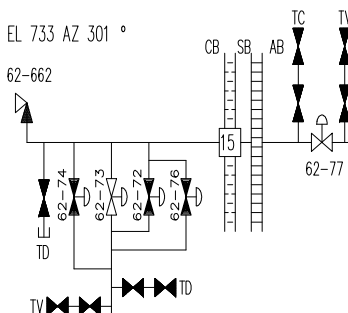
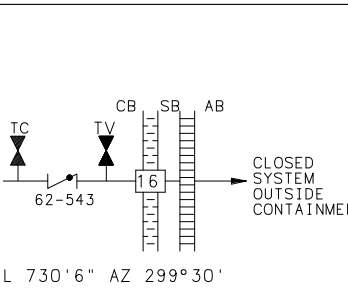
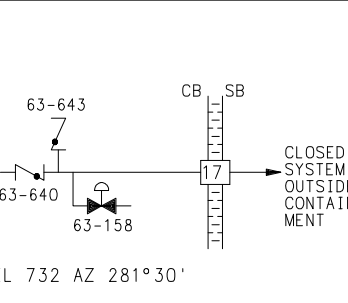
PENETRATION DATA										VALVE DATA																					
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS							ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES		
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION							
 <p>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							22
 <p>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							22
							AB	5	A, B	RV	AO	AT	RM	—	—	C	C	C	C	C	Y	N	A	N							
							AB	15	A	GA	MO	AT	RM	—	—	O	C	V	C	AT	C	N	N	A	N						
							AB	147	A	GA	AO	AT	RM	MS	—	C	V	C	C	C	N	N	A	N							
							AB	522	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	523	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	524	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	525	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	526	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	536	—	GL	M	LM	—	—	—	C	V	C	—	C	N	N	A	N							
 <p>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							22
							AB	12	A, B	RV	AO	AT	RM	—	—	C	C	C	C	C	Y	N	A	N							
							AB	148	B	GA	AO	AT	RM	MS	—	C	V	C	C	C	Y	N	A	N							
							AB	517	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	518	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	519	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	520	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	521	—	RV	—	SA	—	—	—	C	C	C	—	C	N	N	A	N							
							AB	534	—	GL	M	LM	—	—	—	C	V	C	—	C	N	N	A	N							

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

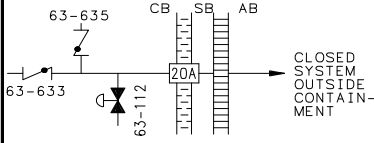
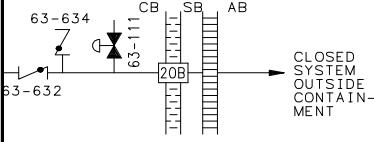
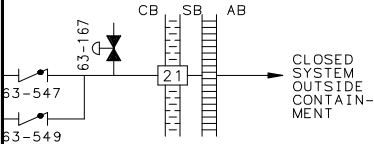
PENETRATION DATA										VALVE DATA																				NOTES
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	VALVE STATUS					APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION			
																				POS IND IN MCR	POS IND IN MCR	POS IND IN MCR	POS IND IN MCR	POS IND IN MCR						
	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							
							AB	149	A	GA	AO	AT	RM	MS	-	C	V	C	C	C	Y	N	A							
							AB	512	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	513	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	514	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	515	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	516	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	532	-	GL	M	LM	-	-	-	C	V	C	-	C	N	N	A							
	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	GA	MO	AT	RM	-	-	C	C	V	AI	C	Y	N	A							
							AB	30	A, B	RV	AO	AT	RM	-	-	C	-	C	C	C	Y	N	A							
							AB	150	B	GL	AO	AT	RM	MS	-	C	V	C	C	C	Y	N	A							
							AB	527	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	528	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	529	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	530	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	531	-	RV	-	SA	-	-	-	C	C	C	-	C	N	N	A							
							AB	538	-	GL	M	LM	-	-	-	C	V	C	-	C	N	N	A							
	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			

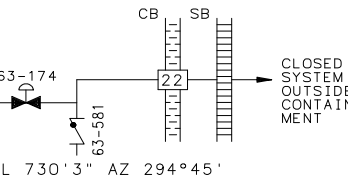
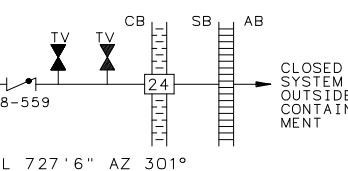
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																											
PENETRATION DATA														VALVE DATA													
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	VALVE STATUS				ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES	
																				POS IND IN MCR	ESF	APP J TEST					
<p>SG LOOP 4</p> <p>TO X-27D</p> <p>CB SB AB</p> <p>1-827</p> <p>1-866</p> <p>1-32</p> <p>TC</p> <p>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</p> <p>TO X-27C</p> <p>CB SB AB</p> <p>1-826</p> <p>1-869</p> <p>1-25</p> <p>TC</p> <p>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</p> <p>TO X-27A</p> <p>CB SB AB</p> <p>1-824</p> <p>1-867</p> <p>1-7</p> <p>TC</p> <p>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	

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

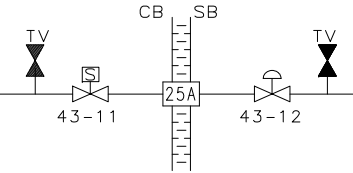
PENETRATION DATA										VALVE DATA																					
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	POST-ACCIDENT	POWER FAILURE	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																				ILRT	POS IND IN MCR	ESF	Y	N	AC	N	AC				
	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	Y	N	AC								
							CB	74	A	GL	AO	AT	RM	PA	10.0	C	V	C	C	C	Y	N	AC								
							CB	662	-	RV	-	SA	-	-	-	C	C	C	C	C	Y	N	AC								
							CB	76	A	GL	AO	AT	RM	PA	10.0	C	C	C	C	C	Y	N	AC								
							AB	77	B	GL	AO	AT	RM	PA	10.0	O	V	C	C	C	Y	N	AC								
	47W809-1	55	W	C	AD	CVCS NORMAL CHARGING (62)	CB	543	-	CK	-	SA	RM	-	-	O	V	C	-	-	N	N	A	N	MK19						
	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	C	Y	Y	A								

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																													
PENETRATION DATA													VALVE DATA																
DETAILS	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	NOTES
																					POS IND IN MCR								
X-18 <																													

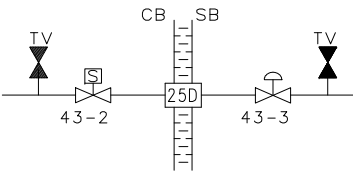
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																									
PENETRATION DATA													VALVE DATA												
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER	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	NOTES
 <p>EL 732 AZ 291°-30"</p>	47W811-1	55	W	C	B D	RHR PUMP DISCHARGE TR B (63)	CB CB CB	112 635 633	— — —	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	
 <p>EL 732 AZ 287°30'</p>	47W811-1	55	W	C	BD	RHR PUMP DISCHARGE TR A (63)	CB CB CB	111 632 634	— — —	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	
 <p>EL 728'6" AZ 289°30'</p>	47W811-1	56	W	C	BD	SIS PUMP DISCHARGE TO HOT LEGS TR B (63)	CB CB CB	167 547 549	— — —	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																											
PENETRATION DATA													VALVE DATA														
DETAILS	DWG NUMBER	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		NOTES
 <p>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</p> <p>EL 729' AZ 283°</p>	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-		
 <p>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

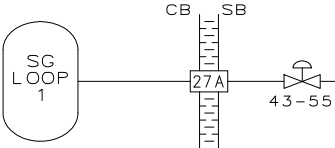
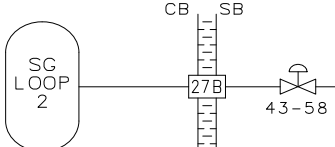
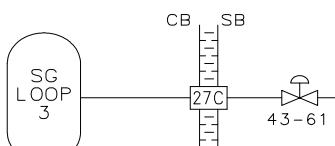
DETAILS	PENETRATION DATA										VALVE DATA																							
	DWG NUMBER	GEN DES CRITERION				PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION		VALVE LOCATION		VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES	
		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR																	ESF	AC	N	Y	C	C	V	V					5.0
 <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>	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-									
<p>X-25C</p> <p>EL 723'6" AZ 294°</p>	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-									

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

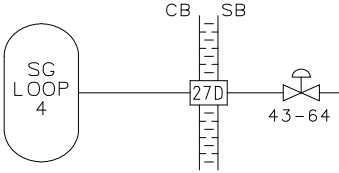
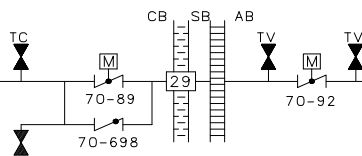
PENETRATION DATA										VALVE DATA																			
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	N	Y				
 <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			

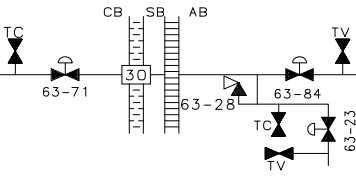
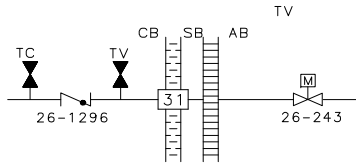
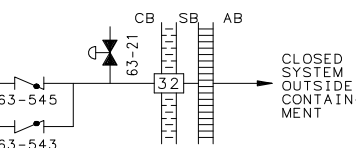
Page 17 of 69

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

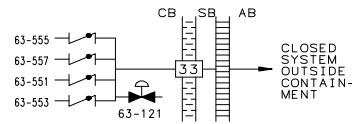
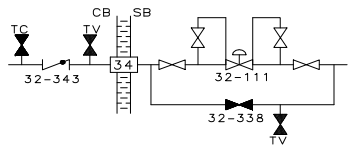
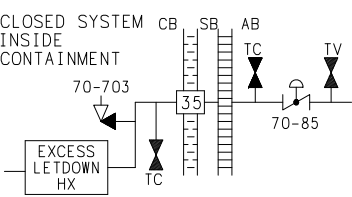
PENETRATION DATA										VALVE DATA																						
DETAILS	DWG NUMBER	GEN DES	CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	VALVE STATUS										POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	ESF	A	N	C	C	C					
 <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	AB 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	AB 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

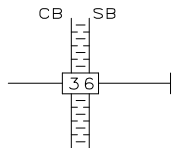
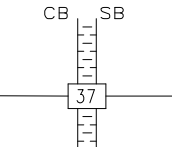
PENETRATION DATA										VALVE DATA																								
DETAILS	DWG NUMBER	GEN DES CRITERION				PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
		W	H	AB	D																POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	Y	N	A	N	MK46M				
 <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 AB CB	89 92 698	B A -	BF BF CK	MO MO -	AT AT SA	- - -	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		MK50		8						

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																											
PENETRATION DATA														VALVE DATA													
DETAILS	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	VALVE STATUS										NOTES
																	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 AB AB AB	71 84 23 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 V	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 AB	1296 243	- A	CK GA	- MO	SA AT	- RM	- PA	- 20.0	C O	C 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	SIT TO HOT LEGS (63)	CB CB CB	545 543 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			

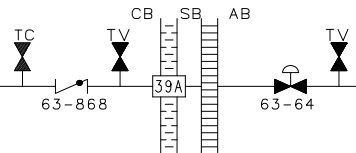
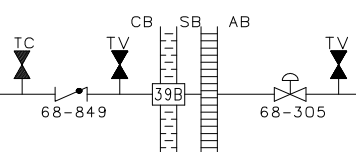
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

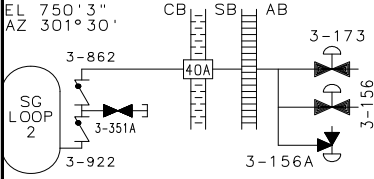
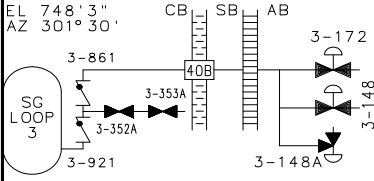
PENETRATION DATA										VALVE DATA																						
DETAILS	DWG NUMBER	GEN DES	CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL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

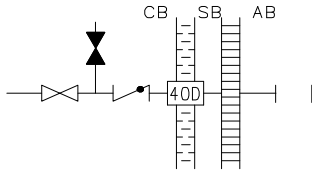
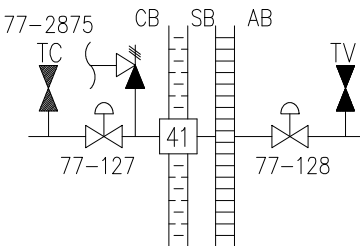
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

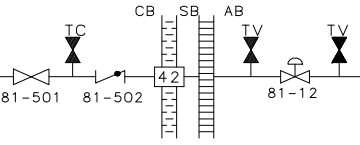
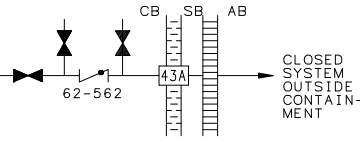
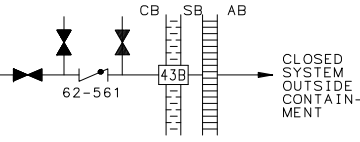
DETAILS	PENETRATION DATA										VALVE DATA																	NOTES
	DWG NUMBER	GEN DES CRITERION				PROCESS FLUID	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS				POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
		FLUID STATE	AB	C	A															ILRT	POWER FAILURE	POST-ACCIDENT	POST-ACCIDENT					
 <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	-		-		

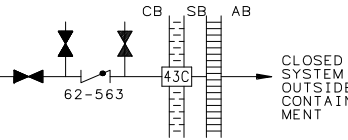
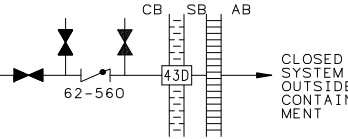
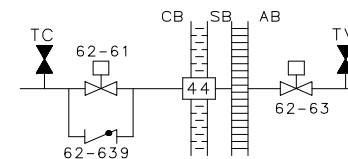
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA																	NOTES		
	DWG NUMBER	GEN DES	CRITERION	PROCESS FLUID	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	VALVE STATUS											ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																		SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST							
 <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	-	-					

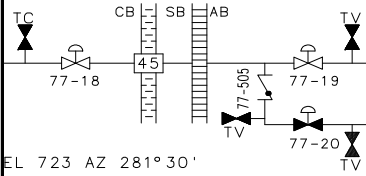
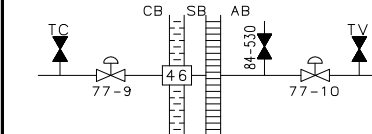
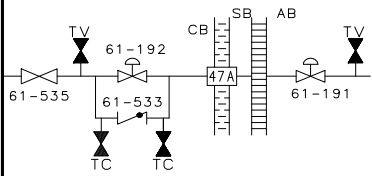
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																										
PENETRATION DATA													VALVE DATA													
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	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-39D EL 720'6" AZ 280°	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	
	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	Y	N	A			
							AB	173	B	GL	AO	RM	LM	-	-	C	C	V	C	C	Y	N	A			
	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	Y	N	A			
							AB	172	A	GL	AO	RM	LM	-	-	C	C	V	C	C	Y	N	A			

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																										
PENETRATION DATA													VALVE DATA													
DETAILS	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					NOTES
																					POS IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
X-400 EL 750'3" AZ 299°30'	48N406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	
 EL 748'3" AZ 299°30'	47W846-2 47W492-2	-	A	C	AD	SERVICE AIR (33)	AB	-	-	BL	M	LM	-	-	-	C	C	C	-	C	-	N	AB	N	MK12	
 EL 719'6" AZ 294°	47W851-1	56	W	C	AD	FL SUMP PUMP DISCH (77)	CB AB CB	127 128 2875	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	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																											
PENETRATION DATA														VALVE DATA													
DETAILS	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	VALVE STATUS							NOTES
																				POS IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION			
 <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		

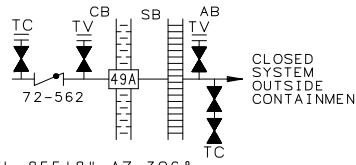
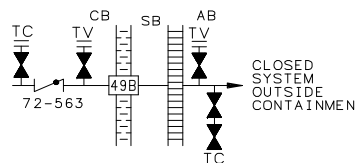
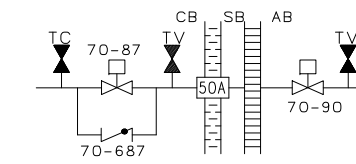
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																												
PENETRATION DATA													VALVE DATA															
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS										NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION				
 <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			

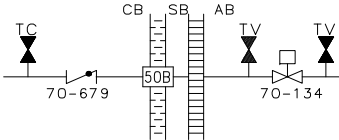
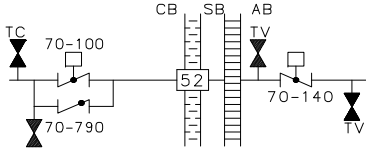
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

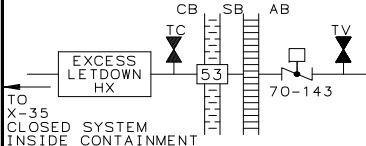
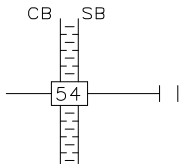
PENETRATION DATA										VALVE DATA																						
DETAILS	DWG NUMBER	GEN DES	CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL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

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

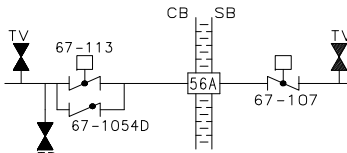
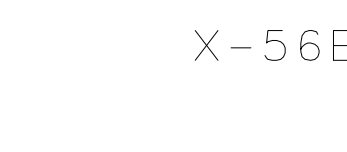
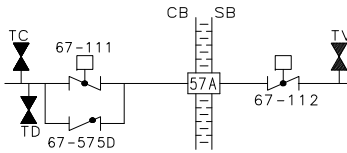
PENETRATION DATA										VALVE DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
DETAILS	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	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
																			POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	ESF	ESF	ESF	ESF	ESF					ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF	ESF

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																											
PENETRATION DATA														VALVE DATA													
DETAILS	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	VALVE STATUS						APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	A				
	47W812-1	56	W	C	AD	RHR SPRAY (72)	CB	562	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A	E	MK2	26	
	47W812-1	56	W	C	AD	RHR SPRAY (72)	CB	563	-	CK	-	SA	-	-	-	C	C	V	-	-	N	Y	A	E	MK1	26	
	47W859-3 47W859-2	56	W	C	AD	RCP THERM BARRIER RETURN (70)	CB AB CB	87 90 687	B A -	GA GA CK	MO MO -	AT AT -	RM RM -	PB PB -	66.0 66.0 -	O O O	O O V	C C C	AI AI V	C C -	Y Y N	N N N	AC AC AC	N	MK16	8	

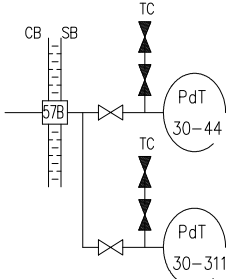
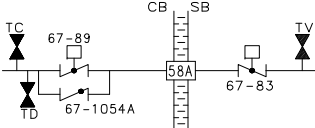

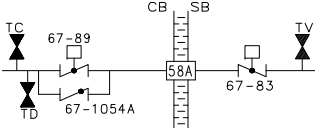
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																														
PENETRATION DATA													VALVE DATA																	
DETAILS	DWG NUMBER	GEN DES CRITERION				PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	VALVE STATUS										NOTES
																				SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION			
 <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 O	C C V	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																													
PENETRATION DATA															VALVE DATA														
DETAILS	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	VALVE STATUS										NOTES		
																	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>	72-4334-315	-	A	C	BC	IITA RENEWAL	SB	-	-	BL	M	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

PENETRATION DATA										VALVE DATA																					
DETAILS	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	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	Y	N	AC	Y				
 <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>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					

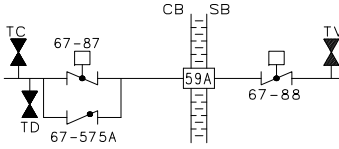

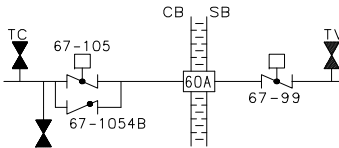
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA																		
	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	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	POS IND IN MCR	POS IND IN MCR	POS IND IN MCR	POS IND IN MCR				
	47W600-89	-	A	C	B	dP SENSOR (30)	SB	SNSR	-	-	-	-	-	-	-	O	O	O	-	-	-	N	A	E	-	12			
	47W845-3	56	W	C	AB DE	LWR CONT ERCW SUPPLY (67)	CB SB CB	1054A 83 89	- 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	MK79				
	47W600-75	54	W	C	BD	RCS PRESSURE SENSOR (68)	-	-	-	-	-	-	-	-	-	O	O	O	-	N	N	A	E	MK126	28				
																													

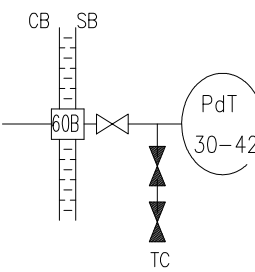
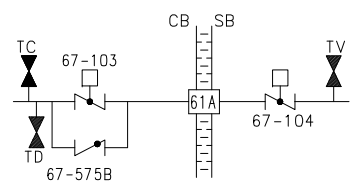
X-58B

EL 720' AZ 13°

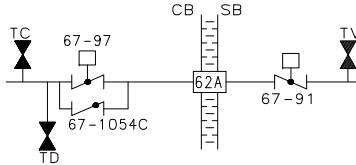
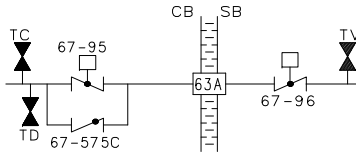
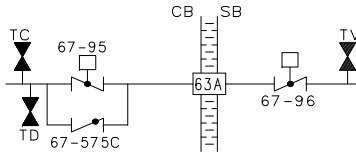
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																			
DETAILS	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	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	Y	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>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 RM	PB 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			

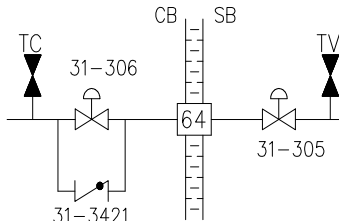
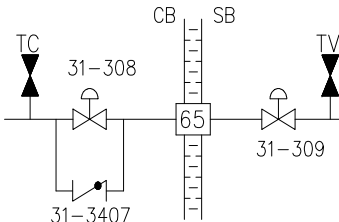
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

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	VALVE STATUS										ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST								
 <p>EL 720'-6" AZ 174° 15'</p>	47W600	-	A	C	B	dP SENSOR (30)	SB	SNSR	-	-	-	-	-	-	-	O	O	O	-	-	-	N	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 O	C C V	AI AI -	C C -	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-				

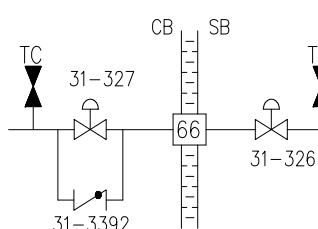
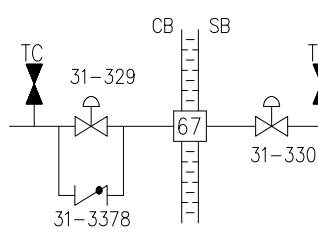
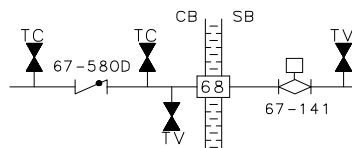
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																					
DETAILS	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	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	AC	AC	AC	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>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					
 <p>EL 720 AZ 193°</p>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-						

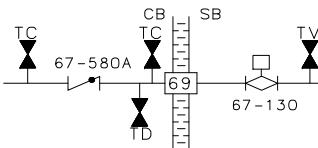
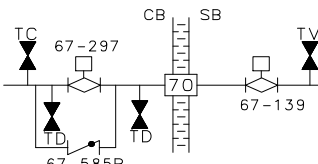
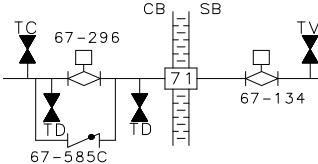
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																		
DETAILS	DWG NUMBER	GEN DES CRITERION				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	VALVE STATUS				APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES	
		GEN DES	CRITERION	PROCESS FLUID	FLUID STATE															POSS LEAK PATHS	POS IND IN MCR	ESF	POS IND IN MCR					APP J TEST
X-63B EL 720 AZ 194°30'	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-				
 EL 737 AZ 65°	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 V	C C C	C C -	C C -	Y Y N	N N N	AC AC AC	N	MK92	8		
 EL 738 AZ 65°	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 V	C C C	C C -	C C -	Y Y N	N N N	AC AC AC	N	MK90	8		

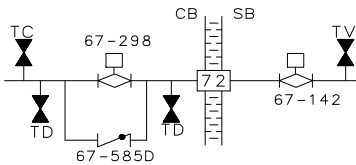
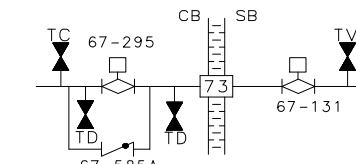
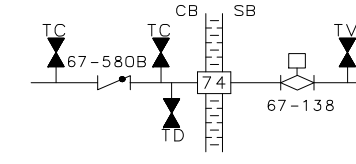
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																							
DETAILS	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	VALVE STATUS												APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	Y	N	AC	Y	N	AC				
 EL 737 AZ 104°	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							
 EL 738 AZ 104°	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							
 EL 794 '6" AZ 301° 15'	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								

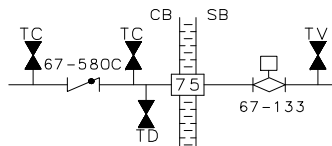
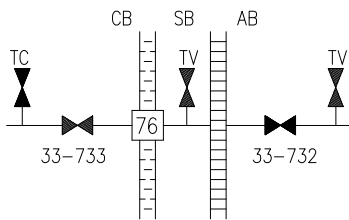
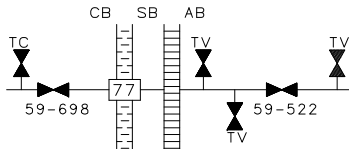
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																			
DETAILS	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	VALVE STATUS										NOTES
																			POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	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 V	AI AI -	C C -	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 V	AI AI -	C C -	Y Y N	N N N	AC AC AC	N	MK82	8			

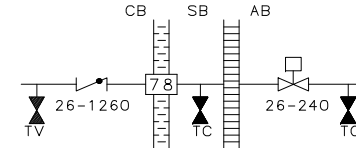
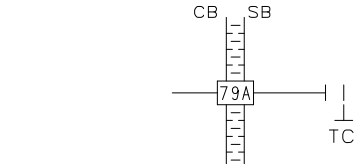
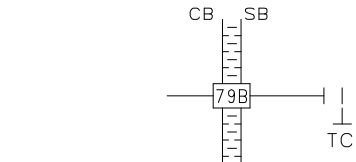
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																					
DETAILS	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	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	AC	Y	N	AC	C	AI				
 <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 O	C C V	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						

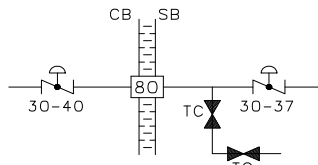
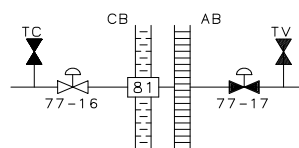
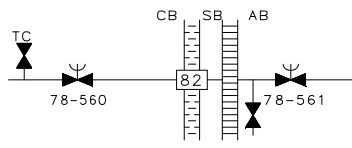
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

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	VALVE STATUS										
																			POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION			
 <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	VALVE STATUS											ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																		SHUTDOWN	POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST	AI	C	N	N			
 <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	C O	C 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

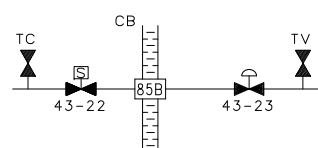
PENETRATION DATA										VALVE DATA																					
DETAILS	DWG NUMBER	GEN DES CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	N	Y	C	C				
 <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	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	ASO81						
 <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	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	VALVE STATUS											APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
							POST-ACCIDENT	POWER FAILURE											ILRT	POS IND IN MCR	ESF	AC	N	Y	N	C	C	C					C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																																
PENETRATION DATA														VALVE DATA																		
DETAILS	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	VALVE STATUS										NOTES
		W	C	BD	ILRT																	POS IND IN MCR	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°	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-					

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

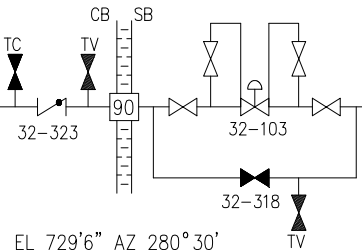
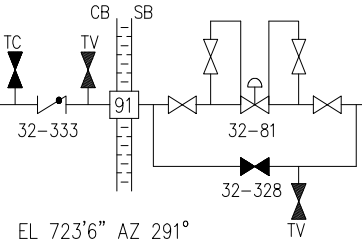
DETAILS	PENETRATION DATA										VALVE DATA																				
	DWG NUMBER	GEN DES	CRITERION	PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS						POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES		
																			POST-ACCIDENT	POWER FAILURE	ILRT	ESF	Y	N						AC	C
 <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>	47W331-2	-	-	-	-	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																										
PENETRATION DATA													VALVE DATA													
DETAILS	DWG NUMBER	VALVE STATUS				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	NOTES
		GEN DES CRITERION PROCESS FLUID FLUID STATE POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER																					
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	-	-		

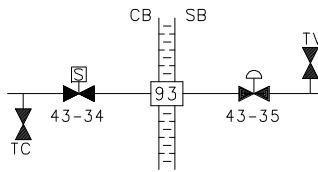
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																															
PENETRATION DATA													VALVE DATA																		
DETAILS	DWG NUMBER	GEN DES CRITERION				PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	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	NOTES
		GEN DES	CRITERION	PROCESS FLUID	FLUID STATE																			POS IND IN MCR	ESF	APP J TEST	ESSENTIAL/NON-ESS				
X-86D EL 721'6" AZ 307°30'	47W331-2	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-				
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																												
PENETRATION DATA														VALVE DATA														
DETAILS	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	VALVE STATUS				APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
		-	W	C	BD																N	N	A	E				
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	

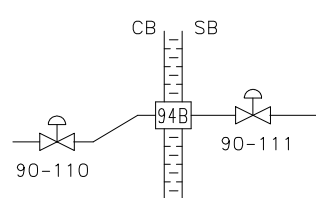
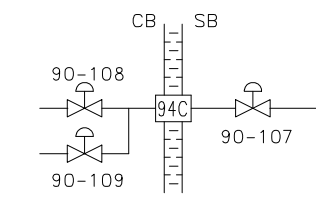
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

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	VALVE TYPE	ACTUATOR	PRI ACT MODE	SEC ACT MODE	ISOLATION SIGNAL	STROKE TIME	NORMAL	SHUTDOWN	VALVE STATUS									ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	APP J TEST						
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 AI	- 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 AI	- 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																														
PENETRATION DATA														VALVE DATA																
DETAILS	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	NOTES
X-92A EL 723 AZ 290°	47W625-11	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			
X-92B EL 723 AZ 290°	47W625-11	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			
X-92C EL 723'-6" AZ 290°	47W625-15	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																												
PENETRATION DATA														VALVE DATA														
DETAILS	DWG NUMBER	GEN DES CRITERION				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	NOTES
		PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	POS IND IN MCR																ESF	APP J TEST						
X-92D EL 723'6" AZ 290°	47W331-3	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			
 EL 723'6" AZ 289°	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			
X-94A EL 741 AZ 294°	47W600-105 48W406	-	A	C	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-				

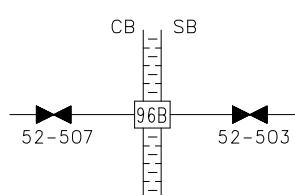
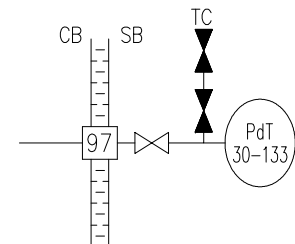
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA										VALVE DATA																					
DETAILS	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	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	C	C	C	Y	N				
	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	N	MK59M						
EL 741 AZ 294°	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	N	MK59M						
	47W600-105	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-						
X-95A	47W600-105	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-						
EL 741 AZ 293°	47W600-105	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-						

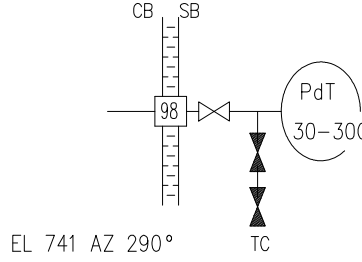
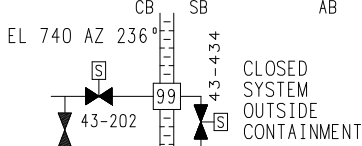
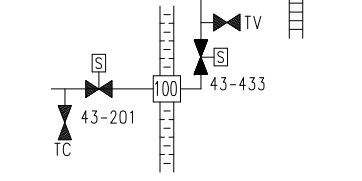
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

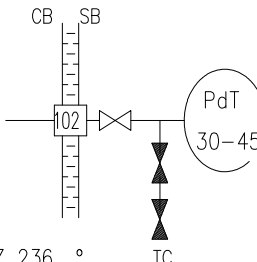
PENETRATION DATA										VALVE DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
DETAILS	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	NOTES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																					POS IND IN MCR	ESF	Y	N	AC	C	O	C	C					O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C	C	O	C

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

PENETRATION DATA										VALVE DATA																			
DETAILS	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	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																		POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	AC	N	O				
 <p>EL 741 AZ 292°</p>	47W331-3	56	A	C	B	ILRT 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	SNSR	-	-	-	-	-	-	-	O	O	O	-	-	-	N	A	N	-	12			

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

PENETRATION DATA										VALVE DATA																							
DETAILS	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	VALVE STATUS										APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																				POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	POS IND IN MCR	APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION					
	2-47W600-89	-	A	C	B		dP SENSOR (30)	SB	SNSR	-	-	-	-	-	-	-	O	O	O	-	-	-	N	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	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	MK-54			15				
																																	

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																												
PENETRATION DATA														VALVE DATA														
DETAILS	DWG NUMBER	GEN DES CRITERION				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	NOTES
		PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	POS IND IN MCR																ESF							
X-101 EL 723'6" AZ 288°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-			
 EL 728' AZ 236 °	2-47W600-89	-	A	C	B	dP SENSOR (30)	SB	SNSR	-	-	-	-	-	-	O	O	O	-	-	-	N	A	E	-		12		
X-103 EL 723'6" AZ 287°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-				

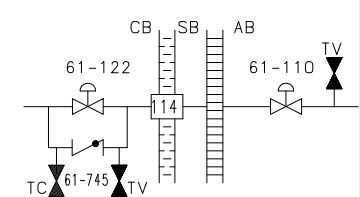
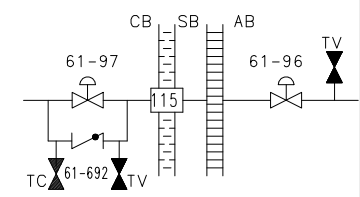
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																												
PENETRATION DATA														VALVE DATA														
DETAILS	DWG NUMBER	GEN DES CRITERION				SYSTEM NUMBER AND PENETRATION DESCRIPTION	VALVE LOCATION	VALVE NUMBER	ESF POWER TRAIN	VALVE TYPE	ACTUATOR	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	NOTES
		PROCESS FLUID	FLUID STATE	POSS LEAK PATHS	POS IND IN MCR																ESF	ESF	ESF	ESF				
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	-	-			

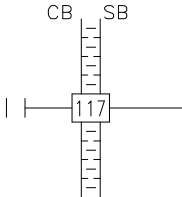
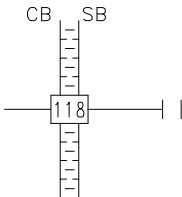
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

DETAILS	PENETRATION DATA										VALVE DATA																			
	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	VALVE STATUS								APP J TEST	ESSENTIAL/NON-ESS	SHIELD BLDG PENETRATION	NOTES
																			POST-ACCIDENT	POWER FAILURE	ILRT	POS IND IN MCR	ESF	O	Y	N				
 EL 717'11.5" AZ 300°30'	47W810-1 47W432-2	55	W	H	BD	RHR SUPPLY TO PUMPS (74.63)	CB CB CB CB	2 8 505 185	B A - A	GA GA RV GL	MO MO - AO	RM RM - RM	LM LM - -	- - - PA	- - - 10.0	C V C V	V V C V	V V C C	AI AI - C	O C C C	Y Y N Y	N N N N	- - - -	E	MK38					
 EL 711'6" AZ 218°	47W435-18 -22	-	A	C	AB D	MAINT PORT	AB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	AS108					
 EL 711'6" AZ 222°	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																													
PENETRATION DATA														VALVE DATA															
DETAILS	DWG NUMBER	VALVE STATUS				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	NOTES
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

PENETRATION DATA										VALVE DATA																					
DETAILS	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	NOTES
																					POS IN D	ESF	APP J	ESF	APP J	ESF	APP J				
<div>X-113</div> <div>EL 740 AZ 216°</div>	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<div></div> <div>EL 775 AZ 300°</div>	47W814-2	56	G	C	AB D	GLYCOL FLOOR COOLING (61)	CB AB CB	122 110 745	B A -	DI DI CK	AO AO -	AT AT SA	RM RM -	PA PA -	30.0 30.0 -	O O O	O O V	C C -	C C O	O O N	Y Y Y	Y Y Y	C C C	N			MK110	8			
<div></div> <div>EL 771'6" AZ 300°</div>	47W814-2	56	G	C	AB D	GLYCOL FLOOR COOLING (61)	CB AB CB	97 96 692	B A -	DI DI CK	AO AO -	AT AT SA	RM RM -	PA PA -	30.0 30.0 -	O O O	O O V	C C -	C C O	O O N	Y Y Y	Y Y Y	C C C	N			MK111	8			

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																												
PENETRATION DATA													VALVE DATA															
DETAILS	DWG NUMBER	GEN DES CRITERION				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	NOTES
		GEN DES	CRITERION	PROCESS FLUID	FLUID STATE																POS IND IN MCR	ESF	APP J TEST					
X-116 EL 760 AZ 300°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	MK7			
 EL 758 AZ 300°	47W301-1	-	A	C	AB	MAINT PORT	CB	-	-	BL	M	LM	-	-	-	C	V	C	-	C	N	N	AB	N	MK8			
 EL 708'6" AZ 209°	72-4334-318	-	W	C	AB C	LAYUP WATER TREATMENT (41) AND ANNULUS FLOOD MODE DRAIN	SB	-	-	BL	M	LM	-	-	-	C	O	C	-	O	N	N	AB	N	MK18	27		

WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1																															
PENETRATION DATA														VALVE DATA																	
DETAILS	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	NOTES
X-119 EL 844'5" AZ 90°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-				
X-120 EL 844'5" AZ 270°	48W406	-	-	-	-	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-				