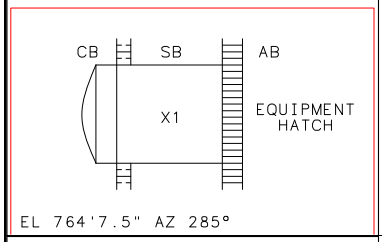
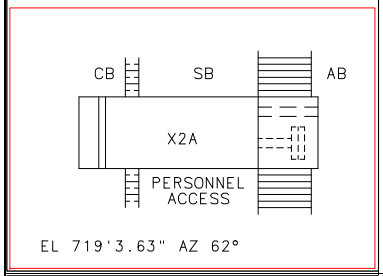
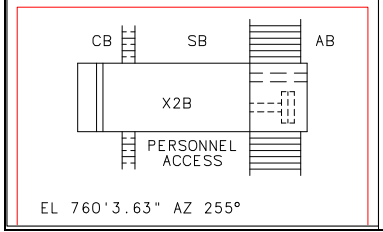
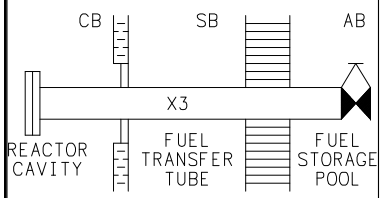
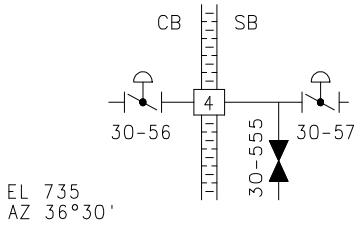
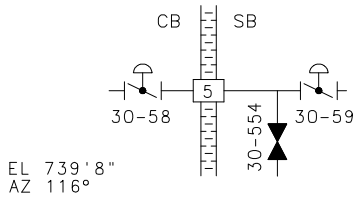
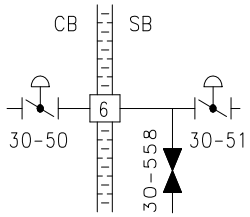
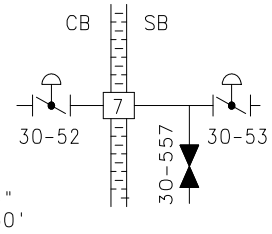
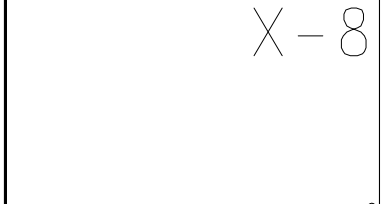
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA											VALVE DATA																
																	VALVE STATUS										
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
	44N250	–	A	C	AB	EQUIPMENT HATCH	–	–	–	D	M	LM	–	–	–	C	V	C	–	C	–	N	AB	N	–		
	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		
	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		

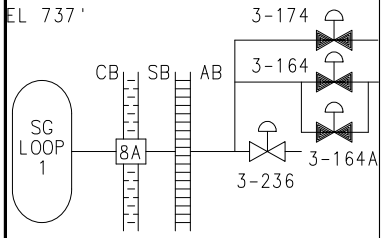
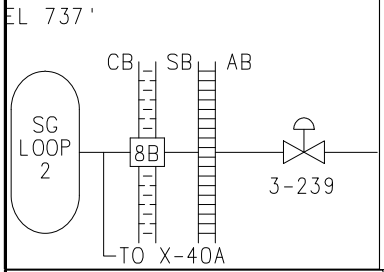
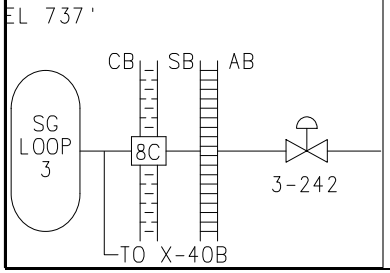
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
	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	
	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
	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

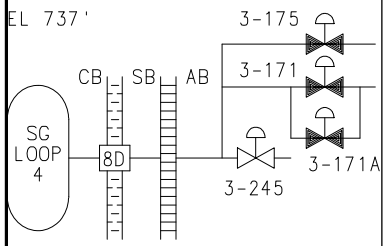
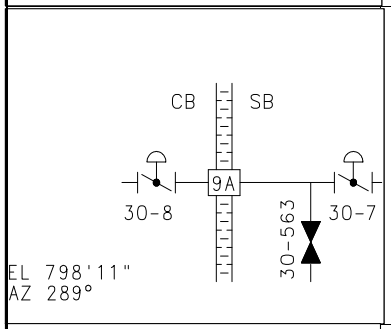
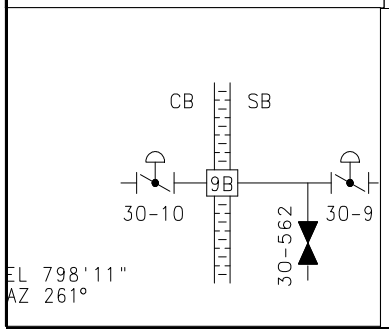
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
	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
	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
	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

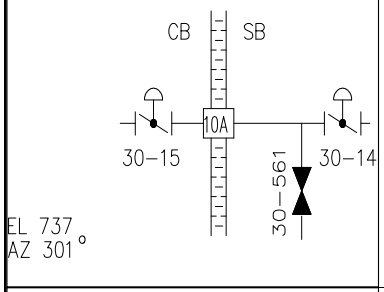
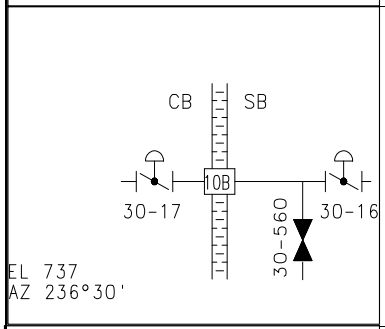
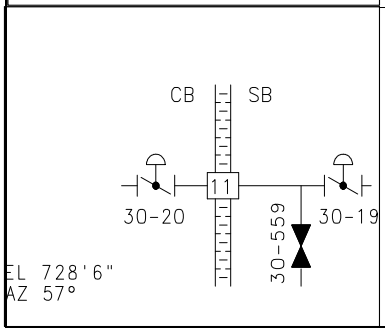
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																		
																	VALVE STATUS									
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
	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 O C	C C C C	Y Y Y Y	N N N N	A A A A	N	MK112	22,23,25
	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
	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

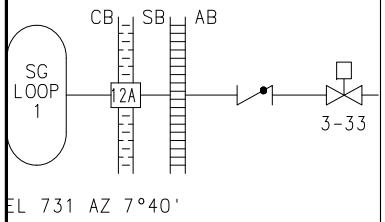
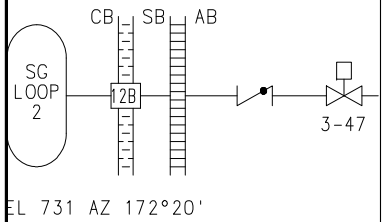
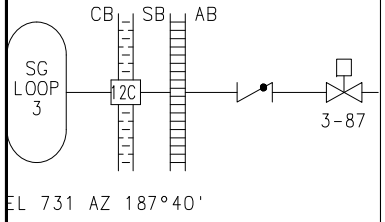
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																		
																	VALVE STATUS										
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
	47W803 -1,2	57	W	H	BC E	FEEDWATER BYPASS (3)	AB	245 175 171 171A	A,B A B B	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 O C	C C C C	Y Y Y Y	N N N N	A A A A	N	MK115	22, 23, 25
	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
	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

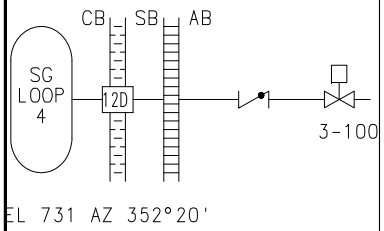
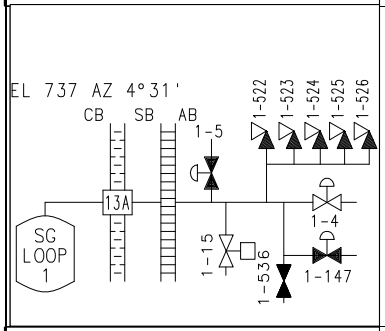
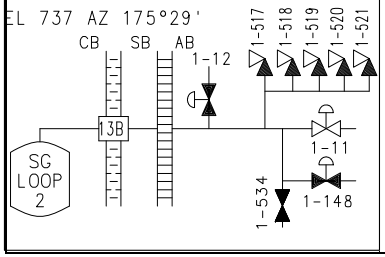
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA											VALVE DATA																
																		VALVE STATUS									
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
	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
	47W866-1	56	A	C	AB CE	LOWER COMPARTRMENT 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
	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

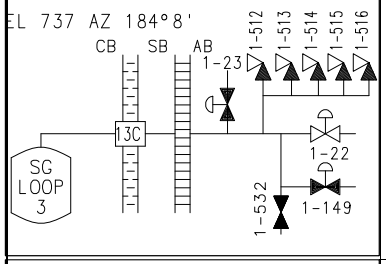
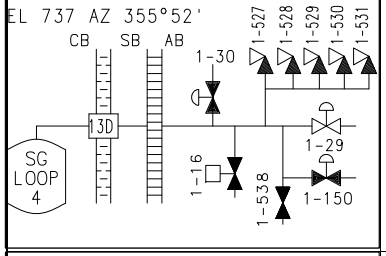
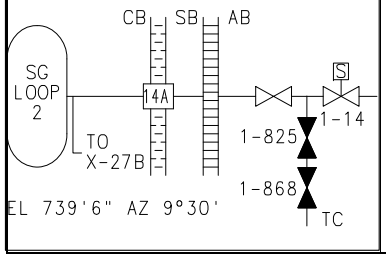
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																	
																	VALVE STATUS									
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
	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
	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
	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

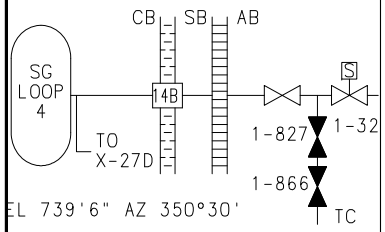
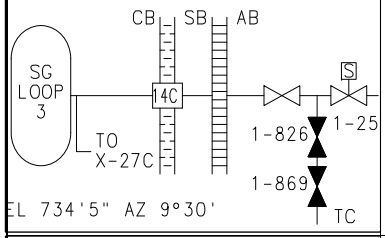
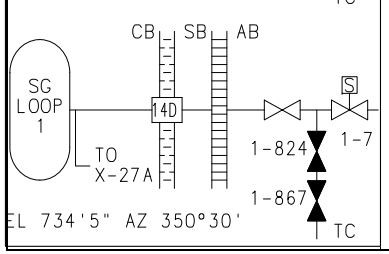
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																		
																	VALVE STATUS									
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
	47W803-1	57	W	H	BC E	FEEDWATER (3)	AB	100	B	GA	MO	AT	LM	FW	–	O	C	C	AI	C	Y	N	A	N	MK67	22
	47W801-1 47W803-2	57	S	H	BC E	MAIN STEAM (1)	AB AB AB AB AB AB AB AB AB AB	4 5 15 147 522 523 524 525 526 536	A, B A, B A A – – – – – –	GL RV GA GA RV RV RV RV RV GL	AO AO MO AO – – – – – M	AT AT AT AT SA SA SA SA SA LM	LM RM RM RM – – – – – –	MS – – MS – – – – – –	– – – – – – – – – –	O C O C C C C C C C	C C C V C C C C C V	C C V C C C C C C C	C C AT C – – – – – –	C C C C C C C C C C	Y Y N N N N N N N N	N N N N N N N N N N	A A A A A A A A A A	N	MK66	22
	47W801-1	57	S	H	BC E	MAIN STEAM (1)	AB AB AB AB AB AB AB AB AB AB	11 12 148 517 518 519 520 521 534	A, B A, B B – – – – – –	GL RV GA RV RV RV RV RV GL	AO AO AO – – – – – M	AT AT AT SA SA SA SA SA LM	LM RM RM – – – – – –	MS – MS – – – – – –	– – – – – – – – –	O C C C C C C C C	C C V C C C C C V	C C C C C C C C C	C C C – – – – – –	C C C C C C C C C	Y Y Y N N N N N N	N N N N N N N N N	A A A A A A A A A	N	MK65	22

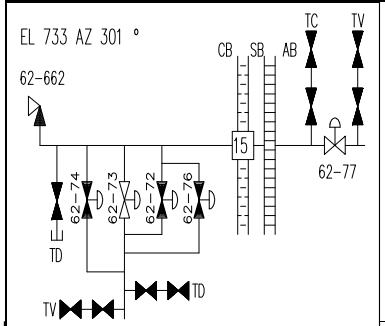
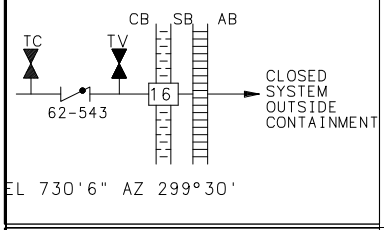
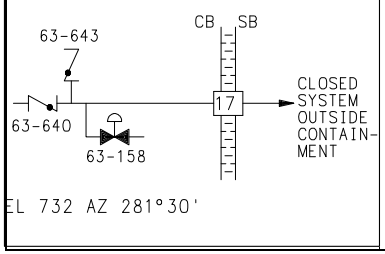
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																VALVE STATUS										
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
	47W801-1	57	S	H	BC E	MAIN STEAM (1)	AB AB AB AB AB AB AB AB AB	22 23 149 512 513 514 515 516 532	A, B A, B A – – – – – –	GL RV GA RV RV RV RV RV GL	AO AO AO – – – – – M	AT AT AT SA SA SA SA SA LM	LM RM RM – – – – – –	MS – MS – – – – – –	– – – – – – – – –	O C C C C C C C C	C C V C C C C C V	C C C C C C C C C	C C C – – – – – –	C C C C C C C C C	Y Y Y N N N N N N	N N N N N N N N N	A A A A A A A A A	N	MK64	22
	47W801-1 47W803-2	57	S	H	BC E	MAIN STEAM (1)	AB AB AB AB AB AB AB AB AB	29 16 30 150 527 528 529 530 531 538	A, B A A, B B – – – – – –	GL GA RV GL RV RV RV RV RV GL	AO MO AO AO – – – – – M	AT AT AT AT SA SA SA SA SA LM	LM RM RM RM – – – – – –	MS _ _ MS – – – – – –	– – – – – – – – – –	O C C C C C C C C C	C C _ V C C C C C V	C V C C C C C C C C	C AI C C – – – – – –	C C C C C C C C C C	Y Y Y Y N N N N N N	N N N N N N N N N N	A A A A A A A A A A	N	MK63	22
	47W801-2	57	W	H	BE	STEAM GENERATOR BLOWDOWN (1)	AB	14	A	GL	SO	AT	RM	PA	15.0	O	C	C	C	C	Y	N	A	N	AS14A	22

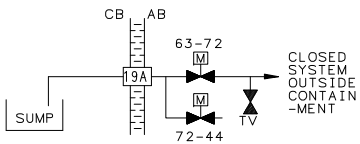
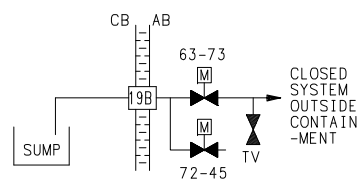
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
	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
	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
	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

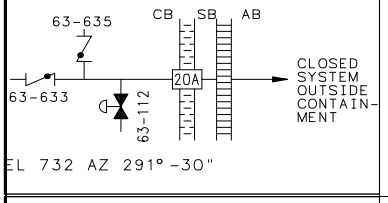
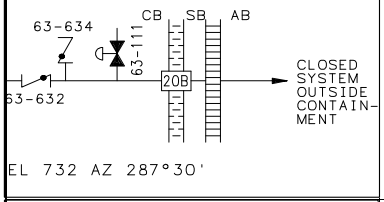
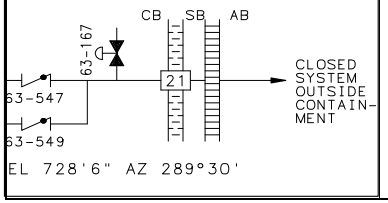
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																	VALVE STATUS									
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
	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			

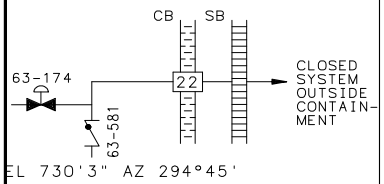
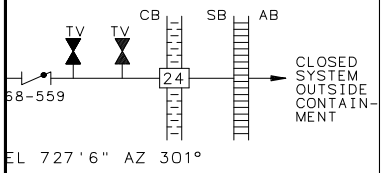
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

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

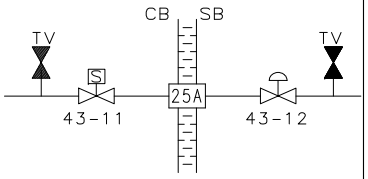
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
	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	
	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	
	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	

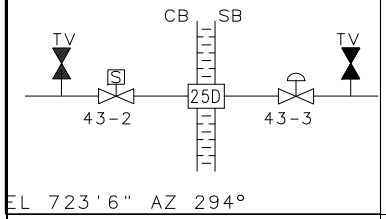
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
	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	
X-23 EL 729' AZ 283°	47W625-15	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
	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

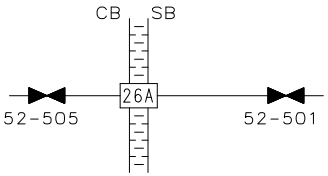
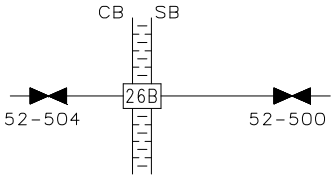
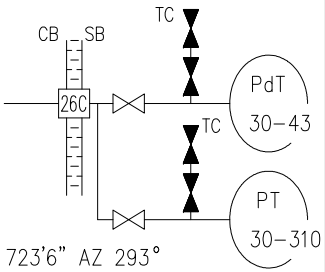
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
 EL 723'6" AZ 294°	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
X-25B EL 723'6" AZ 294°	47W331-2	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
X-25C EL 723'6" AZ 294°	47W331-2	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

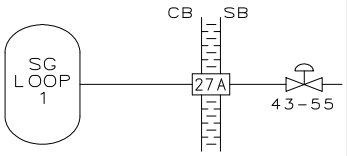
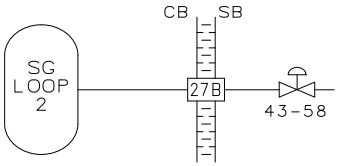
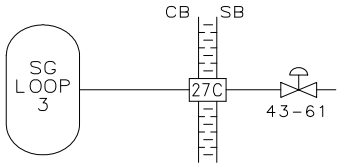
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
	47W625-1	55	S	H	AD	PRESSURIZER STEAM SAMPLE (43)	CB SB	2 3	B A	GL GL	SO AO	AT AT	RM RM	PA PA	5.0 5.0	V V	V V	C C	C C	C C	Y Y	N N	AC AC	N	MK44D	15

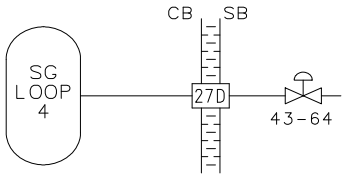
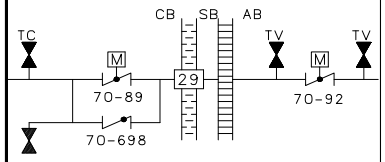
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																	VALVE STATUS									
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
 EL 723'6" AZ 293°	47W331-3	56	A	C	B	ILRT SENSOR LINE (52) TEST INSTRUMENTATION	CB SB	505 501	– –	GL GL	M M	LM LM	– –	– –	– –	C C	V V	C C	– –	O O	N N	N N	AC AC	N	–	
 EL 723'6" AZ 293°	47W331-3	56	A	C	B	ILRT SENSOR LINE (52) TEST INSTRUMENTATION	CB SB	504 500	– –	GL GL	M M	LM LM	– –	– –	– –	C C	V V	C C	– –	O O	N N	N N	AC AC	N	–	
 EL 723'6" AZ 293°	47W600-89 47W331-3	–	A	C	B	dP SENSOR (30)	SB	SNSR	–	–	–	–	–	–	–	O	–	O	–	C	N	N	A	E	–	12, 13

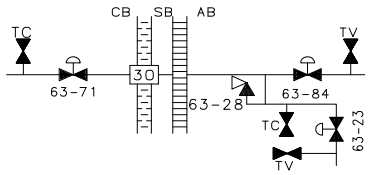
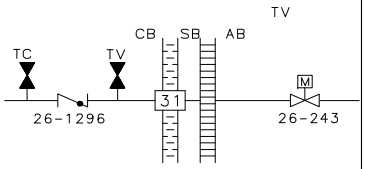
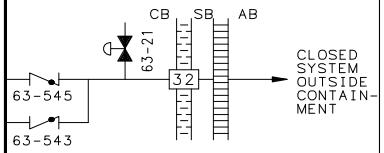
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																		
																	VALVE STATUS									
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
 EL 723'6" AZ 292°	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
 EL 723'6" AZ 292°	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
 EL 723'6" AZ 292°	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

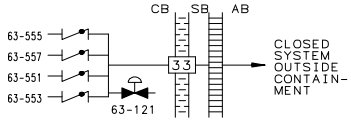
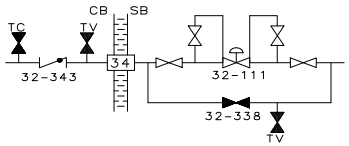
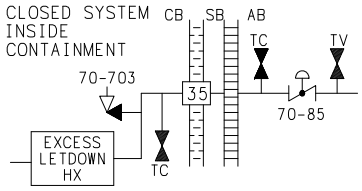
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																		
																	VALVE STATUS									
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
 EL 723'6" AZ 292°	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
X-28 EL 721' AZ 287°30'	47W625-15	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
 EL 720 AZ 288°30'	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

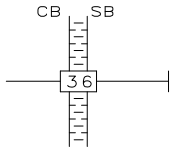
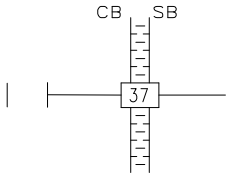
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																	VALVE STATUS									
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
 EL 720'6" AZ 291°30'	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
 EL 722 AZ 289°30'	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	
 EL 720'6" AZ 282°30'	47W811-1	55	W	C	BD	SI 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	

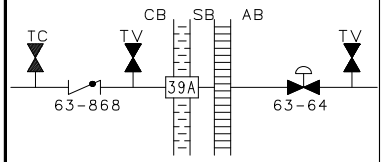
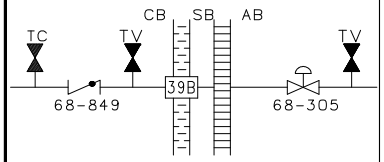
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																	VALVE STATUS									
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
 EL 720'6" AZ 277°30'	47W811-1	55	W	C	BD	SI TO LOW HEAD SI (63)	CB CB CB CB CB	553 551 557 555 121	– – – – –	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	
 EL 720'6" AZ 299°30'	47W848-1	56	A	C	AB D	CONTROL AIR I & C (32)	CB SB SB	343 111 338	– 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
 EL 720'6" AZ 301°30'	47W859-2, 3	57	W	C	AD	CCS FROM EXCESS LETDN HX (70)	CB AB	703 85	– B	RV BF	– AO	SA AT	– RM	– PA	– 10.0	V V	V C	V C	C C	C C	N Y	N N	AC AC	N	MK42	11

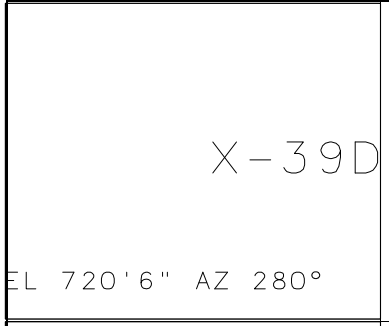
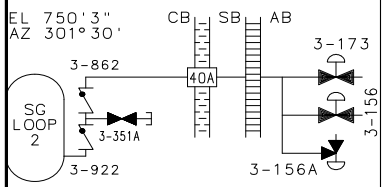
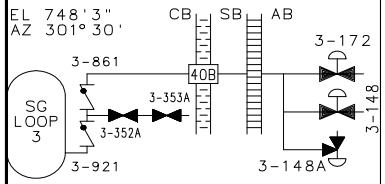
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
 EL 742'6" AZ 280°	72-4333-310	–	A	C	AB	SG. CHEM. CLEANING	SB	–	–	BL	M	LM	–	–	–	C	V	C	–	C	N	N	AB	N	MK20	
 EL 771'6" AZ 265°	47W301-1	–	A	C	AB	MAINT. PORT	CB	–	–	BL	M	LM	–	–	–	C	V	C	–	C	N	N	AB	N	MK14	
X-38 EL 771'6" AZ 268°	48N406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

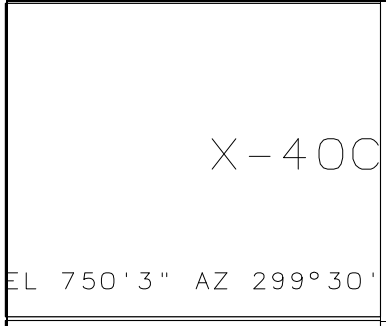
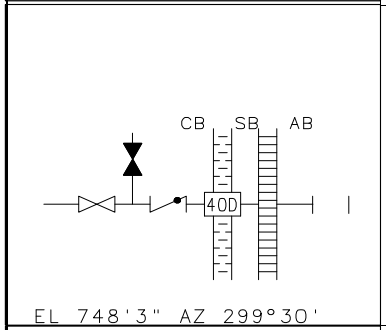
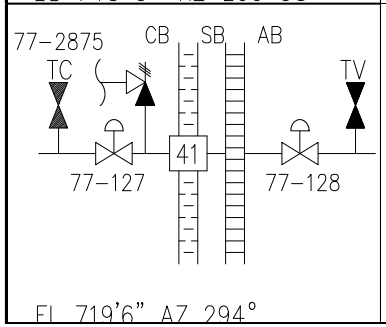
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																	VALVE STATUS									
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
 EL 720'6" AZ 280°	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	
 EL 720'6" AZ 280°	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	
X–39C EL 720'6" AZ 280°	47W331-2	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

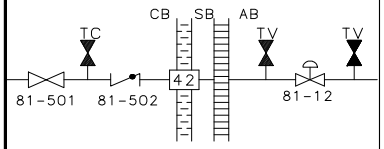
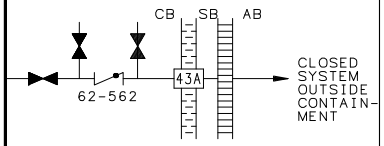
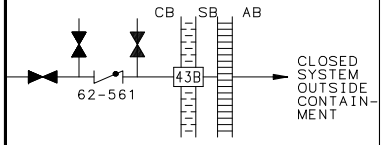
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																		
																		VALVE STATUS									
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
	47W331-2	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
	47W803-2	57	W	C	BC E	AUX FW (3)	AB AB AB	156 156A 173	A A B	GL A GL	AO AO AO	RM RM RM	LM LM LM	– – –	– – –	C C C	C C C	V V V	O C C	C C C	Y Y Y	N N N	A A A	E	MK9	22
	47W803-2	57	W	C	BC E	AUX FW (3)	AB AB AB	148 148A 172	B B A	GL A GL	AO AO AO	RM RM RM	LM LM LM	– – –	– – –	C C C	C C C	V V V	O C C	C C C	Y Y Y	N N N	A A A	E	MK11	22

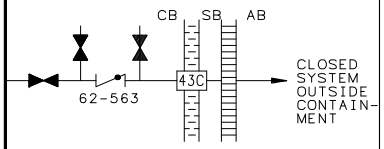
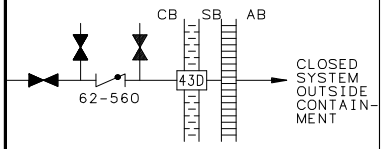
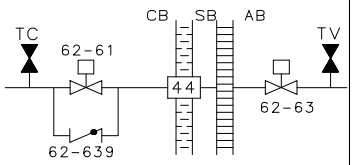
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
	48N406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
	47W846-2 47W492-2	–	A	C	AD	SERVICE AIR (33)	AB	–	–	BL	M	LM	–	–	–	C	C	C	–	C	–	N	AB	N	MK12	
	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	

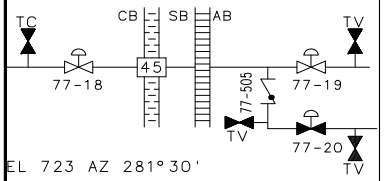
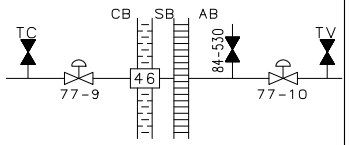
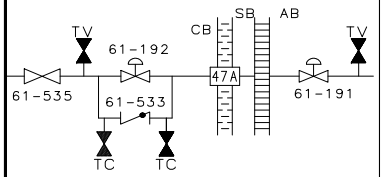
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																		
																		VALVE STATUS									
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
 EL 723'6" AZ 301°	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	
 EL 728'6" AZ 293°30'	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	562	–	CK	–	SA	–	–	–	O	C	C	–	–	N	N	A	N	MK31	
 EL 728'6" AZ 292°	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	561	–	CK	–	SA	–	–	–	O	C	C	–	–	N	N	A	N	MK29	

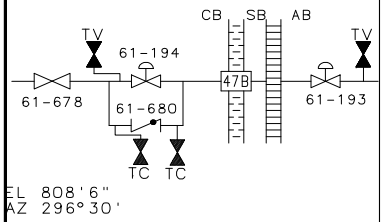
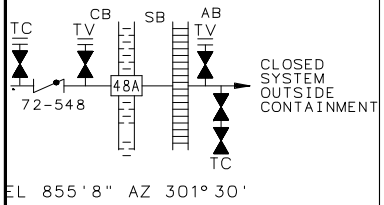
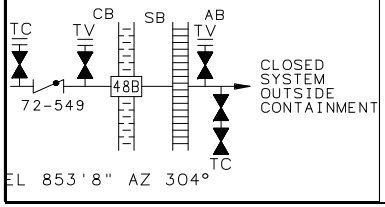
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																		
																	VALVE STATUS										
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
 EL 727 AZ 293° 30'	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	563	–	CK	–	SA	–	–	–	O	C	C	–	–	N	N	A	N	MK28	
 EL 727 AZ 292°	47W809-1	55	W	C	AD	TO RCP SEALS (62)	CB	560	–	CK	–	SA	–	–	–	O	C	C	–	–	N	N	A	N	MK30	
 EL 727'6" AZ 281° 30'	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	

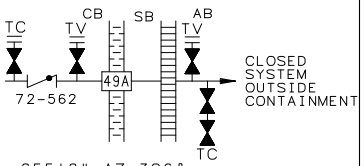
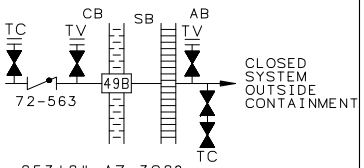
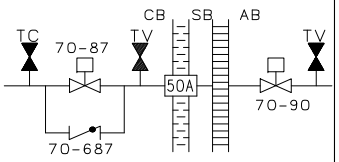
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																		
																	VALVE STATUS								
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
	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	
	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
	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

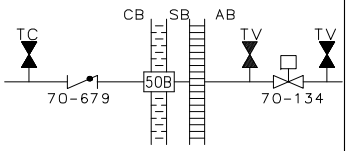
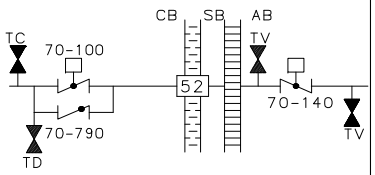
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
	47W814-2	56	G	C	BD	GLYCOL RETURN (61)	CB AB CB	194 193 680	B A –	DI DI CK	AO AO –	AT AT SA	RM RM –	PA PA –	30.0 30.0 –	O O O	O O O	C C V	C C –	O O O	Y Y N	N N N	C C C	N	MK26	8
	47W812-1	56	W	C	AD	CONT. SPRAY (72)	CB	548	–	CK	–	SA	–	–	–	C	C	V	–	–	N	Y	A	E	MK4	26
	47W812-1	56	W	C	AD	CONT. SPRAY (72)	CB	549	–	CK	–	SA	–	–	–	C	C	V	–	–	N	Y	A	E	MK3	26

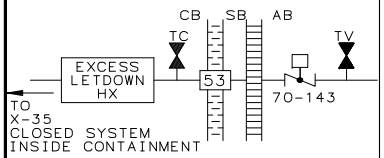
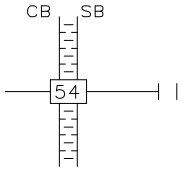
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																		
																	VALVE STATUS									
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
	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 O	C C V	AI AI –	C C –	Y Y N	N N N	AC AC AC	N	MK16	8

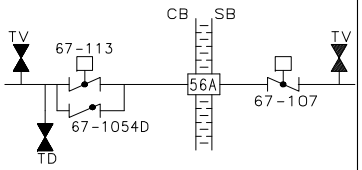
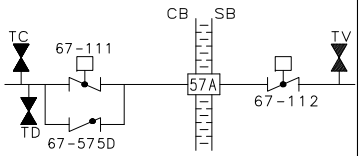
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
 EL 734'6" AZ 299°30'	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	
X-51 EL 728'6" AZ 286°30'	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
 EL 722'6" AZ 299°30'	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

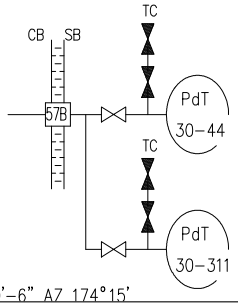
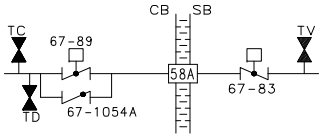
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
 EL 721'6" AZ 301°	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
 EL 740 AZ 90°	72-4334-315	–	A	C	BC	IITA RENEWAL	SB	–	–	BL	M	LM	–	–	–	C	V	C	–	O	N	N	AB	N	MK72	16
X-55 EL 771'6" AZ 262°	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

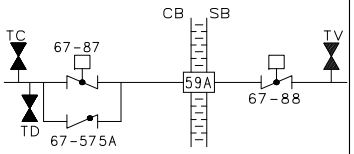
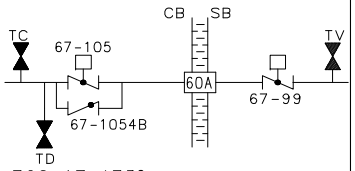
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																	
																	VALVE STATUS									
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
 EL 720 AZ 353°	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
X-56B EL 720 AZ 355°30'	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
 EL 720 AZ 351°30'	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

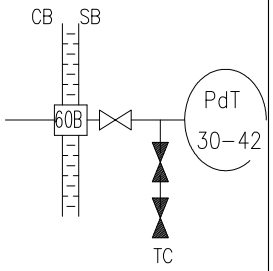
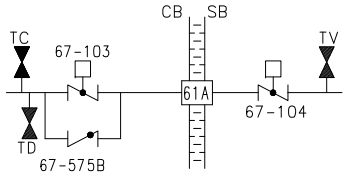
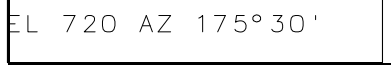
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																		
																	VALVE STATUS									
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
 EL 720'–6" AZ 174°15'	47W600-89	–	A	C	B	dP SENSOR (30)	SB	SNSR	–	–	–	–	–	–	–	O	O	O	–	–	–	N	A	E	–	12
 EL 720' AZ 7°	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	
X–58B EL 720 AZ 13°	47W600-75	54	W	C	BD	RCS PRESSURE SENSOR (68)	–	–	–	–	–	–	–	–	–	–	O	O	O	–	N	N	A	E	MK126	28

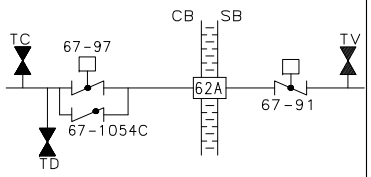
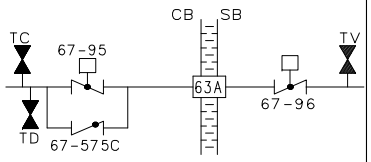
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																	
																	VALVE STATUS									
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
 EL 720 AZ 8° 30'	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
X-59B EL 720 AZ 14° 30'	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
 EL 720 AZ 173°	47W845-3	56	W	C	AB DE	LWR CONT ERCW SUPPLY (67)	CB SB CB	1054B 99 105	– A B	CK BF BF	– MO MO	SA AT AT	– RM RM	– PB PB	– 66.0 66.0	O O O	O O O	V C C	– AI AI	– C C	N Y Y	N N N	AC AC AC	N	MK77	8

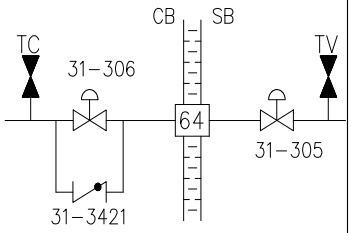
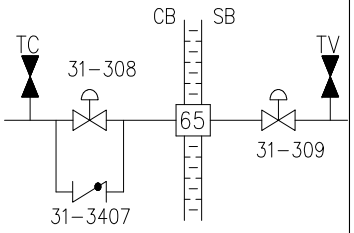
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
	47W600	–	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 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
	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

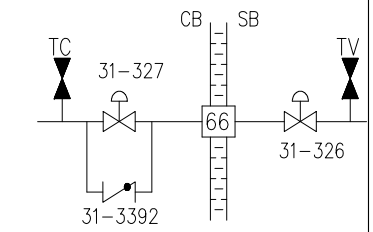
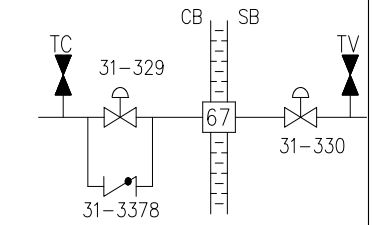
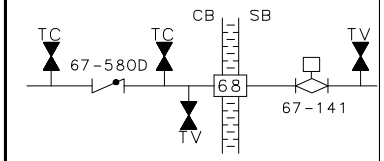
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
 EL 720 AZ 187°	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
X-62B EL 720 AZ 193°	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
 EL 720 AZ 189°30'	47W845-3	56	W	C	AB DE	LWR CONT ERCW RETURN (67)	CB SB CB	95 96 575C	A B –	BF BF CK	MO MO –	AT AT SA	RM RM –	PB PB –	66.0 66.0 –	O O O	O O O	C C V	AI AI –	C C –	Y Y N	N N N	AC AC AC	N	MK75	8

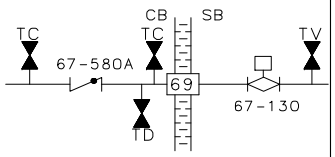
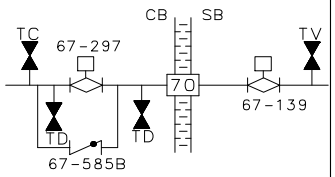
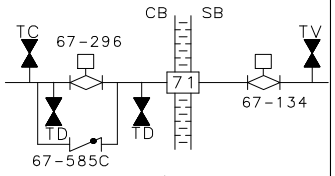
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA												VALVE DATA															
																	VALVE STATUS										
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-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 O	C C V	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 O	C C V	C C –	C C –	Y Y N	N N N	AC AC AC	N	MK90	8

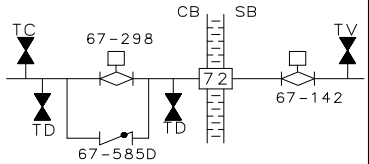
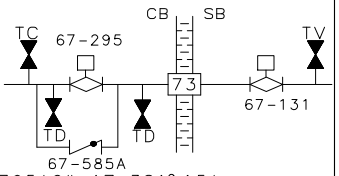
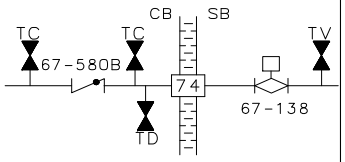
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																	
																	VALVE STATUS									
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
 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	

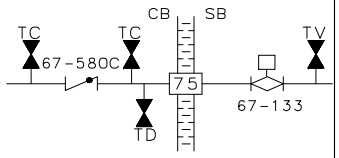
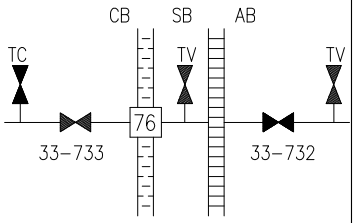
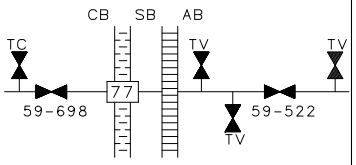
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																	VALVE STATUS									
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
 EL 796'6" AZ 301° 15'	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	
 EL 798'6" AZ 301° 15'	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 O	C C V	AI AI –	C C –	Y Y N	N N N	AC AC AC	N	MK84	8
 EL 800'6" AZ 301° 15'	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 O	C C V	AI AI –	C C –	Y Y N	N N N	AC AC AC	N	MK82	8

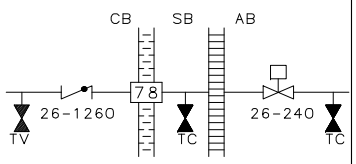
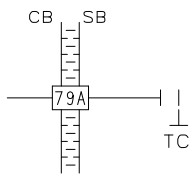
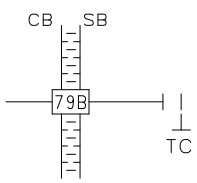
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																				
																	VALVE STATUS										
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
 EL 793'6" AZ 301° 15'	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
 EL 795'6" AZ 301° 15'	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
 EL 797'6" AZ 301° 15'	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	

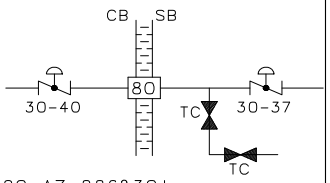
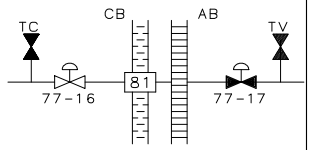
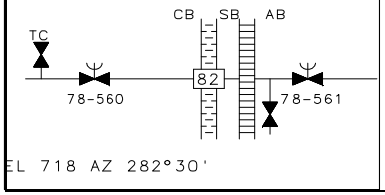
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA									VALVE DATA																		
																		VALVE STATUS									
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
 EL 799'6" AZ 301°15'	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	
 EL 711 AZ 300°	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	
 EL 710'6" AZ 299°	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	

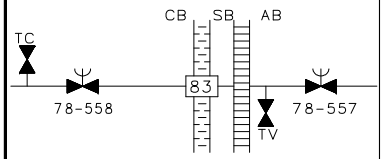
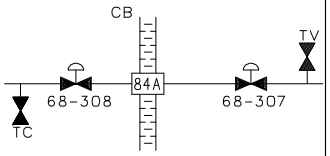
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
 EL 798'9" AZ 301°	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	
 EL 808 AZ 289°	47W814-1 47W462-7	56	I	C	AB	ICE BLOWING (61)	SB			BL	M	LM	–	–	–	C	V	C	–	C	N	N	AB	N	MK23	
 EL 809 AZ 290°	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																
																		VALVE STATUS									
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
	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
	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	
	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	

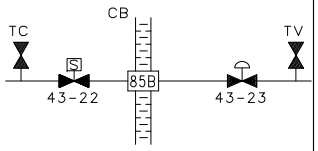
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																		VALVE STATUS									
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
 EL 733 AZ 294°	47W855-1	56	W	C	AB D	REFUEL CAV PRFCN PUMP SUCT (78)	CB AB	558 557	– –	DI DI	M M	LM LM	– –	– –	– –	C C	V V	C C	– –	C C	N N	N N	AC AC	N	MK95	
 EL 723 AZ 307° 30'	47W625-8	56	N	C	AD	P.R.T. TO GAS ANALYZER (68)	CB SB	308 307	B A	GL GL	AO AO	AT AT	RM RM	PA PA	10.0 10.0	V V	O O	C C	C C	C C	Y Y	N N	AC AC	N	MK99M	
X-84B EL 723 AZ 307° 30'	47W600-292	–	W	C	BD	RVLIS (68)	–	–	–	–	–	–	–	–	–	O	O	O	–	–	N	N	A	E	MK101	21

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

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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-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

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
 EL 723 AZ 306°	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
X-85C EL 723' AZ 306°	47W331-2	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
X-85D EL 723 AZ 306°	47W331-2	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

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

PENETRATION DATA											VALVE DATA																
																				VALVE STATUS							
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-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	–	–	

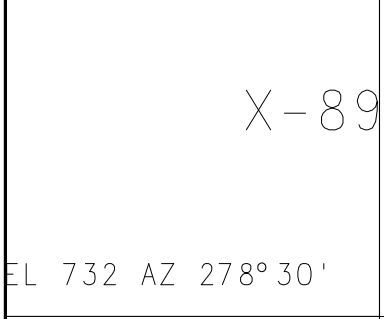
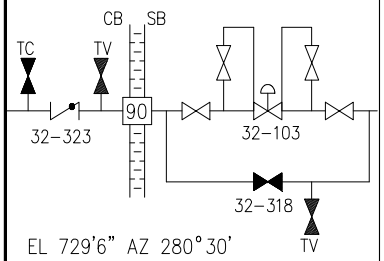
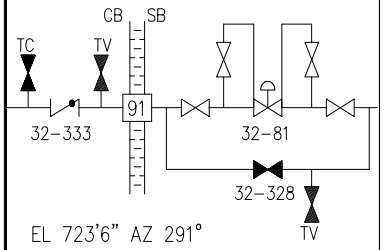
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA											VALVE DATA																
																				VALVE STATUS							
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-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 | | | | | | | | | | | | | | | | | | |

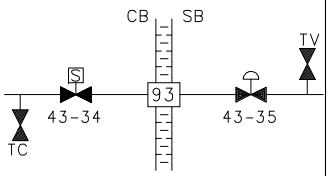
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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
	48W406 47W850-9	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	MK-104	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
	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

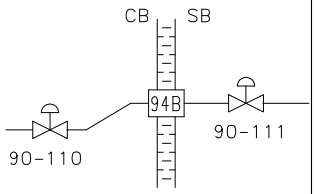
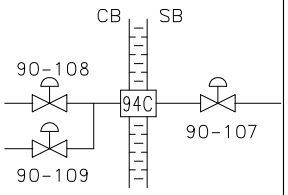
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA											VALVE DATA																
																				VALVE STATUS							
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-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	–	–	

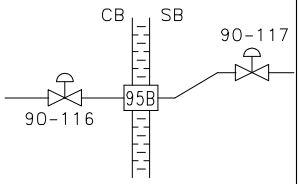
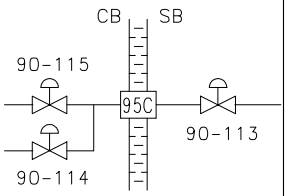
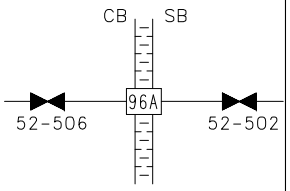
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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-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	–	–	

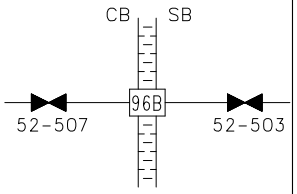
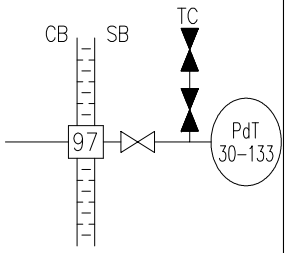
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
 EL 741 AZ 294°	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	
X-95A EL 741 AZ 293°	47W600-105	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	

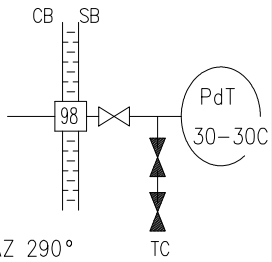
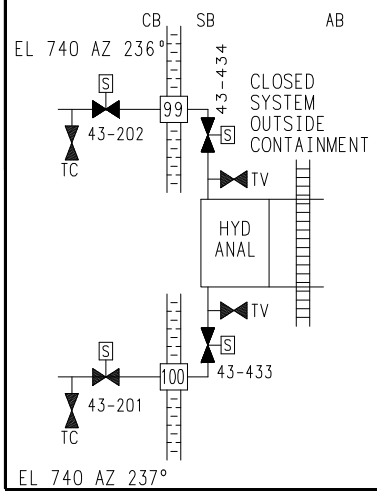
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																	VALVE STATUS									
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
 EL 741 AZ 293°	47W600-105	56	A	C	AB D	UPPER COMP AIR MON INTAKE (90)	CB SB	116 117	B A	GL GL	AO AO	AT AT	RM RM	CV CV	5.0 5.0	O O	O O	C C	C C	C C	Y Y	N N	AC AC	N	MK60M	
 EL 741 AZ 293°	47W600-105	56	A	C	AB D	UPPER COMP AIR MON RETURN (90)	CB SB CB	114 113 115	B A B	GL GL GL	AO AO AO	AT AT AT	RM RM RM	CV CV CV	5.0 5.0 5.0	O O O	O O O	C C C	C C C	O C O	Y Y Y	N N N	AC AC AC	N	MK60M	
 EL 741 AZ 292°	47W331-3	56	A	C	B	ILRT SENSOR LINE (52)	CB SB	506 502	– –	GL GL	M M	LM LM	– –	– –	– –	C C	V V	C C	– –	O O	N N	N N	AC AC	N	–	

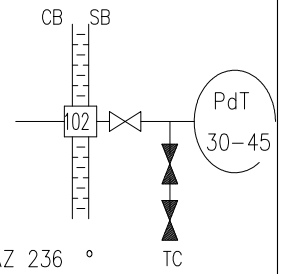
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA								VALVE DATA																			
																	VALVE STATUS										
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
 EL 741 AZ 292°	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	–		
X-96C 741 AZ 292°	47W600-89	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
 EL 741 AZ 291°	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																	
																	VALVE STATUS									
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
	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

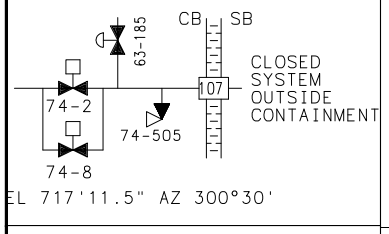
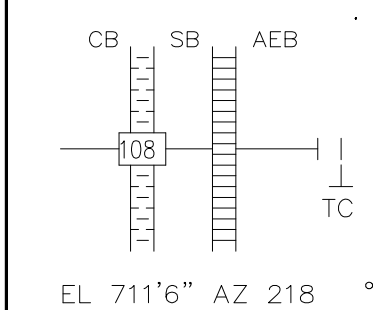
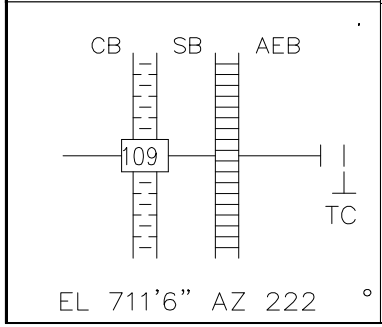
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																VALVE DATA											
																VALVE STATUS											
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-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											
																VALVE STATUS											
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-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	–	–	

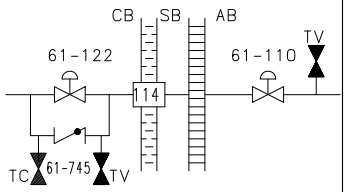
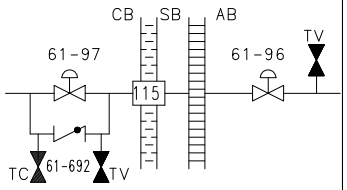
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA							VALVE DATA																			
																VALVE STATUS										
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
	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 C C V	V V V V	V V V C	AI AI – C	O C C C	Y Y N Y	N N N N	– – – –	E	MK38	
	47W435-18 -22	–	A	C	AB E	MAINT PORT	AB	–	–	BL	M	LM	–	–	–	C	V	C	–	C	N	N	AB	N	AS108	
	47W435-18 -22	–	A	C	AB E	MAINT PORT	AB	–	–	BL	M	LM	–	–	–	C	V	C	–	C	N	N	AB	N	AS109	

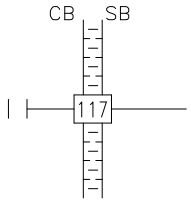
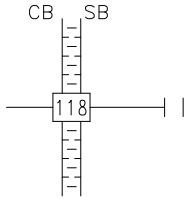
WATTS BAR NUCLEAR PLANT CONTAINMENT PENETRATIONS AND BARRIERS-TABLE 6.2.4-1

PENETRATION DATA																	VALVE DATA											
																					VALVE STATUS							
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-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															
																	VALVE STATUS										
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-113 EL 740 AZ 216°	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
 EL 775 AZ 300°	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 O	C C V	C C –	O O O	Y Y N	Y Y Y	C C C	N	MK110	8
 EL 771'6" AZ 300°	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 O	C C V	C C –	O O O	Y Y N	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											
																VALVE STATUS											
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-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																
																				VALVE STATUS							
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-119 EL 844'5" AZ 90°	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	
X-120 EL 844'5" AZ 270°	48W406	–	–	–	–	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	A	–	–	