

INSERVICE TESTING PROGRAM

REVISION 8

SAN ONOFRE NUCLEAR GENERATING STATION

UNIT 3

JULY 1987

INSERVICE TESTING PROGRAM
SAN ONOFRE - UNIT 3

Ualve Relief Request No. 21
Proposed Revision

SYSTEM: Main Steam
COMPONENT: HU-8204
HU-8205
CATEGORY: B
CLASS: 2
FUNCTION: Main Steam Isolation Ualves

These ualves close on MSIS and CIAS to significantly reduce steam flow from the steam generators.

CANCEL: UALVES WILL BE EXERCISED
AS REQUIRED BY THE CODE.

UNIT 3
REU. 8

INSERUICE TESTING PROGRAM
SAN ONOFRE - UNIT 3

Ualve Relief Request No. 23
Proposed Revision

SYSTEM: All Systems
COMPONENT: All Power Operated Ualves
CATEGORY: A and B
CLASS: 1, 2 and 3
FUNCTION: N. A.

TEST

REQUIREMENT: If an increase in stroke time of 25% or more from the previous test for valves with stroke times greater than 10 sec. or 50% or more form valves with stroke times less than or equal to 10 sec. is observed, test frequency shall be increased to once each month until corrective action is taken, at which time the original test frequency shall be resumed. In any case, any abnormality or erratic action shall be reported.

BASIS

FOR RELIEF: Comparison with the previous test often causes a needless and inappropriate entry into the increased frequency of testing. A one-time test result of low value can often occur immediately after valve maintenance in which, for example, the stem is lubricated. The following test say, after a normal 92 day interval, can then result in a return to the normal valve stroke time. If the difference between these two times is more than that allowed (25% or 50%) the valve will be put in the increased frequency of testing and require corrective action. This happens frequently and causes valves to be the subject of corrective even when they are functioning properly and normally.

ALTERNATE

TESTING: If an increase in stroke time of 25% or more from the average stroke time since the last maintenance that could have effected stroke time (or last three stroke times, which ever is greater) for valves with stroke times greater than 10 sec. or 50% or more from valves with stroke times less than or equal to 10 sec. is observed, test frequency shall be increased to once each month until corrective action is taken, at which time the original test frequency shall be resumed. In any case, any abnormality or erratic action shall be reported.

UNIT 3
REU. 8

INSERVICE TESTING PROGRAM
SAN ONOFRE - UNIT 3

Valve Relief Request No. 24
Proposed Revision

SYSTEM: All Systems
COMPONENT: All Valves Tested at Cold Shutdown Intervals
CATEGORY: All
CLASS: 1, 2 and 3
FUNCTION: N. A.

TEST

REQUIREMENT: Valves that cannot be exercised during plant operation shall be specifically identified by the Owner and shall be full-stroke exercised during cold shutdowns. Full stroke exercising during cold shutdowns for all valves not full-stroke exercised during plant operation shall be on a frequency determined by the intervals between shutdowns as follows: for intervals of 3 months or longer, exercise during each shutdown; for intervals of less than 3 months, full stroke exercise is not required unless 3 months have passed since last shutdown exercise.

BASIS

FOR RELIEF: If a plant cold shutdown is of such short duration that all of the cold shutdown testing cannot be completed as required, then the plant startup can be delayed for this testing. This has not been required of other plants with approved Inservice Testing Programs.

ALTERNATE

TESTING: Valve testing at cold shutdown shall commence not later than 48 hours after cold shutdown and continue until required testing is completed or plant is ready to return to service. Completion of all required valve testing is not a requisite to plant startup. Valve testing which is not completed during a cold shutdown will be performed during subsequent cold shutdowns to meet the Code specified testing requirements. No valve need be tested more often than once every 90 days. For planned cold shutdowns exception to the 48 hours may be taken, if testing of all the "Cold Shutdown" valves identified in the IST Program will be completed before return to power operation.

UNIT 3
REU. 8

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max.		Relief Requests	Applicable Note Numbers & Remarks
								Test Mode	Stroke Time		
** System: Auxiliary Boiler											
* Valve: 2-037-C-387 40169CS03(D-4)	2	A	2	GA	M	C		AT	RR		9,10&11
				AUXILIARY STEAM INSIDE CONTAINMENT ISOLATION VALVE							
* Valve: 2-038-C-387 40169CS03(E-4)	2	A	2	GA	M	C		AT	RR		9,10&11
				AUXILIARY STEAM OUTSIDE CONTAINMENT ISOLATION VALVE							
** System: Auxiliary Feedwater											
* Valve: HV-4705 40160AS03(E-3)	3	B	6	GL	MO	C	C	BTC	OP	39.6	3,6&12
				S/G E088 AFW CONTROL VALVE							
40160AS03(E-3)	3	B	6	GL	MO	C	O	BTO	OP	29.6	3,6&12
40160AS03(E-3)	3	B	6	GL	MO	C		PIT	RR		3,6&12
* Valve: HV-4706 40160AS03(D-3)	3	B	6	GL	MO	C	C	BTC	OP	39.6	3,6&12
				S/G E089 AFW CONTROL VALVE							
40160AS03(D-3)	3	B	6	GL	MO	C	O	BTC	OP	29.6	3,6&12
40160AS03(D-3)	3	B	6	GL	MO	C		PIT	RR		3,6&12
* Valve: HV-4712 40160AS03(G-3)	3	B	4	GL	MO	C	C	BTC	OP	39.6	3,6&12
				AFP 3P504 DISCHARGE TO STEAM GENERATORS							
40160AS03(G-3)	3	B	4	GL	MO	C	O	BTO	OP	30	3,6&12
40160AS03(G-3)	3	B	4	GL	MO	C		PIT	RR		3,6&12
* Valve: HV-4713 40160AS03(B-3)	3	B	4	GL	MO	C	C	BTC	OP	39.6	3,6&12
				AFP 3P141 DISCHARGE TO STEAM GENERATORS							
40160AS03(B-3)	3	B	4	GL	MO	C	O	BTO	OP	30	3,6&12
40160AS03(B-3)	3	B	4	GL	MO	C		PIT	RR		3,6&12
* Valve: HV-4714 40160AS03(F-1)	2	B	6	GL	EH	C	C	BTC	OP	39.6	3&12
				AFW TO S/G E088 ISOLATION VALVE							
40160AS03(F-1)	2	B	6	GL	EH	C	O	BTO	OP	30	3&12
40160AS03(F-1)	2	B	6	GL	EH	C		FST	OP		3&12
40160AS03(F-1)	2	B	6	GL	EH	C		PIT	RR		3&12
* Valve: HV-4715 40160AS03(D-2)	2	B	6	GL	MO	C	C	BTC	OP	39.6	3,6&12
				AFW TO S/G E089 ISOLATION VALVE							
40160AS03(D-2)	2	B	6	GL	MO	C	O	BTO	OP	29.6	3,6&12
40160AS03(D-2)	2	B	6	GL	MO	C		FST	OP		3,6&12
40160AS03(D-2)	2	B	6	GL	MO	C		PIT	RR		3,6&12
* Valve: HV-4716 40160BS03(E-3)	3	B	4	GA	MO	C	O	BTO	OP	20	3&6
				AFP TURBINE TRIP AND THROTTLE VALVE							
40160BS03(E-3)	3	B	4	GA	MO	C		PIT	RR		3&6

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max.	Relief Requests	Applicable Note
									Test Stroke Time		Numbers & Remarks
* Valve: HV-4730 Tag:3HV4730 AFW TO S/G E088 ISOLATION VALVE											
40160ASO3(F-2)	2	B	6	GL	MO	C	C	BTC OP	39.6		3,6&12
40160ASO3(F-2)	2	B	6	GL	MO	C	O	BTO OP	29.6		3,6&12
40160ASO3(F-2)	2	B	6	GL	MO	C		PIT RR			3,6&12
* Valve: HV-4731 Tag:3HV4731 AFW TO S/G E089 ISOLATION VALVE											
40160ASO3(D-1)	2	B	6	GL	EH	C	C	BTC OP	39.6		3&12
40160ASO3(D-1)	2	B	6	GL	EH	C	O	BTO OP	30		3&12
40160ASO3(D-1)	2	B	6	GL	EH	C		FST OP			3&12
40160ASO3(D-1)	2	B	6	GL	EH	C		PIT RR			3&12
* Valve: HV-4762 Tag:3HV4762 E/H BYPASS VALVE FOR AFW SYS VLV 3HV4712											
40160ASO3(F-3)	3	B	4	GL	EH	C	C	BTC OP	40		3,12
40160ASO3(F-3)	3	B	4	GL	EH	C	O	BTO OP	60		12
40160ASO3(F-3)	3	B	4	GL	EH	C		FST OP			12
40160ASO3(F-3)	3	B	4	GL	EH	C		PIT RR			12
* Valve: HV-4763 Tag:3HV4763 E/H BYPASS VALVE FOR AFW SYS VLV 3HV4713											
40160ASO3(C-3)	3	B	4	GL	EH	C	C	BTC OP	40		3,12
40160ASO3(C-3)	3	B	4	GL	EH	C	O	BTO OP	60		12
40160ASO3(C-3)	3	B	4	GL	EH	C		FST OP			12
40160ASO3(C-3)	3	B	4	GL	EH	C		PIT RR			12
* Valve: 6-121-D-598 Tag:S31305MU121 AFW 3P140 SUPPLY TO S/G E089											
40160ASO3(D-3)	3	C	6	CK	SA	C	O	CVTO CS			5*
* Valve: 6-124-C-599 Tag:S31305MU124 AFW CHECK AT STEAM GENERATOR E089											
40141ASO3(B-7)	2	C	6	CK	SA	C	O	CVTO CS			5*
* Valve: 6-126-D-598 Tag:S31305MU126 AFW 3P141 DISCHARGE CHECK VALVE											
40160ASO3(B-5)	3	C	6	CK	SA	C	O	CVTO CS			5*
* Valve: 6-448-C-599 Tag:S31305MU448 AFW CHECK AT STEAM GENERATOR E088											
40141ASO3(F-7)	2	C	6	CK	SA	C	O	CVTO CS			5*
* Valve: 6-532-D-598 Tag:S31305MU532 AFW 3P504 DISCHARGE CHECK VALVE											
40160ASO3(G-4)	3	C	6	CK	SA	C	O	CVTO CS			5*
* Valve: 6-547-D-598 Tag:S31305MU547 AFW 3P140 DISCHARGE CHECK VALVE											
40160ASO3(E-3)	3	C	6	CK	SA	C	O	CVTO CS			5*

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max.	Relief Requests	Applicable Note
									Test Time		Numbers & Remarks
** System: Auxiliary Gas											
* Valve: HV-5434		Tag:3HV5434		NITROGEN TO SAFETY INJECTION TANKS							
40192CSO3(D-6)	2	A	2	GL	AO	C		AT	RR		3&10
40192CSO3(D-6)	2	A	2	GL	AO	C	C	BTC	OP	40	3&10
40192CSO3(D-6)	2	A	2	GL	AO	C		FST	OP		3&10
40192CSO3(D-6)	2	A	2	GL	AO	C		PIT	RR		3&10
* Valve: HV-5437		Tag:3HV5437		NITROGEN SUPPLY TO CONTAINMENT							
40192CSO3(F-5)	2	A	3/4	GL	AO	O		AT	RR		3&10
40192CSO3(F-5)	2	A	3/4	GL	AO	O	C	BTC	OP	40	3&10
40192CSO3(F-5)	2	A	3/4	GL	AO	O		FST	OP		3&10
40192CSO3(F-5)	2	A	3/4	GL	AO	O		PIT	RR		3&10
* Valve: 3/4-002-C-611		Tag:S32418MU002		NITROGEN SUPPLY TO CONTAINMENT							
40192CSO3(E-5)	2	AC	3/4	CK	SA	C		AT	RR		9&10
* Valve: 2-108-C-627		Tag:S32418MU108		NITROGEN SUPPLY TO SAFETY INJECTION TANKS CHECK VALVE							
40192CSO3(C-6)	2	AC	2	CK	SA	C		AT	RR		9&10
** System: Chemical and Volume Control											
* Valve: FV-9253		Tag:3FV9253		MAKE UP WATER TO VCT							
40125BSO3(G-2)	3	B	3	GL	AO	C	C	BTC	OP	5	
40125BSO3(G-2)	3	B	3	GL	AO	C		FST	OP		
40125BSO3(G-2)	3	B	3	GL	AO	C		PIT	RR		
* Valve: HV-9200		Tag:3HV9200		CHARGING PUMPS TO REGEN HEAT EXCHANGER E063							
40123ASO3(D-3)	2	A	2	GL	AO	O		AT	RR		5,10&12*
40123ASO3(D-3)	2	A	2	GL	AO	O	C	BTC	CS	40	5,10&12*
40123ASO3(D-3)	2	A	2	GL	AO	O	O	BTO	CS	40	5,10&12*
40123ASO3(D-3)	2	A	2	GL	AO	O		FST	CS		5,10&12*
40123ASO3(D-3)	2	A	2	GL	AO	O		PIT	RR		5,10&12*
* Valve: HV-9201		Tag:3HV9201		REGEN HEAT EXCHANGER E063 TO AUXILIARY SPRAY							
40123ASO3(C-6)	1	B	2	GA	MO	C	C	BTC	CS	40	5,6&12*
40123ASO3(C-6)	1	B	2	GA	MO	C	O	BTO	CS	40	5,6&12*
40123ASO3(C-6)	1	B	2	GA	MO	C		PIT	RR		5,6&12*
* Valve: HV-9202		Tag:3HV9202		REGEN HEAT EXCHANGER E063 TO RCS LOOP 2A							
40123ASO3(E-6)	1	B	2	GA	MO	O	C	BTC	CS	40	6&12*
40123ASO3(E-6)	1	B	2	GA	MO	O	O	BTO	CS	40	6&12*
40123ASO3(E-6)	1	B	2	GA	MO	O		PIT	RR		6&12*

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code	Valve Class Category	Size	Valve Actuator		Normal Stroke		Max. Test Stroke		Relief Requests	Applicable Note Numbers & Remarks
				Type	Type	Pos.	Dir.	Test Mode	Time		
* Valve: HV-9203 Tag:3HV9203 REGEN HEAT EXCHANGER E063 TO RCS LOOP 1A											
40123AS03(F-6)	1	B	2	GA	MO	O	C	BTC	CS	40	6&12*
40123AS03(E-6)	1	B	2	GA	MO	O	O	BTO	CS	40	6&12*
40123AS03(E-6)	1	B	2	GA	MO	O		PIT	RR		6&12*
* Valve: HV-9204 Tag:3HV9204 RCS LOOP 2B LETDOWN TO REGEN HX											
40123AS03(F-6)	1	B	2	GA	AO	O	C	BTC	CS	30	5*
40123AS03(F-6)	1	B	2	GA	AO	O		FST	CS		5*
40123AS03(F-6)	1	J)	2	GA	AO	O		PIT	RR		5*
* Valve: HV-9205 Tag:3HV9205 REGEN HX TO LETDOWN HX											
40123AS03(F-3)	2	A	2	GL	AO	O		AT	RR		3,5&10*
40123AS03(F-3)	2	A	2	GL	AO	O	C	BTC	CS	40	3,5&10*
40123AS03(F-3)	2	A	2	GL	AO	O		FST	CS		3,5&10*
40123AS03(F-3)	2	A	2	GL	AO	O		PIT	RR		3,5&10*
* Valve: HV-9217 Tag:3HV9217 RCS BLEED OFF TO VCT											
40124AS03(G-2)	2	A	3/4	GL	MO	O		AT	RR		3,5,6 & 10*
40124AS03(G-2)	2	A	3/4	GL	MO	O	C	BTC	CS	40	3,5,6 & 10*
40124AS03(G-2)	2	A	3/4	GL	MO	O		PIT	RR		3,5,6 & 10*
* Valve: HV-9218 Tag:3HV9218 RCS BLEED OFF TO VCT ISOLATION VALVE INSIDE CONTAINMENT											
40124AS03(F-3)	2	A	3/4	GL	MO	O		AT	RR		3,5&10*
40124AS03(F-3)	2	A	3/4	GL	MO	O	C	BTC	CS	40	3,5&10*
40124AS03(F-3)	2	A	3/4	GL	MO	O		FST	CS		3,5&10*
40124AS03(F-3)	2	A	3/4	GL	MO	O		PIT	RR		3,5&10*
* Valve: HV-9231 Tag:3HV9231 BAMU PUMP 3P175 RECIRC TO TANK T072											
40125AS03(D-8)	3	B	2	GL	AO	C	C	BTC	OP	5	
40125AS03(D-8)	3	B	2	GL	AO	C		FST	OP		
40125AS03(D-8)	3	B	2	GL	AO	C		PIT	RR		
* Valve: HV-9235 Tag:3HV9235 BAMU TANK T072 TO GRAVITY FEED TO CHARGING PUMP SUCTION											
40125AS03(B-5)	3	B	3	GA	MO	C	O	BTO	CS	20	5&6*
40125AS03(B-5)	3	B	3	GA	MO	C		PIT	RR		5&6*
* Valve: HV-9236 Tag:3HV9236 BAMU PUMP 3P174 RECIRC TO TANK T071											
40125AS03(D-1)	3	B	2	GL	AO	C	C	BTC	OP	5	
40125AS03(D-1)	3	B	2	GL	AO	C		FST	OP		
40125AS03(D-1)	3	B	2	GL	AO	C		PIT	RR		

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code	Valve Class	Valve Category	Valve Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable
												Note Numbers & Remarks
* Valve: HV-9240 Tag:3HV9240 BAMU TANK T071 TO CHARGING SUCTION HEADER CONTROL VALVE												
40125AS03(B-4)	3	B	3		GA	MO	C	O	BTO	CS	20	5&6*
40125AS03(B-4)	3	B	3		GA	MO	C		PIT	RR		5&6*
* Valve: HV-9247 Tag:3HV9247 BAMU PUMP TO CHARGING PUMP SUCTION CONTROL VALVE												
40125BS03(E-5)	3	B	3		GA	MO	C	O	BTO	CS	20	5&6*
40125BS03(E-5)	3	B	3		GA	MO	C		PIT	RR		5&6*
* Valve: LV-0227B Tag:3LV0227B VCT OUTLET VALVE												
40124AS03(B-5)	2	B	4		GA	MO	O	C	BTC	CS	20	5&6*
40124AS03(B-5)	2	B	4		GA	MO	O		PIT	RR		5&6*
* Valve: LV-0227C Tag:3LV0227C RWST TO CHARGING PUMP SUCTION												
40124BS03(A-7)	2	B	4		GA	MO	C	O	BTO	CS	20	5&6*
40124BS03(A-7)	2	B	4		GA	MO	C		PIT	RR		5&6*
* Valve: TV-0221 Tag:3TV0221 LETDOWN ISOLATION VALVE												
40123AS03(F-6)	1	B	2		GL	AO	O	C	BTC	CS	5	5*
40123AS03(F-6)	1	B	2		GL	AO	O		FST	CS		5*
40123AS03(F-6)	1	B	2		GL	AO	O		PIT	RR		5*
* Valve: TV-9267 Tag:3TV9267 LETDOWN CONTAINMENT ISOLATION VALVE												
40123AS03(F-3)	2	A	2		GA	MO	O		AT	RR		3,5,6&10*
40123AS03(F-3)	2	A	2		GA	MO	O	C	BTC	CS	40	3,5,6&10*
40123AS03(F-3)	2	A	2		GA	MO	O		PIT	RR		3,5,6&10*
* Valve: 2-019-A-554 Tag:S31201MU019 AUXILIARY SPRAY CHECK VALVE												
40123AS03(C-7)	1	C	2		CK	SA	C	O	CVTO	CS		5*
* Valve: 2-020-A-554 Tag:S31201MU020 CHARGING LINE CHECK VALVE TO RCS LOOP 2A												
40123AS03(E-7)	1	C	2		CK	SA	C	O	CVTO	CS		*
* Valve: 2-021-A-554 Tag:S31201MU021 CHARGING LINE CHECK VALVE TO RCS LOOP 1A												
40123AS03(D-7)	1	C	2		CK	SA	C	O	CVTO	CS		*
* Valve: 2-129-A-554 Tag:S31201MU129 AUXILIARY SPRAY TO RCS FROM CHARGING PUMPS												
40123AS03(B-3)	1	AC	2		CK	SA	C		AT	RR		10*
40123AS03(B-3)	1	AC	2		CK	SA	C	O	CVTO	CS		10*
* Valve: 4-015-C-675 Tag:S31208MU015 VCT TO CHARGING PUMP SUCTION CHECK VALVE												
40124AS03(B-4)	2	C	4		CK	SA	O	C	CVTC	CS		*
* Valve: 2-017-C-554 Tag:S31208MU017 CHARGING PUMP 3P192 DISCHARGE CHECK VALVE												
40124BS03(C-3)	2	C	2		CK	SA	C	O	CVTO	OP		

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 2-067-C-554 40124BSO3(G-2)	2	C	2	CK	SA	C	O	CVTO	OP		
Tag: S31208MU067		CHARGING PUMP 3P190 DISCHARGE CHECK VALVE									
* Valve: 2-069-C-554 40124BSO3(D-2)	2	C	2	CK	SA	C	O	CVTO	OP		
Tag: S31208MU069		CHARGING PUMP 3P191 DISCHARGE CHECK VALVE									
* Valve: 3-082-C-675 40124BSO3(H-5)	2	C	3	CK	SA	C	O	CVTO	CS		5*
Tag: S31208MU082		GRAV FEED - BAMU TANKS TO CHARGING PUMP 3P190 SUCTION									
* Valve: 3-083-C-675 40124BSO3(F-7)	2	C	3	CK	SA	C	O	CVTO	CS		5*
Tag: S31208MU083		BAMU PUMPS TO CHARGING PUMPS SUCTION HEADER									
* Valve: 2-122-C-554 40123ASO3(D-4)	2	AC	2	CK	SA	C		AT	RR	14	10
Tag: S31208MU122		CHARGING PUMPS TO REGEN HX E063 CHECK VALVE									
40123ASO3(D-4)	2	AC	2	CK	SA	C	C	CVTC	OP	14	10
40123ASO3(D-4)	2	AC	2	CK	SA	C	O	CVTO	OP	14	10
* Valve: 2-130-C-334 40123ASO3(B-2)	2	A	2	GL	M	C		AT	RR		4&10*
Tag: S31208MU130		CHG PP DISCH TO AUX SP REGN HX BYPASS CONTMT ISOL									
40123ASO3(B-2)	2	A	2	GL	M	C	C	BTC	CS		4&10*
40123ASO3(B-2)	2	A	2	GL	M	C	O	BTO	CS		4&10*
40123ASO3(B-2)	2	A	2	GL	M	C		PIT	RR		4&10*
* Valve: 3-033-D-675 40125BSO3(B-5)	3	C	3	CK	SA	C	O	CVTO	CS		*
Tag: S31218MU033		BAMU PUMP 3P175 DISCHARGE CHECK VALVE									
* Valve: 3-035-D-675 40125BSO3(C-5)	3	C	3	CK	SA	C	O	CVTO	CS		*
Tag: S31218MU035		BAMU PUMP 3P174 DISCHARGE CHECK VALVE									
* Valve: 3-046-Y-675 40125BSO3(G-3)		C	3	CK	SA	C	C	CVTC	OP		
Tag: S31218MU046		DEMIN WATER TO BORIC ACID MIXING TEE									
* Valve: 6-052-C-675 40124BSO3(B-7)	2	C	6	CK	SA	C	O	CVTO	CS		5*
Tag: S31219MU052		RWFT T006 TO CHARGING PUMP SUCTION HEADER									
** System: Component Cooling Water											
* Valve: HCV-6537 40127ASO3(F-2)	3	B	10	BTF	AO	O	C	BTC	OP	10	
Tag: 3HCV6537		CCW PUMP 3P024 MINIFLOW BLOCK VALVE									
40127ASO3(F-2)	3	B	10	BTF	AO	O		FST	OP		
* Valve: HCV-6538 40127ASO3(E-2)	3	B	10	BTF	AO	O	C	BTC	OP	10	
Tag: 3HCV6538		CCW PUMP 3P025 MINIFLOW BLOCK VALVE									
40127ASO3(E-2)	3	B	10	BTF	AO	O		FST	OP		

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Test Stroke Time	Relief Requests	Applicable
											Note
* Valve: HCV-6539 Tag:3HCV6539 CCV PUMP 3P026 MINIFLOW BLOCK VALVE											
40127ASO3(B-2)	3	B	10	BTF	AO	O	C	BTC	OP	10	
40127ASO3(B-2)	3	B	10	BTF	AO	O		FST	OP		
* Valve: HV-6200 Tag:3HV6200 SWCS PUMP 3P112 DISCH VALVE											
40126ASO3(G-3)	3	B	30	BTF	AO	OC	O	BTO	OP	20	
40126ASO3(G-3)	3	B	30	BTF	AO	OC		FST	OP		
40126ASO3(G-3)	3	B	30	BTF	AO	OC		PIT	RR		
* Valve: HV-6201 Tag:3HV6201 SWCS PUMP 3P113 DISCH VALVE											
40126ASO3(E-3)	3	B	30	BTF	AO	OC	O	BTO	OP	20	
40126ASO3(E-3)	3	B	30	BTF	AO	OC		FST	OP		
40126ASO3(E-3)	3	B	30	BTF	AO	OC		PIT	RR		
* Valve: HV-6202 Tag:3HV6202 SWCS PUMP 3P307 DISCHARGE											
40126BSO3(G-3)	3	B	30	BTF	AO	OC	O	BTO	OP	20	
40126BSO3(G-3)	3	B	30	BTF	AO	OC		FST	OP		
40126BSO3(G-3)	3	B	30	BTF	AO	OC		PIT	RR		
* Valve: HV-6203 Tag:3HV6203 SWCS PUMP 3P114 DISCHARGE											
40126BSO3(E-3)	3	B	30	BTF	AO	OC	O	BTO	OP	20	
40126BSO3(E-3)	3	B	30	BTF	AO	OC		FST	OP		
40126BSO3(E-3)	3	B	30	BTF	AO	OC		PIT	RR		
* Valve: HV-6211 Tag:3HV6211 CCW NON-CRIT LOOP TO CONTMT ISOL											
40127FSO3(G-3)	2	A	10	BTF	MO	O		AT	RR		3,5,6&10*
40127FSO3(G-3)	2	A	10	BTF	MO	O	C	BTC	CS	40	3,5,6&10*
40127FSO3(G-3)	2	A	10	BTF	MO	O		PIT	RR		3,5,6&10*
* Valve: HV-6212 Tag:3HV6212 CCW FROM HX E001A TO NON-CRITICAL LOOP											
40127DSO3(E-7)	3	B	28	BTF	AO	O	C	BTC	CS	19.7	3*
40127DSO3(E-7)	3	B	28	BTF	AO	O		FST	CS		3*
40127DSO3(E-7)	3	B	28	BTF	AO	O		PIT	RR		3*
* Valve: HV-6213 Tag:3HV6213 COMPONENT COOLING WATER DISCHARGE TO NON-CRITICAL LOOP											
40127DSO3(D-7)	3	B	28	BTF	AO	O	C	BTC	CS	19.7	3*
40127DSO3(D-7)	3	B	28	BTF	AO	O		FST	CS		3*
40127DSO3(D-7)	3	B	28	BTF	AO	O		PIT	RR		3*
* Valve: HV-6216 Tag:3HV6216 CCW NON-CRIT LOOP FM CONTMT ISOL											
40127FSO3(C-5)	2	A	10	BTF	MO	O		AT	RR		3,5,6&10*
40127FSO3(C-5)	2	A	10	BTF	MO	O	C	BTC	CS	40	3,5,6&10*
40127FSO3(C-5)	2	A	10	BTF	MO	O		PIT	RR		3,5,6&10*

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code	Valve Class Category	Valve Size	Actuator Type	Normal Stroke Pos.	Stroke Dir.	Test Mode	Max. Test Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: HV-6218 Tag:3HV6218 CCW PUMP SUCTION FROM NON-CRITICAL LOOP										
40127ASO3(E-7)	3	B	28	BTF AO	O	C	BTC CS	19.7		3&5*
40127ASO3(E-7)	3	B	28	BTF AO	O		FST CS			3&5*
40127ASO3(E-7)	3	B	28	BTF AO	O		PIT RR			3&5*
* Valve: HV-6219 Tag:3HV6219 CCW PUMP SUCTION FROM NON-CRITICAL LOOP										
40127ASO3(D-7)	3	B	28	BTF AO	O	C	BTC CS	19.7		3&5*
40127ASO3(D-7)	3	B	28	BTF AO	O		FST CS			3&5*
40127ASO3(D-7)	3	B	28	BTF AO	O		PIT RR			3&5*
* Valve: HV-6223 Tag:3HV6223 CCW NON-CRIT LOOP CONTMT INLET ISOL										
40127FSO3(G-4)	2	A	10	BTF MO	O		AT RR			3,5,6&10*
40127FSO3(G-4)	2	A	10	BTF MO	O	C	BTC CS	40		3,5,6&10*
40127FSO3(G-4)	2	A	10	BTF MO	O		PIT RR			3,5,6&10*
* Valve: HV-6236 Tag:3HV6236 CCW NON-CRIT LOOP RET. CONTMT ISOL										
40127FSO3(C-6)	2	A	10	BTF MO	O		AT RR			3,5,6&10*
40127FSO3(C-6)	2	A	10	BTF MO	O	O	BTO CS	40		3,5,6&10*
40127FSO3(C-6)	2	A	10	BTF MO	O		PIT RR			3,5,6&10*
* Valve: HV-6495 Tag:3HV6495 SALT WATER FROM CCW HEAT EXCHANGER E002B										
40127CSO3(E-2)	3	B	30	BTF MO	C	O	BTO OP	60		6
40127CSO3(E-2)	3	B	30	BTF MO	C		PIT RR			6
* Valve: HV-6497 Tag:3HV6497 SALT WATER FROM CCW HEAT EXCHANGER E001A										
40127CSO3(B-2)	3	B	30	BTF MO	C	O	BTO OP	60		6
40127CSO3(B-2)	3	B	30	BTF MO	C		PIT RR			6
* Valve: HV-6500 Tag:3HV6500 COMPONENT COOLING WATER FROM SDCS HX E003										
40127ESO3(F-4)	3	B	18	BTF AO	C	O	BTO CS	10		3&5*
40127ESO3(F-4)	3	B	18	BTF AO	C		FST CS			3&5*
40127ESO3(F-4)	3	B	18	BTF AO	C		PIT RR			3&5*
* Valve: HV-6501 Tag:3HV6501 COMPONENT COOLING WATER FROM SDCS HX E004										
40127ESO3(C-4)	3	B	18	BTF AO	C	O	BTO CS	10		3&5*
40127ESO3(C-4)	3	B	18	BTF AO	C		FST CS			3&5*
40127ESO3(C-4)	3	B	18	BTF AO	C		PIT RR			3&5*
* Valve: 28-101-D-725 Tag:S31203MU101 CCW PUMP 3P024 DISCHARGE CHECK										
40127ASO3(G-4)	3	C	28	SDCK SA	OC	O	CVPO OP			12*
40127ASO3(G-4)	3	C	28	SDCK SA	OC	C	CVTC CS			12*
40127ASO3(G-4)	3	C	28	SDCK SA	OC	O	CVTO CS			12*
* Valve: 28-102-D-725 Tag:S31203MU102 CCW PUMP 3P026 DISCHARGE CHECK										
40127ASO3(B-4)	3	C	28	SDCK SA	OC	O	CVPO OP			12*

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Actuator		Normal Stroke		Max. Test Stroke		Relief Requests	Applicable Note Numbers & Remarks
				Type	Type	Pos.	Dir.	Test Mode	Time		
40127AS03(B-4)	3	C	28	SDCK	SA	OC	C	CVTC	CS		12*
40127AS03(B-4)	3	C	28	SDCK	SA	OC	O	CVTO	CS		12*
* Valve: 28-103-D-725 Tag:S31203MU103 CCW PUMP 3P025 DISCHARGE CHECK											
40127AS03(D-4)	3	C	28	SDCK	SA	OC	O	CVPO	OP		12*
40127AS03(D-4)	3	C	28	SDCK	SA	OC	C	CVTC	CS		12*
40127AS03(D-4)	3	C	28	SDCK	SA	OC	O	CVTO	CS		12*
* Valve: 30-009-D-722 Tag:S31413MU009 SWCS PUMP 3P112 DISCHARGE CHECK											
40126AS03(G-4)	3	C	30	SDCK	SA	OC	C	CVTC	OP		
40126AS03(G-4)	3	C	30	SDCK	SA	OC	O	CVTO	OP		
* Valve: 30-010-D-722 Tag:S31413MU010 SWCS PUMP 3P113 DISCHARGE CHECK											
40126AS03(D-4)	3	C	30	SDCK	SA	OC	C	CVTC	OP		
40126AS03(D-4)	3	C	30	SDCK	SA	OC	O	CVTO	OP		
* Valve: 30-011-D-722 Tag:S31413MU011 SWCS PUMP 3P307 DISCHARGE CHECK											
40126BS03(G-4)	3	C	30	SDCK	SA	OC	C	CVTC	OP		
40126BS03(G-4)	3	C	30	SDCK	SA	OC	O	CVTO	OP		
* Valve: 30-012-D-722 Tag:S31413MU012 SWCS PUMP 3P114 DISCHARGE CHECK											
40126BS03(E-4)	3	C	30	SDCK	SA	OC	C	CVTC	OP		
40126BS03(E-4)	3	C	30	SDCK	SA	OC	O	CVTO	OP		
* Valve: 1-013-D-691 Tag:S31413MU013 SWCS PUMP 3P112 RECIRC TO CYCLONE SEPARATOR											
40126AS03(F-4)	3	C	1	CK	SA	C	O	CVTO	OP		
* Valve: 1-016-D-691 Tag:S31413MU016 SWCS PUMP 3P113 RECIRC TO CYCLONE SEPARATOR											
40126AS03(D-4)	3	C	1	CK	SA	C	O	CVTO	OP		
* Valve: 1-021-D-691 Tag:S31413MU021 SWCS PUMP 3P307 RECIRC TO CYCLONE SEPARATOR											
40126BS03(F-4)	3	C	1	CK	SA	C	O	CVTO	OP		
* Valve: 1-024-D-691 Tag:S31413MU024 SWCS PUMP 3P114 RECIRC TO CYCLONE SEPARATOR											
40126BS03(D-4)	3	C	1	CK	SA	C	O	CVTO	OP		
** System: Compressed Air											
* Valve: HV-5388 Tag:3HV5388 CONTAINMENT ISOLATION VALVE - INSTRUMENT AIR											
40191GS03(G-6)	2	A	1-1/2	GL	AO	O		AT	RR		3&10*
40191GS03(G-6)	2	A	1-1/2	GL	AO	O	C	BTC	CS	40	3&10*
40191GS03(G-6)	2	A	1-1/2	GL	AO	O		FST	CS		3&10*
* Valve: 1-1/2-016-C-617 Tag:S32417MU016 INSTRUMENT AIR CONTMT ISOL CHECK - INSIDE CONTMT											
40191GS03(G-6)	2	AC	1-1/2	CK	SA	C		AT	RR		9&10

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max. Test Stroke Test Mode	Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 2-017-C-627 40191ES03(C-4)	2	AC	2	CK	SA	C		AT RR			9&10
CONTAINMENT ISOLATION VALVE - SERVICE AIR											
* Valve: 2-055-C-387 40191ES03(C-5)	2	A	2	GL	M	C		AT RR			9&10
CONTAINMENT ISOLATION VALVE - SERVICE AIR											
** System: Containment Spray											
* Valve: HV-8150 40114BS03(E-5)	2	B	10	GL	MO	C	C	BTC CS	180		6&12*
SDCS HX E004 TO LPSI HEADER ISOLATION VALVE											
40114BS03(E-5)	2	B	10	GL	MO	C	O	BTO CS	180		6&12*
40114BS03(E-5)	2	B	10	GL	MO	C		PIT RR			6&12*
* Valve: HV-8151 40114BS03(F-5)	2	B	10	GL	MO	C	C	BTC CS	180		6&12*
SDCS HX E003 TO LPSI HEADER ISOLATION VALVE											
40114BS03(F-5)	2	B	10	GL	MO	C	O	BTO CS	180		6&12*
40114BS03(F-5)	2	B	10	GL	MO	C		PIT RR			6&12*
* Valve: HV-9306 40114DS03(B-3)	2	B	4	GA	MO	O	C	BTC OP	40		3&6
SI RECIRC RETURN TO RWST T005 ISOLATION VALVE											
40114DS03(B-3)	2	B	4	GA	MO	O		PIT RR			3&6
* Valve: HV-9307 40114DS03(B-4)	2	B	4	GA	MO	O	C	BTC OP	40		3&6
SI RECIRC RETURN TO RWST T005 ISOLATION VALVE											
40114DS03(B-4)	2	B	4	GA	MO	O		PIT RR			3&6
* Valve: HV-9347 40114DS03(D-3)	2	B	4	GA	MO	O	C	BTC OP	40		3&6
SI RECIRC RETURN TO RWST T005 ISOLATION VALVE											
40114DS03(D-3)	2	B	4	GA	MO	O		PIT RR			3&6
* Valve: HV-9348 40114DS03(D-4)	2	B	4	GA	MO	O	C	BTC OP	40		3&6
SI RECIRC RETURN TO RWST T005 ISOLATION VALVE											
40114DS03(D-4)	2	B	4	GA	MO	O		PIT RR			3&6
* Valve: HV-9367 40114BS03(C-4)	2	A	8	GA	MO	C		AT RR			3,6&10
SPRAY HEADER #1 CONTAINMENT ISOLATION MOV											
40114BS03(C-4)	2	A	8	GA	MO	C	O	BTO OP	10		3,6&10
40114BS03(C-4)	2	A	8	GA	MO	C		PIT RR			3,6&10
* Valve: HV-9368 40114BS03(G-4)	2	A	8	GA	MO	C		AT RR			3,6&10
SPRAY HEADER #2 CONTAINMENT ISOLATION MOV											
40114BS03(G-4)	2	A	8	GA	MO	C	O	BTO OP	10		3,6&10
40114BS03(G-4)	2	A	8	GA	MO	C		PIT RR			3,6&10

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max. Test Stroke Test Mode	Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 16-087-C-675 40114AS03(F-6)	2	C	16	CK	SA	C	O	CVTO	CS		5*
Tag: S31204MU087	SPRAY PUMP 3P013 SUCTION CHECK VALVE										
* Valve: 16-088-C-675 40114AS03(C-6)	2	C	16	CK	SA	C	O	CVTO	CS		5*
Tag: S31204MU088	SPRAY PUMP 3P012 SUCTION CHECK VALVE										
* Valve: 8-004-C-406 40114BS03(C-3)	2	AC	8	SCK	SA	C		AT	RR	13	1a,5,8&10
40114BS03(C-3)	2	AC	8	SCK	SA	C	O	CVTO	RR	13	1a,5,8&10
Tag: S31206MU004	SPRAY HEADER #1 CONTAINMENT ISOLATION STOP CHECK										
* Valve: 8-006-C-406 40114BS03(G-3)	2	AC	8	SCK	SA	C		AT	RR	13	1a,5,8&10
40114BS03(G-3)	2	AC	8	SCK	SA	C	O	CVTO	RR	13	1a,5,8&10
Tag: S31206MU006	SPRAY HEADER #2 CONTAINMENT ISOLATION STOP CHECK										
* Valve: 2-010-C-329 40114AS03(D-3)	2	C	2	SCK	SA	C	O	CVTO	OP		
Tag: S31206MU010	PUMP 3P012 MINIFLOW STOP CHECK										
* Valve: 2-011-C-329 40114AS03(H-3)	2	C	2	SCK	SA	C	O	CVTO	OP		
Tag: S31206MU011	PUMP 3P013 MINIFLOW STOP CHECK										
* Valve: 8-012-C-406 40114AS03(C-3)	2	C	8	SCK	SA	C	C	CVTC	CS		5*
40114AS03(C-3)	2	C	8	SCK	SA	C	O	CVTO	CS		5*
Tag: S31206MU012	SPRAY PUMP 3P012 DISCHARGE STOP CHECK VALVE										
* Valve: 8-014-C-406 40114AS03(G-3)	2	C	8	SCK	SA	C	C	CVTC	CS		5*
40114AS03(G-3)	2	C	8	SCK	SA	C	O	CVTO	CS		5*
Tag: S31206MU014	SPRAY PUMP 3P013 DISCHARGE STOP CHECK VALVE										
* Valve: 8-029-C-645 40114AS03(C-3)	2	C	8	CK	SA	C	C	CVTC	CS		5*
40114AS03(C-3)	2	C	8	CK	SA	C	O	CVTO	CS		5*
Tag: S31206MU029	SPRAY PUMP 3P012 DISCHARGE TO SDCS HX E004 CHECK VALVE										
* Valve: 8-030-C-645 40114AS03(G-3)	2	C	8	CK	SA	C	C	CVTC	CS		5*
40114AS03(G-3)	2	C	8	CK	SA	C	O	CVTO	CS		5*
Tag: S31206MU030	SPRAY PUMP 3P013 DISCHARGE TO SDCS HX E003 CHECK VALVE										
** System: Diesel Fuel Storage											
* Valve: 2-039-D-627 40116AS03(C-7)	3	C	2	CK	SA	C	O	CVTO	OP		
Tag: S32421MU039	DG FUEL OIL TRANSFER PUMP 3P096 DISCHARGE CHECK										
* Valve: 2-048-D-627 40116AS03(D-7)	3	C	2	CK	SA	C	O	CVTO	OP		
Tag: S32421MU048	DG FUEL OIL TRANSFER PUMP 3P093 DISCHARGE CHECK										

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Test Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 2-054-D-627 40116ASO3(C-3)	3	C	2	CK	SA	C	O	CVTO	OP		
Tag: S32421MU054 DG FUEL OIL TRANSFER PUMP 3P095 DISCHARGE CHECK											
* Valve: 2-063-D-627 40116ASO3(D-4)	3	C	2	CK	SA	C	O	CVTO	OP		
Tag: S32421MU063 DG FUEL OIL TRANSFER PUMP 3P094 DISCHARGE CHECK											
** System: Fire Protection											
* Valve: HV-5686 40139BSO3(D-3)	2	A	4	GA	MO	C		AT	RR		3,10 & 11*
Tag: 3HV5686 FIRE PROTECTION SYSTEM WATER CONTMT ISOL VALVE OUTSIDE											
40189BSO3(D-3)	2	A	4	GA	MO	C	C	BTC	CS 40		3,10 & 11*
40189BSO3(D-3)	2	A	4	GA	MO	C		PIT	RR		3,10 & 11*
* Valve: 4-095-C-681 40189BSO3(D-4)	2	AC	4	CK	SA	C		AT	RR		9,10&11
Tag: SA2301MU095 FIRE PROTECTION SYSTEM WATER CONTMT ISOL VALVE INSIDE											
** System: Fuel Pool Cooling											
* Valve: 10-100-C-212 40122ASO3(G-4)	2	A	10	GA	M	C		AT	RR		9,10&11
Tag: S31219MU100 REFUELING POOL OUTLET INSIDE CONTAINMENT											
* Valve: 10-101-C-212 40122ASO3(G-4)	2	A	10	GA	M	C		AT	RR		9,10&11
Tag: S31219MU101 REFUELING POOL OUTLET OUTSIDE CONTMT TO PUMP 2P014											
** System: Gas Radwaste											
* Valve: HV-7258 40131ASO3(F-3)	2	A	3	GA	MO	O		AT	RR		3,6&10
Tag: 3HV7258 WASTE GAS FM CONTMT TO SURGE TNK CONTMT ISOLATION											
40131ASO3(F-3)	2	A	3	GA	MO	O	C	BTC	OP 40		3,6&10
40131ASO3(F-3)	2	A	3	GA	MO	O		PIT	RR		3,6&10
* Valve: HV-7259 40131ASO3(F-2)	2	A	3	GA	AO	O		AT	RR		3&10
Tag: 3HV7259 SI TANK VENT HDR CONTMT ISOL											
40131ASO3(F-2)	2	A	3	GA	AO	O	C	BTC	OP 40		3&10
40131ASO3(F-2)	2	A	3	GA	AO	O		FST	OP		3&10
40131ASO3(F-2)	2	A	3	GA	AO	O		PIT	RR		3&10
** System: HVAC (Emergency)											
* Valve: HCV-9918 40172BSO3(G-2)	2	A	6	BTF	M	C		AT	RR		10&11
Tag: 3HCV9918 HYDROGEN PURGE EXHAUST CONTROL VALVE											
* Valve: HCV-9945 40172BSO3(G-5)	2	A	6	BTF	M	C		AT	RR		10&11
Tag: 3HCV9945 HYDROGEN PURGE UNIT A-080 DISCHARGE											

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code	Valve Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable
												Note
* Valve: HV-0500 40172AS03(C-3)	2	A	1		GA	SO	C		AT	RR		9,10&11
POST LOCA HYDROGEN MONITOR												
* Valve: HV-0501 40172AS03(D-2)	2	A	1		GA	SO	C		AT	RR		9,10&11
POST LOCA HYDROGEN MONITOR												
* Valve: HV-0502 40172AS03(B-3)	2	A	1		GA	SO	C		AT	RR		9,10&11
POST LOCA HYDROGEN MONITOR												
* Valve: HV-0503 40172AS03(B-2)	2	A	1		GA	SO	C		AT	RR		9,10&11
POST LOCA HYDROGEN MONITOR												
* Valve: HV-6366 40172BS03(C-7)	2	A	10		GA	MO	O		AT	RR		3,6&10
CCW TO EMERGENCY COOLING UNIT E-401												
40172BS03(C-7)	2	A	10		GA	MO	O	C	BTC	OP	11.8	3,6&10
40172BS03(C-7)	2	A	10		GA	MO	O	O	BTO	OP	11.8	3,6&10
40172BS03(C-7)	2	A	10		GA	MO	O		PIT	RR		3,6&10
* Valve: HV-6367 40172BS03(D-7)	2	A	10		GA	MO	C		AT	RR		3,6&10
CCW FM EMERGENCY COOLING UNIT E-401												
40172BS03(D-7)	2	A	10		GA	MO	C	C	BTC	OP	11.8	3,6&10
40172BS03(D-7)	2	A	10		GA	MO	C	O	BTO	OP	11.8	3,6&10
40172BS03(D-7)	2	A	10		GA	MO	C		PIT	RR		3,6&10
* Valve: HV-6368 40172BS03(E-7)	2	A	10		GA	MO	O		AT	RR		3,6&10
CCW TO EMERGENCY COOLING UNIT E-400												
40172BS03(E-7)	2	A	10		GA	MO	O	C	BTC	OP	11.8	3,6&10
40172BS03(E-7)	2	A	10		GA	MO	O	O	BTO	OP	11.8	3,6&10
40172BS03(E-7)	2	A	10		GA	MO	O		PIT	RR		3,6&10
* Valve: HV-6369 40172BS03(F-7)	2	A	10		GA	MO	C		AT	RR		3,6&10
CCW FM EMERGENCY COOLING UNIT E-400												
40172BS03(F-7)	2	A	10		GA	MO	C	C	BTC	OP	11.8	3,6&10
40172BS03(F-7)	2	A	10		GA	MO	C	O	BTO	OP	11.8	3,6&10
40172BS03(F-7)	2	A	10		GA	MO	C		PIT	RR		3,6&10
* Valve: HV-6370 40172BS03(D-2)	2	A	10		GA	MO	O		AT	RR		3,6&10
CCW TO EMERGENCY COOLING UNIT E-399												
40172BS03(D-2)	2	A	10		GA	MO	O	C	BTC	OP	11.8	3,6&10
40172BS03(D-2)	2	A	10		GA	MO	O	O	BTO	OP	11.8	3,6&10
40172BS03(D-2)	2	A	10		GA	MO	O		PIT	RR		3,6&10
* Valve: HV-6371 40172BS03(C-2)	2	A	10		GA	MO	C		AT	RR		3,6&10
CCW RETURN ISOLATION VALVE FROM E-399												
40172BS03(C-2)	2	A	10		GA	MO	C	C	BTC	OP	11.8	3,6&10

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code	Valve Class Category	Size	Valve Actuator		Normal Stroke		Test Mode	Max. Test Stroke Time	Relief Requests	Applicable Note Numbers & Remarks	
				Type	Type	Pos.	Dir.					
40172BSO3(C-2)	2	A	10	GA	MO	C	O	BTO	OP	11.8	3,6&10	
40172BSO3(C-2)	2	A	10	GA	MO	C		PIT	RR		3,6&10	
* Valve: HV-6372 Tag:3HV6372 CCW TO EMERGENCY COOLING UNIT E-402												
40172BSO3(F-2)	2	A	10	GA	MO	O		AT	RR		3,6&10	
40172BSO3(F-2)	2	A	10	GA	MO	O	C	BTC	OP	11.8	3,6&10	
40172BSO3(F-2)	2	A	10	GA	MO	O	O	BTO	OP	11.8	3,6&10	
40172BSO3(F-2)	2	A	10	GA	MO	O		PIT	RR		3,6&10	
* Valve: HV-6373 Tag:3HV6373 CCW FM EMERGENCY COOLING UNIT E-402												
40172BSO3(E-2)	2	A	10	GA	MO	C		AT	RR		3,6&10	
40172BSO3(E-2)	2	A	10	GA	MO	C	C	BTC	OP	11.8	3,6&10	
40172BSO3(E-2)	2	A	10	GA	MO	C	O	BTO	OP	11.8	3,6&10	
40172BSO3(E-2)	2	A	10	GA	MO	C		PIT	RR		3,6&10	
* Valve: HV-9917 Tag:3HV9917 CONTAINMENT HYDROGEN PURGE OUTLET												
40172BSO3(G-3)	2	A	6	BTF	MO	C		AT	RR		6,10&11	
* Valve: HV-9946 Tag:3HV9946 CONTAINMENT HYDROGEN PURGE INLET												
40172BSO3(G-4)	2	A	6	BTF	MO	C		AT	RR		6,10&11	
** System: HVAC (Normal)												
* Valve: HV-7800 Tag:3HV7800 CONTAINMENT AIRBORNE RADIATION MONIT TRN B ISOL VLV PEN 30B												
40170ASO3(E-3)	2	A	3/4	GA	SO	O		AT	RR	15	3&10	
40170ASO3(E-3)	2	A	3/4	GA	SO	O	C	BTC	OP	1	15	3&10
40170ASO3(E-3)	2	A	3/4	GA	SO	O		FST	OP	15	3&10	
40170ASO3(E-3)	2	A	3/4	GA	SO	O		PIT	RR	15	3&10	
* Valve: HV-7801 Tag:3HV7801 CONTAINMENT AIRBORNE RADIATION MONIT TRN A ISOL VLV PEN 30B												
40170ASO3(E-4)	2	A	3/4	GA	SO	O		AT	RR	15	3&10	
40170ASO3(E-4)	2	A	3/4	GA	SO	O	C	BTC	OP	1	15	3&10
40170ASO3(E-4)	2	A	3/4	GA	SO	O		FST	OP	15	3&10	
40170ASO3(E-4)	2	A	3/4	GA	SO	O		PIT	RR	15	3&10	
* Valve: HV-7802 Tag:3HV7802 CONTAINMENT AIRBORNE RADIATION MONIT TRN A ISOL VLV PEN 30A												
40170ASO3(D-4)	2	A	3/4	GA	SO	O		AT	RR	15	3&10	
40170ASO3(D-4)	2	A	3/4	GA	SO	O	C	BTC	OP	1	15	3&10
40170ASO3(D-4)	2	A	3/4	GA	SO	O		FST	OP	15	3&10	
40170ASO3(D-4)	2	A	3/4	GA	SO	O		PIT	RR	15	3&10	
* Valve: HV-7803 Tag:3HV7803 CONTAINMENT AIRBORNE RADIATION MONIT TRN B ISOL VLV PEN 3A												
40170ASO3(D-3)	2	A	3/4	GA	SO	O		AT	RR	15	3&10	
40170ASO3(D-3)	2	A	3/4	GA	SO	O	C	BTC	OP	1	15	3&10
40170ASO3(D-3)	2	A	3/4	GA	SO	O		FST	OP	15	3&10	

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max. Test Mode	Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
40170AS03(D-3)	2	A	3/4	GA	SO	O		PIT RR		15	3&10
* Valve: HV-7805 Tag:3HV7805 CONTAINMENT AIRBORNE RADIATION MONIT TRN B											
40170AS03(C-4)	2	A	3/4	GA	SO	O		AT RR		15	3&10
40170AS03(C-4)	2	A	3/4	GA	SO	O	C	BTC OP 1		15	3&10
40170AS03(C-4)	2	A	3/4	GA	SO	O		FST OP		15	3&10
40170AS03(C-4)	2	A	3/4	GA	SO	O		PIT RR		15	3&10
* Valve: HV-7806 Tag:3HV7806 CONTAINMENT AIRBORNE RADIATION MONIT TRN B											
40170AS03(C-4)	2	A	3/4	GA	SO	O		AT RR		15	3&10
40170AS03(C-4)	2	A	3/4	GA	SO	O	C	BTC OP 1		15	3&10
40170AS03(C-4)	2	A	3/4	GA	SO	O		FST OP		15	3&10
40170AS03(C-4)	2	A	3/4	GA	SO	O		PIT RR		15	3&10
* Valve: HV-7810 Tag:3HV7810 CONTAINMENT AIRBORNE RADIATION MONIT TRN B PEN 16C											
40170AS03(C-3)	2	A	3/4	GA	SO	O		AT RR		15	3&10
40170AS03(C-3)	2	A	3/4	GA	SO	O	C	BTC OP 1		15	3&10
40170AS03(C-3)	2	A	3/4	GA	SO	O		FST OP		15	3&10
40170AS03(C-3)	2	A	3/4	GA	SO	O		PIT RR		15	3&10
* Valve: HV-7811 Tag:3HV7811 CONTAINMENT AIRBORNE RADIATION MONIT TRN A PEN 27C											
40170AS03(C-3)	2	A	3/4	GA	SO	O		AT RR		15	3&10
40170AS03(C-3)	2	A	3/4	GA	SO	O	C	BTC OP 1		15	3&10
40170AS03(C-3)	2	A	3/4	GA	SO	O		FST OP		15	3&10
40170AS03(C-3)	2	A	3/4	GA	SO	O		PIT RR		15	3&10
* Valve: HV-7816 Tag:3HV7816 CONTAINMENT AIRBORNE RADIATION MONIT EMERGENCY SAMPLE											
40170AS03(E-3)	2	A	3/4	GA	SO	O		AT RR			3&10
40170AS03(E-3)	2	A	3/4	GA	SO	O	C	BTC OP 1			3&10
40170AS03(E-3)	2	A	3/4	GA	SO	O		FST OP			3&10
40170AS03(E-3)	2	A	3/4	GA	SO	O		PIT RR			3&10
* Valve: HV-9821 Tag:3HV9821 CONTAINMENT MINIPURGE SUPPLY ISOLATION VALVE											
40171AS03(B-5)	2	A	8	BTF	AO	O		AT OP			3&10
40171AS03(B-5)	2	A	8	BTF	AO	O	C	BTC OP 5			3&10
40171AS03(B-5)	2	A	8	BTF	AO	O		FST OP			3&10
40171AS03(B-5)	2	A	8	BTF	AO	O		PIT RR			3&10
* Valve: HV-9823 Tag:3HV9823 CONTAINMENT MINIPURGE SUPPLY ISOLATION VALVE											
40171AS03(B-4)	2	A	8	BTF	AO	O		AT OP			3&10
40171AS03(B-4)	2	A	8	BTF	AO	O	C	BTC OP 5			3&10
40171AS03(B-4)	2	A	8	BTF	AO	O		FST OP			3&10
40171AS03(B-4)	2	A	8	BTF	AO	O		PIT RR			3&10

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable	
											Note	
* Valve: HV-9824 Tag:3HV9824 CONTAINMENT MINIPURGE EXHAUST ISOLATION VALVE												
40171AS03(D-3)	2	A	8	BTF	AO	O		AT	OP		3&10	
40171AS03(D-3)	2	A	8	BTF	AO	O	C	BTC	OP	5	3&10	
40171AS03(D-3)	2	A	8	BTF	AO	O		FST	OP		3&10	
40171AS03(D-3)	2	A	8	BTF	AO	O		PIT	RR		3&10	
* Valve: HV-9825 Tag:3HV9825 CONTAINMENT MINIPURGE EXHAUST ISOLATION VALVE												
40171AS03(D-7)	2	A	8	BTF	AO	O		AT	OP		3&10	
40171AS03(D-7)	2	A	8	BTF	AO	O	C	BTC	OP	5	3&10	
40171AS03(D-7)	2	A	8	BTF	AO	O		FST	OP		3&10	
40171AS03(D-7)	2	A	8	BTF	AO	O		PIT*	RR		3&10	
* Valve: HV-9900 Tag:3HV9900 CONTAINMENT COOLING SUPPLY ISOLATION VALVE PEN 45												
40170AS03(G-4)	2	A	8	BTF	MO	O		AT	RR		3,6,10&11	
40170AS03(G-4)	2	A	8	BTF	MO	O	C	BTC	OP	40	3,6,10&11	
40170AS03(G-4)	2	A	8	BTF	MO	O		PIT	RR		3,6,10&11	
* Valve: HV-9920 Tag:3HV9920 CONTAINMENT COOLING SUPPLY ISOLATION VALVE												
40170AS03(G-2)	2	A	8	BTF	AO	O		AT	RR		3,10&11	
40170AS03(G-2)	2	A	8	BTF	AO	O	C	BTC	OP	40	3,10&11	
40170AS03(G-2)	2	A	8	BTF	AO	O		FST	OP		3,10&11	
40170AS03(G-2)	2	A	8	BTF	AO	O		PIT	RR		3,10&11	
* Valve: HV-9921 Tag:3HV9921 CONTAINMENT COOLING RETURN ISOLATION VALVE												
40170AS03(F-2)	2	A	8	BTF	AO	O		AT	RR		3,10&11	
40170AS03(F-2)	2	A	8	BTF	AO	O	C	BTC	OP	40	3,10&11	
40170AS03(F-2)	2	A	8	BTF	AO	O		FST	OP		3,10&11	
40170AS03(F-2)	2	A	8	BTF	AO	O		PIT	RR		3,10&11	
* Valve: HV-9948 Tag:3HV9948 CONTAINMENT PURGE SUPPLY												
40171AS03(B-6)	2	A	42	BTF	AO	C		AT	OP	19	3&10	
40171AS03(B-6)	2	A	42	BTF	AO	C	C	BTC	CS	12	19	3&10
40171AS03(B-6)	2	A	42	BTF	AO	C		FST	CS	19	3&10	
* Valve: HV-9949 Tag:3HV9949 CONTAINMENT PURGE SUPPLY												
40171AS03(D-4)	2	A	42	BTF	MO	C		AT	OP	19	3,6&10	
40171AS03(D-4)	2	A	42	BTF	MO	C	C	BTC	CS	12	19	3,6&10
* Valve: HV-9950 Tag:3HV9950 CONTAINMENT PURGE EXHAUST												
40171AS03(C-3)	2	A	42	BTF	MO	C		AT	OP	19	3,6&10	
40171AS03(C-3)	2	A	42	BTF	MO	C	C	BTC	CS	12	19	3,6&10
* Valve: HV-9951 Tag:3HV9951 CONTAINMENT PURGE EXHAUST												
40171AS03(C-6)	2	A	42	BTF	AO	C		AT	OP	19	3&10	
40171AS03(C-6)	2	A	42	BTF	AO	C	C	BTC	CS	12	19	3&10

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max.		Relief Requests	Applicable Note Numbers & Remarks
								Test Mode	Stroke Time		
40171AS03(C-6)	2	A	42	BTF	AO	C		FST	CS	19	3&10
* Valve: HV-9971 Tag:3HV9971 CONTAINMENT COOLING RETURN ISOLATION VALVE PEN 46											
40170AS03(F-4)	2	A	8	BTF	MO	O		AT	RR		3,6,10&11
40170AS03(F-4)	2	A	8	DTF	MO	O	C	BTC	OP	40	3,6,10&11
40170AS03(F-4)	2	A	8	BTF	MO	O		PIT	RR		3,6,10&11
* Valve: 3/4-038-C-396 Tag:S31500MU038 ILRT PRESSURIZATION CONNECTION											
40171BS03(C-2)	2	A	3/4	GL	M	C		AT	RR		9&10
* Valve: 3/4-039-C-396 Tag:S31500MU039 ILRT PRESSURIZATION CONNECTION											
40171BS03(D-1)	2	A	3/4	GL	M	C		AT	RR		9&10
** System: High Pressure Feedwater											
* Valve: HV-1105 Tag:3HV1105 S/G E089 FEEDWATER BYPASS VALVE											
40156BS03(B-6)	-	B	6	GA	AO	C	C	BTC	CS	9.6	3*
40156BS03(B-6)	-	B	6	GA	AO	C		FST	CS		3*
40156BS03(B-6)	-	B	6	GA	AO	C		PIT	RR		3*
* Valve: HV-1106 Tag:3HV1106 S/G E088 FEEDWATER BYPASS VALVE											
40156BS03(E-6)	-	B	6	GA	AO	C	C	BTC	CS	9.6	3*
40156BS03(E-6)	-	B	6	GA	AO	C		FST	CS		3*
40156BS03(E-6)	-	B	6	GA	AO	C		PIT	RR		3*
* Valve: HV-4047 Tag:3HV4047 S/G E088 FEEDWATER ISOLATION VALVE											
40156BS03(F-4)	-	B	20	GA	EH	O	C	BTC	CS	9.6	3&5*
40156BS03(F-4)	-	B	20	GA	EH	O		PIT	RR		3&5*
* Valve: HV-4048 Tag:3HV4048 S/G E088 FEEDWATER ISOLATION VALVE											
40156BS03(F-2)	2	B	20	GA	EH	O	C	BTC	CS	10	3&5*
40156BS03(F-2)	2	B	20	GA	EH	O		FST	CS		3&5*
40156BS03(F-2)	2	B	20	GA	EH	O		PIT	RR		3&5*
* Valve: HV-4051 Tag:3HV4051 S/G E089 FEEDWATER ISOLATION VALVE											
40156BS03(B-4)	-	B	20	GA	EH	O	C	BTC	CS	9.6	3&5*
40156BS03(B-4)	-	B	20	GA	EH	O		PIT	RR		3&5*
* Valve: HV-4052 Tag:3HV4052 S/G E089 FEEDWATER ISOLATION VALVE											
40156BS03(B-2)	2	B	20	GA	EH	O	C	BTC	CS	10	3&5*
40156BS03(B-2)	2	B	20	GA	EH	O		FST	CS		3&5*
40156BS03(B-2)	2	B	20	GA	EH	O		PIT	RR		3&5*
* Valve: 20-036-C-609 Tag:S31305MU036 MAIN FEED CHECK AT STEAM GENERATOR E089											
40141AS03(C-7)	2	C	20	CK	SA	O	C	CVTC	RR	20	1a

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 20-129-C-609 40141ASO3(F-7)	2	C	20	CK	SA	O	C	CVTC RR		20	1a
MAIN FEED CHECK AT STEAM GENERATOR E088											
** System: Liquid Radwaste											
* Valve: HV-7512 40131ASO3(B-3)	2	A	3	GL	MO	C		AT RR			3,6,10&11
40131ASO3(B-3)	2	A	3	GL	MO	C	C	BTC OP	40		3,6,10&11
40131ASO3(B-3)	2	A	3	GL	MO	C		PIT RR			3,6,10&11
RCDT PUMP DISCH FM CONTMT TO RAD WASTE											
* Valve: HV-7513 40131ASO3(B-2)	2	A	3	GL	AO	C		AT RR			3,10&11
40131ASO3(B-2)	2	A	3	GL	AO	C	C	BTC OP	40		3,10&11
40131ASO3(B-2)	2	A	3	GL	AO	C		FST OP			3,10&11
40131ASO3(B-2)	2	A	3	GL	AO	C		PIT RR			3,10&11
RCS DRAIN TO RADWASTE CONTMT ISOL											
* Valve: 2-321-C-376 40111CSO3(G-6)	2	A	2	GL	M	C		AT RR			9,10&11
ISOL VLV-CLNT POL DEMIN TO QUENCH TANK											
* Valve: 2-573-C-611 40111CSO3(G-5)	2	AC	2	CK	SA	C		AT RR			9,10&11
CHECK VALVE-CLNT POL DEMIN TO QUENCH TANK											
** System: Main Steam											
* Valve: HV-4053 40141ASO3(C-2)	2	B	6	GL	AO	O	C	BTC OP	19.6		3
40141ASO3(C-2)	2	B	6	GL	AO	O		FST OP			3
40141ASO3(C-2)	2	B	6	GL	AO	O		PIT RR			3
S/G E089 BLOWDOWN ISOLATION											
* Valve: HV-4054 40141ASO3(F-2)	2	B	6	GL	AO	O	C	BTC OP	19.6		3
40141ASO3(F-2)	2	B	6	GL	AO	O		FST OP			3
40141ASO3(F-2)	2	B	6	GL	AO	O		PIT RR			3
S/G E088 BLOWDOWN ISOLATION											
* Valve: HV-4057 40141ASO3(B-2)	2	B	3/4	GL	AO	O	C	BTC OP	19.6		3
40141ASO3(B-2)	2	B	3/4	GL	AO	O		FST OP			3
40141ASO3(B-2)	2	B	3/4	GL	AO	O		PIT RR			3
S/G E089 SAMPLE ISOLATION											
* Valve: HV-4058 40141ASO3(F-2)	2	B	3/4	GL	AO	O	C	BTC OP	19.6		3
40141ASO3(F-2)	2	B	3/4	GL	AO	O		FST OP			3
40141ASO3(F-2)	2	B	3/4	GL	AO	O		PIT RR			3
S/G E088 SAMPLE ISOLATION											

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Test Stroke Time	Relief Requests	Applicable Notes Numbers & Remarks
* Valve: HV-8200 Tag:3HV8200 STEAM FROM STEAM GENERATOR E089 TO AFP											
40141CSO3(E-3)	2	B	4	GL	AO	OC	O	BTO OP	19.6		12
40141CSO3(E-3)	2	B	4	GL	AO	OC		FST OP			12
40141CSO3(E-3)	2	B	4	GL	AO	OC		PIT RR			12
* Valve: HV-8201 Tag:3HV8201 STEAM FROM STEAM GENERATOR E088 TO AFP											
40141DSO3(E-3)	2	B	4	GL	AO	OC	O	BTO OP	19.6		12
40141DSO3(E-3)	2	B	4	GL	AO	OC		FST OP			12
40141DSO3(E-3)	2	B	4	GL	AO	OC		PIT RR			12
* Valve: HV-8204 Tag:3HV8204 STEAM GENERATOR E089 MSIV											
40141CSO3(B-2)	2	B	40	GA	HY	O	C	BTC CS	6		3*
40141CSO3(B-2)	2	B	40	GA	HY	O	C	BTPC OP			3*
40141CSO3(B-2)	2	B	40	GA	HY	O		FST CS			3*
40141CSO3(B-2)	2	B	40	GA	HY	O		PIT RR			3*
* Valve: HV-8205 Tag:3HV8205 STEAM GENERATOR E088 MSIV											
40141DSO3(B-3)	2	B	40	GA	HY	O	C	BTC CS	6		3*
40141DSO3(B-3)	2	B	40	GA	HY	O	C	BTPC OP			3*
40141DSO3(B-3)	2	B	40	GA	HY	O		FST CS			3*
40141DSO3(B-3)	2	B	40	GA	HY	O		PIT RR			3*
* Valve: HV-8419 Tag:3HV8419 MAIN STEAM DUMP TO ATMOSPHERE											
40141DSO3(E-6)	2	B	8	AV	AO	C	C	BTC CS	19.6		3&5*
40141DSO3(E-6)	2	B	8	AV	AO	C		FST CS			3&5*
40141DSO3(E-6)	2	B	8	AV	AO	C		PIT RR			3&5*
* Valve: HV-8421 Tag:3HV8421 MAIN STEAM DUMP TO ATMOSPHERE											
40141CSO3(F-6)	2	B	8	AV	AO	C	C	BTC CS	19.6		3&5*
40141CSO3(F-6)	2	B	8	AV	AO	C		FST CS			3&5*
40141CSO3(F-6)	2	B	8	AV	AO	C		PIT RR			3&5*
* Valve: PSV-8401 Tag:3PSV8401 MAIN STEAM RELIEF VALVE											
40141DSO3(G-7)	2	C	6	SV	SA	C	O	RVT RR			2
* Valve: PSV-8402 Tag:3PSV8402 MAIN STEAM RELIEF VALVE											
40141DSO3(G-6)	2	C	6	SV	SA	C	O	RVT RR			2
* Valve: PSV-8403 Tag:3PSV8403 MAIN STEAM RELIEF VALVE											
40141DSO3(G-6)	2	C	6	SV	SA	C	O	RVT RR			2
* Valve: PSV-8404 Tag:3PSV8404 MAIN STEAM RELIEF VALVE											
40141DSO3(G-5)	2	C	6	SV	SA	C	O	RVT RR			2

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max. Test Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: PSV-8405 40141DSO3(G-5)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8406 40141DSO3(G-4)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8407 40141DSO3(F-5)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8408 40141DSO3(F-5)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8409 40141DSO3(F-5)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8410 40141CSO3(G-7)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8411 40141CSO3(G-6)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8412 40141CSO3(G-6)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8413 40141CSO3(G-5)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8414 40141CSO3(G-5)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8415 40141CSO3(G-4)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8416 40141CSO3(G-4)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8417 40141CSO3(G-3)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: PSV-8418 40141CSO3(G-3)	2	C	6	SV	SA	C	O	RVT RR	2	
* Valve: 4-003-D-620 40141CSO3(F-1)	3	C	4	CK	SA	C	C	CVTC RR	18	1a&14
40141CSO3(F-1)	3	C	4	CK	SA	C	O	CVTO OP	18	1a&14

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Test Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 4-005-D-620 Tag: S31301MU005 CHECK VALVE ON STEAM SUPPLY FROM E089 TO AFP TURB (007)											
40141CS03(E-2)	3	C	4	CK	SA	C	C	CVTC RR		18	1a&14
40141CS03(E-2)	3	C	4	CK	SA	C	D	CVTO OP		18	1a&14
** System: Nuclear Plant Sampling											
* Valve: HV-0508 Tag: 3HV0508 RCS HOT LEG CONTMT ISOL											
40134AS03(F-7)	2	A	3/4	GL	MO	C		AT RR			3,6&10
40134AS03(F-7)	2	A	3/4	GL	MO	C	C	BTC OP	40		3,6&10
40134AS03(F-7)	2	A	3/4	GL	MO	C		PIT RR			3,6&10
* Valve: HV-0509 Tag: 3HV0509 RCS HOT LEG CONTMT ISOL											
40134AS03(F-5)	2	A	3/4	GL	AO	C		AT RR			3&10
40134AS03(F-5)	2	A	3/4	GL	AO	C	C	BTC OP	40		3&10
40134AS03(F-5)	2	A	3/4	GL	AO	C		FST OP			3&10
40134AS03(F-5)	2	A	3/4	GL	AO	C		PIT RR			3&10
* Valve: HV-0510 Tag: 3HV0510 PZR VAPOR SAMPLE CONTMT ISOLATION											
40134AS03(E-7)	2	A	3/4	GL	MO	C		AT RR			3,6&10
40134AS03(E-7)	2	A	3/4	GL	MO	C	C	BTC OP	40		3,6&10
40134AS03(E-7)	2	A	3/4	GL	MO	C		PIT RR			3,6&10
* Valve: HV-0511 Tag: 3HV0511 PZR VAPOR SAMPLE CONTMT ISOLATION											
40134AS03(E-5)	2	A	3/4	GL	AO	C		AT RR			3&10
40134AS03(E-5)	2	A	3/4	GL	AO	C	C	BTC OP	40		3&10
40134AS03(E-5)	2	A	3/4	GL	AO	C		FST OP			3&10
40134AS03(E-5)	2	A	3/4	GL	AO	C		PIT RR			3&10
* Valve: HV-0512 Tag: 3HV0512 PZR SURGE LINE LIQ SAMPLE CONTMT ISOL											
40134AS03(C-7)	2	A	3/4	GL	MO	C		AT RR			3,6&10
40134AS03(C-7)	2	A	3/4	GL	MO	C	C	BTC OP	40		3,6&10
40134AS03(C-7)	2	A	3/4	GL	MO	C		PIT RR			3,6&10
* Valve: HV-0513 Tag: 3HV0513 PZR SURGE LINE LIQ SAMPLE CONTMT ISOL											
40134AS03(C-6)	2	A	3/4	GL	AO	C		AT RR			3&10
40134AS03(C-6)	2	A	3/4	GL	AO	C	C	BTC OP	40		3&10
40134AS03(C-6)	2	A	3/4	GL	AO	C		FST OP			3&10
40134AS03(C-6)	2	A	3/4	GL	AO	C		PIT RR			3&10
* Valve: HV-0517 Tag: 3HV0517 RCS HOT LEG #2 SAMPLE ISOLATION VALVE											
40134AS03(G-7)	2	A	3/4	GL	MO	C		AT RR			3,6&10
40134AS03(G-7)	2	A	3/4	GL	MO	C	C	BTC OP	40		3,6&10
40134AS03(G-7)	2	A	3/4	GL	MO	C		PIT RR			3,6&10

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Test Time	Relief Stroke	Relief Requests	Applicable Note Numbers & Remarks
** System: Nuclear Sampling												
* Valve: HV-0514		Tag:3HV0514		ISOLATION VALVE QUENCH TANK TO WASTE GAS SYSTEM								
40111CSO3(F-3)	2	A	3/4	GL	MO	O		AT	RR			3,6,10&11
40111CSO3(F-3)	2	A	3/4	GL	MO	O	C	BTC	OP	40		3,6,10&11
40111CSO3(F-3)	2	A	3/4	GL	MO	O		PIT	RR			3,6,10&11
* Valve: HV-0515		Tag:3HV0515		ISOLATION VALVE QUENCH TANK/RCDT TO WASTE GAS SAMPLING SYST								
40111CSO3(G-2)	2	A	3/4	GL	AO	C		AT	RR			3,10&11
40111CSO3(G-2)	2	A	3/4	GL	AO	C	C	BTL	OP	40		3,10&11
40111CSO3(G-2)	2	A	3/4	GL	AO	C		FST	OP			3,10&11
40111CSO3(G-2)	2	A	3/4	GL	AO	C		PIT	RR			3,10&11
* Valve: HV-0516		Tag:3HV0516		ISOLATION VALVE RCDT TO WASTE GAS SAMPLING SYSTEM								
40111CSO3(G-3)	2	A	3/4	GL	MO	O		AT	RR			3,6,10&11
40111CSO3(G-3)	2	A	3/4	GL	MO	O	C	BTC	OP	40		3,6,10&11
40111CSO3(G-3)	2	A	3/4	GL	MO	O		PIT	RR			3,6,10&11
** System: Nuclear Service Water												
* Valve: HV-7911		Tag:3HV7911		NUCLEAR SERVICE WATER CONTAINMENT ISOLATION								
40140BSO3(F-5)	2	A	3	GA	AO	O		AT	RR			3,10&11
40140BSO3(F-5)	2	A	3	GA	AO	O	C	BTC	OP	40		3,10&11
40140BSO3(F-5)	2	A	3	GA	AO	O		FST	OP			3,10&11
40140BSO3(F-5)	2	A	3	GA	AO	O		PIT	RR			3,10&11
* Valve: 3-236-C-675		Tag:S31415MU236		NUCLEAR SERVICE WATER CONTAINMENT ISOLATION CHECK VALVE								
40140BSO3(F-5)	2	AC	3	CK	SA	C		AT	RR			9,10&11
** System: Reactor Coolant												
* Valve: PSV-200		Tag:3PSV200		PRESSURIZER SAFETY VALVE								
40111BSO3(G-7)	1	C	6	SV	SA	C	O	RVT	RR			2
* Valve: PSV-201		Tag:3PSV201		PRESSURIZER SAFETY VALVE								
40111BSO3(G-5)	1	C	6	SV	SA	C	O	RVT	RR			2
* Valve: 3-152-A-551		Tag:S31204MU152		TO #2 HPSI HDR								
40111ASO3(F-5)	1	AC	3	CK	SA	C		AT	RR			*
40111ASO3(F-5)	1	AC	3	CK	SA	C	O	CVTO	CS			*

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code	Valve Class Category Size	Valve Actuator Type Type	Normal Stroke Pos. Dir.	Test Mode	Max. Test Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
** System: Safety Injection								
* Valve: HV-0396 Tag:3HV0396 FLOW CONTROL VALVE - LPSI PUMPS TO SDCS								
40112BS03(C-3)	2	B 10	GL MC	C O	BTO CS	180		6*
40112BS03(C-3)	2	B 10	GL MO	C	PIT RR			6*
* Valve: HV-8152 Tag:3HV8152 SDCS HX E004 INLET ISOLATION VALVE								
40112BS03(F-2)	2	B 12	GA MO	C C	BTC CS	180		6&12*
40112BS03(F-2)	2	B 12	GA MO	C O	BTO CS	180		6&12*
40112BS03(F-2)	2	B 12	GA MO	C	PIT RR			6&12*
* Valve: HV-8153 Tag:3HV8153 SDCS HX E003 INLET ISOLATION VALVE								
40112BS03(G-2)	2	B 12	GA MO	C C	BTC CS	180		6&12*
40112BS03(G-2)	2	B 12	GA MO	C O	BTO CS	180		6&12*
40112BS03(G-2)	2	B 12	GA MO	C	PIT RR			6&12*
* Valve: HV-8160 Tag:3HV8160 SDCS HX BYPASS FLOW CONTROL VALVE								
40112BS03(C-2)	2	B 10	GL MO	O C	BTC CS	180		6*
40112BS03(C-2)	2	B 10	GL MO	O	PIT RR			6*
* Valve: HV-8161 Tag:3HV8161 LPSI TO SDCS HX BYPASS BLOCK VALVE								
40112BS03(C-2)	2	B 14	GA MO	O C	BTC CS	180		6*
40112BS03(C-2)	2	B 14	GA MO	O	PIT RR			6*
* Valve: HV-8162 Tag:3HV8162 LPSI PUMP 3P015 MINIFLOW BLOCK VALVE								
40112BS03(G-2)	2	B 2	GA MO	O C	BTC CS	30		6*
40112BS03(G-2)	2	B 2	GA MO	O	PIT RR			6*
* Valve: HV-8163 Tag:3HV8163 LPSI PUMP 3P016 MINIFLOW BLOCK VALVE								
40112BS03(D-3)	2	B 2	GA MO	O C	BTC CS	30		6*
40112BS03(D-3)	2	B 2	GA MO	O	PIT RR			6*
* Valve: HV-9302 Tag:3HV9302 CONTROL VALVE CONTMT EMERG SUMP TO SPRAY PUMP 3P013								
40112AS03(B-6)	2	B 24	BTF MO	C O	BTO OP	39.5		3&6
40112AS03(B-6)	2	B 24	BTF MO	C	PIT RR			3&6
* Valve: HV-9303 Tag:3HV9303 CONTROL VALVE CONTMT EMERG SUMP TO SPRAY PUMP 3P012								
40112AS03(B-6)	2	B 24	BTF MO	C C	BTO OP	39.5		3&6
40112AS03(B-6)	2	B 24	BTF MO	C	PIT RR			3&6
* Valve: HV-9322 Tag:3HV9322 LPSI HEADER TO RCS LOOP 1A CONTROL VALVE								
40112DS03(G-4)	2	B 8	GL MO	C O	BTO OP	30		3&6
40112DS03(G-4)	2	B 8	GL MO	C	PIT RR			3&6

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max. Test Mode Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: HV-9323 Tag:3HV9323 CONTROL VALVE - HPSI HEADER #2 TO RCS LOOP 1A										
40112CS03(D-4)	2	B	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(D-4)	2	B	2	GL	MO	C		PIT RR		3&6
* Valve: HV-9324 Tag:3HV9324 CONTROL VALVE - HPSI HEADER #1 TO RCS LOOP 1A										
40112CS03(D-5)	2	B	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(D-5)	2	B	2	GL	MO	C		PIT RR		3&6
* Valve: HV-9325 Tag:3HV9325 LPSI HEADER TO RCS LOOP 1B CONTROL VALVE										
40112DS03(F-4)	2	B	8	GL	MO	C	O	BTO OP 30		3&6
40112DS03(F-4)	2	B	8	GL	MO	C		PIT RR		3&6
* Valve: HV-9326 Tag:3HV9326 CONTROL VALVE - HPSI HEADER #2 TO RCS LOOP 1B										
40112CS03(C-4)	2	B	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(C-4)	2	B	2	GL	MO	C		PIT RR		3&6
* Valve: HV-9327 Tag:3HV9327 CONTROL VALVE - HPSI HEADER #1 TO RCS LOOP 1B										
40112CS03(B-5)	2	B	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(B-5)	2	B	2	GL	MO	C		PIT RR		3&6
* Valve: HV-9328 Tag:3HV9328 LPSI HEADER TO RCS LOOP 2A CONTROL VALVE										
40112DS03(F-4)	2	B	8	GL	MO	C	O	BTO OP 30		3&6
40112DS03(F-4)	2	B	8	GL	MO	C		PIT RR		3&6
* Valve: HV-9329 Tag:3HV9329 CONTROL VALVE - HPSI HEADER #2 TO RCS LOOP 2A										
40112CS03(B-4)	2	C	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(B-4)	2	B	2	GL	MO	C		PIT RR		3&6
* Valve: HV-9330 Tag:3HV9330 CONTROL VALVE - HPSI HEADER #1 TO RCS LOOP 2A										
40112CS03(A-5)	2	B	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(A-5)	2	B	2	GL	MO	C		PIT RR		3&6
* Valve: HV-9331 Tag:3HV9331 LPSI HEADER TO RCS LOOP 2B CONTROL VALVE										
40112DS03(H-4)	2	B	8	GL	MO	C	O	BTO OP 30		3&6
40112DS03(H-4)	2	B	8	GL	MO	C		PIT RR		3&6
* Valve: HV-9332 Tag:3HV9332 CONTROL VALVE - HPSI HEADER #2 TO RCS LOOP 2B										
40112CS03(F-4)	2	B	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(F-4)	2	B	2	GL	MO	C		PIT RR		3&6
* Valve: HV-9333 Tag:3HV9333 CONTROL VALVE - HPSI HEADER #1 TO RCS LOOP 2B										
40112CS03(F-5)	2	B	2	GL	MO	C	O	BTO OP 15		3&6
40112CS03(F-5)	2	B	2	GL	MO	C		PIT RR		3&6

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Max. Test Mode	Stroke Time	Relief Requests	Applicable
											Note
* Valve: HV-9334 Tag:3HV9334 SI TANK DRAIN HDR TO RFWT 2T005 CONTAINMENT ISOLATION MOV											
40114DSO3(F-7)	2	A	2	GL	MO	C		AT	RR		3,10&11
40114DSO3(F-7)	2	A	2	GL	MO	C	C	BTC	OP 40		3,10&11
40114DSO3(F-7)	2	A	2	GL	MO	C		PIT	RR		3,10&11
* Valve: HV-9336 Tag:3HV9336 SDCS TO LPSI PUMP SUCTION ISOLATION VALVE											
40112DSO3(C-7)	2	B	16	GA	MO	OC	C	BTC	OP 160		6&12
40112DSO3(C-7)	2	B	16	GA	MO	OC	O	BTO	OP 160		6&12
40112DSO3(C-7)	2	B	16	GA	MO	OC		PIT	RR		6&12
* Valve: HV-9337 Tag:3HV9337 SDCS TO LPSI PUMP SUCTION ISOLATION VALVE											
40112DSO3(C-4)	1	A	16	GA	MO	OC		AT	RR		5,6&12*
40112DSO3(C-4)	1	A	16	GA	MO	OC	C	BTC	CS 160		5,6&12*
40112DSO3(C-4)	1	A	16	GA	MO	OC	O	BTO	CS 160		5,6&12*
40112DSO3(C-4)	1	A	16	GA	MO	OC		PIT	RR		5,6&12*
* Valve: HV-9339 Tag:3HV9339 SDCS FROM RCS LOOP 2 ISOLATION VALVE											
40112DSO3(C-2)	1	A	16	GA	MO	OC		AT	RR		5,6&12*
40112DSO3(C-2)	1	A	16	GA	MO	OC	C	BTC	CS 160		5,6&12*
40112DSO3(C-2)	1	A	16	GA	MO	OC	O	BTO	CS 160		5,6&12*
40112DSO3(C-2)	1	A	16	GA	MO	OC		PIT	RR		5,6&12*
* Valve: HV-9340 Tag:3HV9340 SI TANK T008 OUTLET VALVE TO RCS LOOP 1A											
40113ASO3(D-6)	1	B	12	GA	MO	O	O	BTO	CS 60		5&6*
40113ASO3(D-6)	1	B	12	GA	MO	O		PIT	RR		5&6*
* Valve: HV-9345 Tag:3HV9345 SI TANK T008 VENT											
40113ASO3(G-6)	2	B	1	GL	SO	C	O	BTO	CS 1		5*
40113ASO3(G-6)	2	B	1	GL	SO	C		FST	CS		5*
40113ASO3(G-6)	2	B	1	GL	SO	C		PIT	RR		5*
* Valve: HV-9350 Tag:3HV9350 SI TANK T009 OUTLET VALVE TO RCS LOOP 1B											
40113ASO3(D-2)	1	B	12	GA	MO	O	O	BTO	CS 60		5&6*
40113ASO3(D-2)	1	B	12	GA	MO	O		PIT	RR		5&6*
* Valve: HV-9355 Tag:3HV9355 SI TANK T007 VENT											
40113ASO3(G-2)	2	B	1	GL	SO	C	O	BTO	CS 1		5*
40113ASO3(G-2)	2	B	1	GL	SO	C		FST	CS		5*
40113ASO3(G-2)	2	B	1	GL	SO	C		PIT	RR		5*
* Valve: HV-9360 Tag:3HV9360 SI TANK T009 OUTLET TO RCS LOOP 2A											
40113BSO3(D-6)	1	B	12	GA	MO	O	O	BTO	CS 60		5&6*
40113BSO3(D-6)	1	B	12	GA	MO	O		PIT	RR		5&6*

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: HV-9365 Tag:3HV9365 SI TANK TU09 VENT VALVE											
40113BSO3(G-6)	2	B	1	GL	SO	C	O	BTO CS	1		5*
40113BSO3(G-6)	2	B	1	GL	SO	C		FST CS			5*
40113BSO3(G-6)	2	B	1	GL	SO	C		PIT RR			5*
* Valve: HV-9370 Tag:3HV9370 SI TANK T010 OUTLET TO RCS LOOP 2B											
40113BSO3(D-2)	1	B	12	GA	MO	O	O	BTO CS	60		5&6*
40113BSO3(D-2)	1	B	12	GA	MO	O		PIT RR			5&6*
* Valve: HV-9375 Tag:3HV9375 SI TANK T009 VENT VALVE											
40113BSO3(G-2)	1	B	1	GL	SO	C	O	BTO CS	1		5*
40113BSO3(G-2)	1	B	1	GL	SO	C		FST CS			5*
40113BSO3(G-2)	1	B	1	GL	SO	C		PIT RR			5*
* Valve: HV-9377 Tag:3HV9377 SDCS BYPASS TO LPSI SUCTION ISOLATION VALVE											
40112DSO3(B-4)	1	A	10	GA	MO	OC		AT RR			5,6&12*
40112DSO3(B-4)	1	A	10	GA	MO	OC	C	BTC CS	360		5,6&12*
40112DSO3(B-4)	1	A	10	GA	MO	OC	O	BTO CS	360		5,6&12*
40112DSO3(B-4)	1	A	10	GA	MO	OC		PIT RR			5,6&12*
* Valve: HV-9378 Tag:3HV9378 SDCS BYPASS TO LPSI SUCTION ISOLATION VALVE											
40112DSO3(B-3)	1	A	10	GA	MO	OC		AT RR			5,6&12*
40112DSO3(B-3)	1	A	10	GA	MO	OC	C	BTC CS	360		5,6&12*
40112DSO3(B-3)	1	A	10	GA	MO	OC	O	BTO CS	360		5,6&12*
40112DSO3(B-3)	1	A	10	GA	MO	OC		PIT RR			5,6&12*
* Valve: HV-9379 Tag:3HV9379 SDCS BYPASS TO LPSI SUCTION ISOLATION VALVE - SEAL											
40112DSO3(B-7)	2	B	12	GA	MO	OC	C	BTC OP	20		6&12
40112DSO3(B-7)	2	B	12	GA	MO	OC	O	BTO OP	20		6&12
40112DSO3(B-7)	2	B	12	GA	MO	OC		PIT RR			6&12
* Valve: HV-9420 Tag:3HV9420 CONTROL VALVE - HPSI HEADER #1 TO RCS LOOP 2 HOT LEG											
40112CSO3(G-3)	2	A	3	GL	MO	C		AT RR			6&10*
40112CSO3(G-3)	2	A	3	GL	MO	C	O	BTO CS	20		6&10*
40112CSO3(G-3)	2	A	3	GL	MO	C		PIT RR			6&10*
* Valve: HV-9434 Tag:3HV9434 CONTROL VALVE - HPSI HEADER #2 TO RCS LOOP 1 HOT LEG											
40112CSO3(E-3)	2	A	3	GL	MO	C		AT RR			6&10*
40112CSO3(E-3)	2	A	3	GL	MO	C	O	BTO CS	20		6&10*
40112CSO3(E-3)	2	A	3	GL	MO	C		PIT RR			6&10*
* Valve: PSV-9349 Tag:3PSV9349 SDCS RELIEF VALVE FROM RCS LOOP 2											
40112DSO3(C-5)	2	C	B	RV	SA	C		RVT RR			15

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code	Valve Class	Valve Category	Valve Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 14-200-C-645 Tag:S31201MU200 PUMP 3P016 SUCTION CHECK												
40112BS03(F-6)	2	C		14	CK	SA	C	C	CVTC	CS		*
40112BS03(F-6)	2	C		14	CK	SA	C	O	CVTO	CS		*
* Valve: 14-202-C-645 Tag:S31201MU202 LPSI PUMP SUCTION CHECK												
40112BS03(G-5)	2	C		14	CK	SA	C	C	CVTC	CS		*
40112BS03(G-5)	2	C		14	CK	SA	C	O	CVTO	CS		*
* Valve: 24-001-C-724 Tag:S31204MU001 RW TANK 3T005 TO SPRAY PUMP 3P012 SUCTION HEADER												
40112AS03(D-8)	2	C		24	SDCK	SA	C	O	CVPO	OP	2	1a
40112AS03(D-8)	2	C		24	SDCK	SA	C	C	CVTC	RR	2	1a
40112AS03(D-8)	2	C		24	SDCK	SA	C	O	CVTO	RR	2	1a
* Valve: 24-002-C-724 Tag:S31204MU002 RW TANK 3T006 TO CS PUMP 3P013 SUCTION HEADER												
40112AS03(D-7)	2	C		24	SDCK	SA	C	O	CVPO	OP	2	1a
40112AS03(D-7)	2	C		24	SDCK	SA	C	C	CVTC	RR	2	1a
40112AS03(D-7)	2	C		24	SDCK	SA	C	O	CVTO	RR	2	1a
* Valve: 24-003-C-724 Tag:S31204MU003 OUTLET CHECK VALVE - CONTAINMENT EMERGENCY SUMP												
40112AS03(A-7)	2	C		24	SDCK	SA	C	O	CVTO	RR	3	1a&5
* Valve: 24-004-C-724 Tag:S31204MU004 OUTLET CHECK VALVE - CONTAINMENT EMERGENCY SUMP												
40112AS03(B-7)	2	C		24	SDCK	SA	C	O	CVTO	RR	3	1a&5
* Valve: 10-006-C-675 Tag:S31204MU006 HPSI PUMPS 3P017 & 3P018 SUCTION CHECK												
40112AS03(G-7)	2	C		10	CK	SA	C	O	CVPO	OP	8	
40112AS03(G-7)	2	C		10	CK	SA	C	O	CVTO	RR	8	
* Valve: 10-008-C-675 Tag:S31204MU008 HPSI PUMPS 3P018 & 3P019 SUCTION CHECK												
40112AS03(C-7)	2	C		10	CK	SA	C	O	CVPO	OP	8	
40112AS03(C-7)	2	C		10	CK	SA	C	O	CVTO	RR	8	
* Valve: 4-012-C-358 Tag:S31204MU012 HPSI PUMP 3P017 DISCHARGE												
40112AS03(G-3)	2	C		4	SCK	SA	C	O	C.TO	CS		5*
* Valve: 4-015-C-358 Tag:S31204MU015 HPSI PUMP 3P019 DISCHARGE												
40112AS03(C-3)	2	C		4	SCK	SA	C	O	CVTO	CS		5*
* Valve: 4-016-C-358 Tag:S31204MU016 HPSI PUMP 3P018 DISCHARGE												
40112AS03(E-3)	2	C		4	SCK	SA	C	O	CVTO	CS		5*
* Valve: 4-017-C-553 Tag:S31204MU017 HPSI PUMPS 3P018 & 3P019 TO #2 HIGH PRESS HDR												
40112AS03(C-1)	2	C		4	CK	SA	C	O	CVTO	CS		5*

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Actuator		Normal Stroke		Test Mode	Max. Test Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
				Type	Type	Pos.	Dir.				
* Valve: 3-018-A-551 40112CS03(D-3)	1	AC	3	CK	SA	C		AT	RR		5*
40112CS03(D-3)	1	AC	3	CK	SA	C	O	CVTO	CS		5*
* Valve: 3-019-A-551 40112CS03(C-3)	1	AC	3	CK	SA	C		AT	RR		5*
40112CS03(C-3)	1	AC	3	CK	SA	C	O	CVTO	CS		5*
* Valve: 3-020-A-551 40112CS03(B-3)	1	AC	3	CK	SA	C		AT	RR		5*
40112CS03(B-3)	1	AC	3	CK	SA	C	O	CVTO	CS		5*
* Valve: 3-021-A-551 40112CS03(F-2)	1	AC	3	CK	SA	C		AT	RR		5*
40112CS03(F-2)	1	AC	3	CK	SA	C	O	CVTO	CS		5*
* Valve: 10-024-C-406 40112BS03(G-2)	2	C	10	SCK	SA	C	O	CVTO	CS		5*
* Valve: 10-025-C-406 40112BS03(E-3)	2	C	10	SCK	SA	C	O	CVTO	CS		5*
* Valve: 12-027-A-551 40113AS03(C-5)	1	AC	12	CK	SA	C		AT	RR		5*
40113ASC3(C-5)	1	AC	12	CK	SA	C	O	CVTO	CS		5*
* Valve: 12-029-A-551 40113AS03(C-4)	1	AC	12	CK	SA	C		AT	RR		5*
40113AS03(C-4)	1	AC	12	CK	SA	C	O	CVTO	CS		5*
* Valve: 12-031-A-551 40113BS03(C-5)	1	AC	12	CK	SA	C		AT	RR		5*
40113BS03(C-5)	1	AC	12	CK	SA	C	O	CVTO	CS		5*
* Valve: 12-033-A-551 40113BS03(C-4)	1	AC	12	CK	SA	C		AT	RR		5*
40113BS03(C-4)	1	AC	12	CK	SA	C	O	CVTO	CS		5*
* Valve: 2-034-C-329 40112AS03(H-2)	2	C	2	SCK	SA	C	O	CVTO	OP		
* Valve: 2-035-C-329 40112AS03(D-3)	2	C	2	SCK	SA	C	O	CVTO	OP		

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max.	Relief Requests	Applicable Note
									Strcke Time		Numbers & Remarks
* Valve: 2-036-C-329 40112AS03(F-3)	2	C	2	SCK	SA	C	O	CVTO	OP		
Tag: S31204MU036 HPSI 3P018 TRAIN A MINIFLOW											
* Valve: 2-037-C-329 40112BS03(G-2)	2	C	2	SCK	SA	C	O	CVTO	OP		
Tag: S31204MU037 LPSI PUMP 3P015 MINIFLOW STOP CHECK											
* Valve: 12-040-A-551 40113AS03(D-6)	1	AC	12	CK	SA	C		AT	RR	11	1a&5
40113AS03(D-6)	1	AC	12	CK	SA	C	O	CVPO	CS	11	1a&5
40113AS03(D-6)	1	AC	12	CK	SA	C	O	CVTO	RR	11	1a&5
Tag: S31204MU040 SIT T008 OUTLET CHECK											
* Valve: 12-041-A-551 40113AS03(D-2)	1	AC	12	CK	SA	C		AT	RR	11	1a&5
40113AS03(D-2)	1	AC	12	CK	SA	C	O	CVPO	CS	11	1a&5
40113AS03(D-2)	1	AC	12	CK	SA	C	O	CVTO	RR	11	1a&5
Tag: S31204MU041 SIT T007 OUTLET CHECK											
* Valve: 12-042-A-551 40113BS03(D-6)	1	AC	12	CK	SA	C		AT	RR	11	1a&5
40113BS03(D-6)	1	AC	12	CK	SA	C	O	CVPO	CS	11	1a&5
40113BS03(D-6)	1	AC	12	CK	SA	C	O	CVTO	RR	11	1a&5
Tag: S31204MU042 SIT T009 OUTLET CHECK											
* Valve: 12-043-A-551 40113BS03(D-2)	1	AC	12	CK	SA	C		AT	RR	11	1a&5
40113BS03(D-2)	1	AC	12	CK	SA	C	O	CVPO	CS	11	1a&5
40113BS03(D-2)	1	AC	12	CK	SA	C	O	CVTO	RR	11	1a&5
Tag: S31204MU043 SIT T010 OUTLET CHECK											
* Valve: 2-063-C-329 40112BS03(D-2)	2	C	2	SCK	SA	C	O	CVTO	OP		
Tag: S31204MU063 LPSI PUMP 3P016 MINIFLOW STOP CHECK											
* Valve: 8-072-A-552 40112DS03(G-2)	1	AC	8	CK	SA	C		AT	RR		5*
40112DS03(G-2)	1	AC	8	CK	SA	C	O	CVTO	CS		5*
Tag: S31204MU072 LPSI TO RCS LOOP 1A CHECK VALVE											
* Valve: 8-073-A-552 40112DS03(F-2)	1	AC	8	CK	SA	C		AT	RR		5*
40112DS03(F-2)	1	AC	8	CK	SA	C	O	CVTO	CS		5*
Tag: S31204MU073 LPSI TO RCS LOOP 1B CHECK VALVE											
* Valve: 8-074-A-552 40112DS03(F-2)	1	AC	8	CK	SA	C		AT	RR		5*
40112DS03(F-2)	1	AC	8	CK	SA	C	O	CVTO	CS		5*
Tag: S31204MU074 LPSI TO RCS LOOP 2A CHECK VALVE											
* Valve: 8-075-A-552 40112DS03(H-2)	1	AC	8	CK	SA	C		AT	RR		5*
40112DS03(H-2)	1	AC	8	CK	SA	C	O	CVTO	CS		5*
Tag: S31204MU075 LPSI TO RCS LOOP 2B CHECK VALVE											

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Type	Actuator Type	Normal Pos.	Stroke Dir.	Test Mode	Max. Stroke Time	Relief Requests	Applicable Note Numbers & Remarks
* Valve: 16-077-C-645 Tag:S31204MU077 LPSI PUMP 3P016 SUCTION HEADER CHECK											
40112BS03(E-7)	2	C	16	CK	SA	C	O	CVPO OP		12	1a
40112BS03(E-7)	2	C	16	CK	SA	C	C	CVTC RR		12	1a
40112BS03(E-7)	2	C	16	CK	SA	C	O	CVTO RR		12	1a
* Valve: 16-084-C-645 Tag:S31204MU084 LPSI PUMP 3P015 SUCTION HEADER CHECK											
40112AS03(G-7)	2	C	16	CK	SA	C	O	CVPO OP		12	1a
40112AS03(G-7)	2	C	16	CK	SA	C	C	CVTC RR		12	1a
40112AS03(G-7)	2	C	16	CK	SA	C	O	CVTO RR		12	1a
* Valve: 2-099-C-334 Tag:S31204MU099 SI TANK DRAIN HEADER TO RFWT 3T005 CONTMT ISOL VALVE											
40114DS03(F-6)	2	A	2	GL	M	C		AT RR			9,10&11
* Valve: 2-104-C-329 Tag:S31204MU104 HPSI 3P018 TRAIN B MINIFLOW											
40112AS03(E-2)	2	C	2	SCK	SA	C	O	CVTO OP			
* Valve: 3-155-C-551 Tag:S31204MU155 HPSI HEADER #1 TO RCS LOOP 2 HOT LEG											
40112CS03(F-7)	2	C	3	CK	SA	C	O	CVTO CS			5*
* Valve: 3-156-A-551 Tag:S31204MU156 HPSI HEADER #1 TO RCS LOOP 2 HOT LEG INLET CHECK VALVE											
40112DS03(B-2)	1	AC	3	CK	SA	C		AT RR			5*
40112DS03(B-2)	1	AC	3	CK	SA	C	O	CVTO CS			5*
* Valve: 3-157-A-550 Tag:S31204MU157 HPSI HEADER #2 TO RCS LOOP 1 HOT LEG											
40112CS03(E-2)	1	AC	3	CK	SA	C		AT RR			5&10*
40112CS03(E-2)	1	AC	3	CK	SA	C	O	CVTO CS			5&10*
* Valve: 3-158-A-550 Tag:S31204MU158 HPSI HEADER #1 TO RCS LOOP 2 HOT LEG											
40112CS03(G-2)	1	AC	3	CK	SA	C		AT RR			5&10*
40112CS03(G-2)	1	AC	3	CK	SA	C	O	CVTO CS			5&10*
* Valve: 16-199-C-645 Tag:S31204MU199 LPSI PUMP 3P015 SUCTION HEADER CHECK											
40112AS03(D-7)	2	C	16	CK	SA	C	O	CVPO OP		12	1a
40112AS03(D-7)	2	C	16	CK	SA	C	C	CVTC RR		12	1a
40112AS03(D-7)	2	C	16	CK	SA	C	O	CVTO RR		12	1a
* Valve: 16-201-C-645 Tag:S31204MU201 LPSI PUMP 3P015 SUCTION HEADER CHECK											
40112BS03(G-7)	2	C	16	CK	SA	C	O	CVPO OP		12	1a
40112BS03(G-7)	2	C	16	CK	SA	C	C	CVTC RR		12	1a
40112BS03(G-7)	2	C	16	CK	SA	C	O	CVTO RR		12	1a

Inservice Testing Program
ASME Class 1, 2 and 3 Valves
San Onofre Nuclear Generating Station
Unit 3

Drawing (Coordinate)	Code Class	Valve Category	Size	Valve Actuator		Normal Stroke		Test Stroke		Max. Test Mode Time	Relief Requests	Applicable Note Numbers & Remarks
				Type	Type	Pos.	Dir.	Test	Mode			
** System: Sumps and Drains												
* Valve: HV-5803		Tag:3HV5803		CONTAINMENT SUMP TO RADWASTE SUMP								
40117AS03(E-2)	2	A	3	GA	MO	O		AT	RR			3,5,6,10 & 11
40117AS03(E-2)	2	A	3	GA	MO	O	C	BTC	OP	40		3,5,6,10 & 11
40117AS03(E-2)	2	A	3	GA	MO	O		PIT	RR			3,5,6,10 & 11
* Valve: HV-5804		Tag:3HV5804		CONTAINMENT SUMP TO RADWASTE SUMP ISOLATION VALVE								
40117AS03(E-1)	2	A	3	GA	AO	O		AT	RR			3,5,10 & 11
40117AS03(E-1)	2	A	3	GA	AO	O	C	BTC	OP	40		3,5,10 & 11
40117AS03(E-1)	2	A	3	GA	AO	O		FST	OP			3,5,10 & 11
40117AS03(E-1)	2	A	3	GA	AO	O		PIT	RR			3,5,10 & 11

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
REACTOR COOLANT P&ID #40111503				
3-152-A-551	A/F-5	1	AC	This check valve cannot be full stroke exercised during power operation because the high pressure safety injection pumps cannot overcome reactor coolant system pressure. In addition, this valve cannot be part stroke exercised because the header isolation valve is required to be closed during power operation by Technical Specification 3/4.5.2. The disc in this valve will actuate to its full open position while passing approximately 170 gpm. This can be performed while the plant is in cold shutdown and sufficient volume available in the pressurizer.
SAFETY INJECTION P&ID #40112503				
HV-0396	B/C-3	2	B	Full stroke testing of this valve during operation would result in non-compliance with Specification 3/4.5.2 which requires this valve to be closed with power to the valve operator removed. Valve will be full stroke exercised during cold shutdown.
HV-8152	B/F-2	2	B	Same as HV-0396.
HV-8153	B/G-2	2	B	Same as HV-0396.
HV-8160	B/C-2	2	B	Full stroke exercising this valve during power operation would violate Technical Specification 3/4.5.2 which requires this valve to be open with power to the valve operator removed. This valve will be full stroked during cold shutdown.
HV-8161	B/C-2	2	B	Same as HV-8160.
HV-8162	B/G-2	2	B	Same as HV-8160.
HV-8163	B/D-3	2	B	Same as HV-8160.
HV-9337	D/C-b	1	A	This valve is required by Technical Specification 3/4.5.2 to be interlocked to prevent opening at reactor coolant system above 376 psia. This valve will be full stroke exercised during cold shutdown.
HV-9339	D/C-2	1	A	Same as HV-9337.
HV-9377	D/B-4	1	A	Same as HV-9337.

COLD SHUTDOWN VALVE TESTING
 JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
SAFETY INJECTION P&ID #40112503 (Continued)				
HV-9378	D/B-3	1	A	Same as HV-9420.
HV-9420	C/G-3	2	A	This valve is required to be closed with power removed during power operation by Technical Specifications. Opening this valve would defeat high pressure cold leg safety injection. Valve will be full stroke exercised during cold shutdown.
HV-9434	C/E-3	2	A	Same as HV-9420.
3-018-A-551	C/D-3	1	AC	This valve cannot be exercised during power operation without violating the seat leakage integrity of a reactor coolant pressure isolation valve required by (associated cold leg injection loop check valve) Technical Specification 3/4.5.2. The tilting disc in this check valve will actuate to its full open position while passing approximately 170 gpm through it. This shall be performed while reactor is in cold shutdown and sufficient volume is available in pressurizer.
3-019-A-551	C/C-3	1	AC	Same as 3-018-A-551.
3-020-A-551	C/B-3	1	AC	Same as 3-018-A-551.
3-021-A-551	C/F-2	1	AC	Same as 3-018-A-551.
3-155-C-551	C/F-7	2	C	This check valve cannot be full stroke exercised during power operation because the high pressure safety injection pumps cannot overcome reactor coolant system pressure. In addition, this valve cannot be part stroke exercised because the header isolation valve is required to be closed during power operation by Technical Specification 3/4.5.2. The disc in this valve will actuate to its full open position while passing approximately 170 gpm. This can be performed while plant is in cold shutdown and sufficient volume available in the pressurizer.
3-156-A-551	D/B-2	1	AC	This check valve cannot be full stroke exercised during power operation because high pressure safety injection pumps cannot overcome reactor coolant system pressure. In addition, this valve cannot be part stroke exercised because the header isolation valve is required to be closed during power operation by Technical Specification 3/4.5.2. The disc in this valve will actuate to its full open position while passing approximately 170 gpm. This can be accomplished while reactor is in cold shutdown sufficient volume is available in the pressurizer.

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
SAFETY INJECTION P&ID #40112503 (Continued)				
3-157-A-550	C/E-2	1	AC	This check valve cannot be full stroke exercised during power operations because high pressure safety injection pumps cannot overcome reactor coolant system pressure. In addition, this valve cannot be part stroke exercised because the header isolation valve is required to be closed during power operation by Technical Specification 3/4.5.2. The tilting disc in this valve will actuate to its full open position while passing approximately 170 gpm. This can be accomplished while reactor is in cold shutdown and sufficient volume available in the pressurizer.
3-158-A-550	C/G-2	1	AC	Same as 3-157-A-550.
4-012-C-358	A/G-3	2	C	This valve cannot be full stroke exercised during power operation because the high pressure safety injection pump cannot overcome reactor coolant system pressure. The disc in this check valve will move to its full open position while passing approximately 200 gpm. This can be performed while plant is in cold shutdown and sufficient volume available in the pressurizer.
4-015-C-358	A/C-3	2	C	Same as 4-012-C-358.
4-016-C-358	A/E-3	2	C	Same as 4-012-C-358.
4-017-C-553	A/C-1	2	C	This valve cannot be full stroke exercised during power operation because the high pressure safety injection pump cannot overcome reactor coolant system pressure. The disc in the valve will actuate to the full open position while passing approximately 250 gpm. This can be performed while plant is in cold shutdown and sufficient volume available in the pressurizer.
8-072-A-552	D/G-2	1	AC	There is no full flow path available to exercise this valve during power operation. LPSI pumps cannot overcome RCS pressure during power operation. This valve will be full stroke exercised during cold shutdown.
8-073-A-552	D/F-2	1	AC	Same as 8-072-A-552.
8-074-A-552	D/F-2	1	AC	Same as 8-072-A-552.
8-075-A-552	D/H-2	1	AC	Same as 8-072-A-552.
10-024-C-406	B/G-2	2	C	LPSI pump discharge check valve. LPSI pump, cannot overcome RCS pressure. Aligning the system discharge to the RWST would defeat both trains of LPSI. This valve will be full stroke exercised during cold shutdown.

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
<u>SAFETY INJECTION PAID #40112S03 (Continued)</u>				
10-025-C-406	B/E-3	2	C	Same as 10-024-C-406.
14-200-C-645	B/F-6	2	C	This valve can only be exercised when plant is on shutdown cooling.
14-202-C-645	B/G-5	2	C	Same as 14-200-C-645.
<u>SAFETY INJECTION PAID #40113S03</u>				
HV-9340	A/D-6	1	B	This valve is a safety injection tank discharge valve. This valve is required to be open with power removed during operation by the Technical Specifications. This valve will be full stroke exercised during cold shutdown.
HV-9345	A/G-6	2	B	This valve is a safety injection tank pressure isolation valve. During power operation, Technical Specifications require power to be locked out to this valve so an inadvertent depressurization of the SIT will not occur. This valve will be full stroke exercised during cold shutdown.
HV-9350	A/D-2	1	B	Same as HV-9340.
HV-9355	A/G-2	2	B	Same as HV-9345.
HV-9360	B/D-6	1	B	Same as HV-9340.
HV-9365	B/G-6	2	B	Same as HV-9345.
HV-9370	B/D-2	1	B	Same as HV-9340.
HV-9375	B/D-2	1	B	Same as HV-9345.
12-027-A-551	A/C-5	1	AC	During power operation there is no full flow path available to stroke test this valve. LPST or HPST pumps cannot overcome the RCS pressure. The latching disc in this check valve will actuate to its full open position with approximately 2000 gpm. This can be accomplished while the plant is on shutdown cooling.
12-029-A-551	A/C-4	1	AC	Same as 12-027-A-551.
12-031-A-551	B/C-5	1	AC	Same as 12-027-A-551.
12-033-A-551	B/C-4	1	AC	Same as 12-027-A-551.

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
<u>CONTAINMENT SPRAY PAID #40114503</u>				
HV-8150	B/E-5	2	B	This valve is required to be closed with power removed during power operation by the Technical Specifications. Opening this valve could defeat both trains of LPSI. This valve will be full stroke exercised during cold shutdown.
HV-8151	B/F-5	2	B	Same as HV-8150.
HV-9398	C/D-2	2	B	ISI Surveillance testing of this valve requires a system modification that requires approximately 72 hours to complete. To perform this modification one train of chemical addition must be declared inoperable which places the unit in a limiting condition for operation per Technical Specification 3.6.2.2. This valve shall be full stroke exercised during cold shutdown until a design change can be completed that will increase the capability of the valve to be ISI tested.
HV-9399	C/B-2	2	B	Same as HV-9398.
B-012-C-406	A/C-3	2	C	During power operation, full stroke exercising of this check valve would require disabling both trains of LPSI. This valve will be full stroke exercised at a cold shutdown interval during the process of going to cold shutdown (Mode 4).
B-014-C-406	A/G-3	2	C	Same as B-012-C-406.
B-029-C-645	A/C-3	2	C	Same as B-012-C-406.
B-030-C-645	A/G-3	2	C	Same as B-012-C-406.
16-087-C-675	A/F-6	2	C	Same as B-012-C-406.
16-088-C-675	A/C-6	2	C	Same as B-012-C-406.

CHEMICAL & VOLUME CONTROL PAID #40123503

HV-9200	A/D-3	2	A	Exercising this valve during power operation would isolate normal charging to reactor coolant system. This would violate Technical Specification 3.1.2.2 which requires two flow paths for boration during power operation. Closing this valve would isolate the boration flow path. This valve will be full stroke exercised during cold shutdown.
HV-9201	A/C-6	1	B	This valve cannot be full stroke exercised during power operation since this would result in placing unnecessary thermal stress transients on pressurizer spray nozzle. This valve will be full stroke exercised during cold shutdown.

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
CHEMICAL & VOLUME CONTROL PAID #40123S03 (Cont Inued)				
HV-9202	A/E-6	1	B	This valve must remain open during power operation in order to ensure consistency with assumptions made regarding system flow to the RCS cold legs in the Accident Analysis and to comply with the intent of Limiting Condition for Operation 3.5.2.
HV-9203	A/E-6	1	B	Same as HV-9302.
HV-9204	A/F-6	1	B	Exercising this valve during power operation would result in unnecessary thermal stress transients on the regenerative heat exchanger and reactor coolant system charging nozzles. This valve will be full stroke exercised during cold shutdown.
HV- 9205	A/F-3	2	A	Same as HV-9204.
TV-0221	A/F-6	1	B	Same as HV-9204.
TV-9267	A/F-3	2	A	Same as HV-9204.
2-019-A-554	A/C-7	1	C	Same as HV-9201.
2-020-A-554	A/E-7	1	C	This valve cannot be tested without closing HV-9203.
2-021-A-554	A/D-7	1	C	This valve cannot be tested without closing HV-9202.
2-129-A-554	A/B-3	1	AC	Same as HV-9201.
2-130-C-334	A/E-2	2	A	Same as HV-9201.
CHEMICAL & VOLUME CONTROL PAID #40124S03				
HV-9217	A/G-2	2	A	Exercising this valve could result in reactor coolant pump seal failure which could result in plant shutdown. This valve will be full stroke exercised during cold shutdown.
HV-9218	A/F-3	2	A	Same as HV-9217.
LV-0227B	A/B-5	2	B	Closing this valve would require aligning charging pump suction to another source and would inject highly concentrated boric acid into the reactor coolant system causing a plant shutdown. This valve will be full stroked during cold shutdown.
LV-0227C	B/A-7	2	B	Opening this valve would result in injecting highly concentrated boric acid into the reactor coolant system causing plant shutdown. This valve will be full stroke exercised during cold shutdown.
3-082-C-675	B/H-5	2	C	Same as LV-0227C.

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
<u>CHEMICAL & VOLUME CONTROL P&ID #40124S03 (Continued)</u>				
3-083-C-675	B/F-7	2	C	Same as LV-0227C.
4-015-C-675	A/B-4	2	C	Closure of check valve cannot be performed during power operation as this would require aligning charging pumps to another source which would inject highly concentrated boric acid to the reactor coolant system resulting in a plant shutdown. This valve will be exercised during cold shutdown.
6-052-C-675	B/B-7	2	C	Same as LV-0227C.
<u>CHEMICAL & VOLUME CONTROL P&ID #40125S03</u>				
HV-9235	A/B-5	3	B	Opening this valve during power operation could result in over-boration of the RCS which could result in plant shutdown. This valve will be full stroke exercised during cold shutdown.
HV-9240	A/B-4	3	B	Same as HV-9235.
HV-9247	B/E-5	3	B	Same as HV-9235.
3-033-D-675	B/B-5	3	C	This valve cannot be full stroke exercised during power operation since this would result in over-boration of the RCS which would result in plant shutdown. This valve will be partial stroke exercised quarterly during power operation and full stroke exercised during cold shutdown.
3-035-D-675	B/C-5	3	C	Same as 3-033-D-675.
<u>COMPONENT COOLING WATER P&ID #40127S03</u>				
HV-6211	F/G-3	2	A	Exercising this valve during operation would secure or divert cooling water flow from RCP seals which could result in seal damage and plant shutdown. This valve will be full stroke exercised during cold shutdown.
HV-6212	D/E-7	3	B	Same as HV-6211.
HV-6213	D/D-7	3	B	Same as HV-6211.
HV-6216	F/C-5	2	A	Same as HV-6211.
HV-6218	A/E-7	3	B	Same as HV-6211.
HV-6219	A/D-7	3	B	Same as HV-6211.

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
COMPONENT COOLING WATER PAID #40127S03 (Continued)				
HV-6223	F/G-4	2	A	Same as HV-6217.
HV-6236	F/C-6	2	A	Same as HV-6211.
HV-6500	E/F-4	3	B	Same as HV-6211.
HV-6501	E/C-4	3	B	Same as HV-6211.
28-101-D-725	A/G-4	3	C	Full stroke exercising of this valve during power operation would require diverting component cooling water from the reactor coolant pump seals which would result in seal damage and plant shutdown. This valve will be part stroke exercised quarterly and full stroke exercised during cold shutdown.
28-102-D-725	A/B-4	3	C	Same as 28-101-D-725.
28-103-D-725	A/D-4	3	C	Same as 28-101-D-725.
MAIN STEAM PAID #40141SC3				
HV-8204	C/B-2	2	B	Main Steam Isolation Valve. Full exercising of this valve is not practical during plant operation. The valve will be part stroked during plant operation and full stroked during cold shutdowns.
HV-8205	D/B-3	2	B	Same as HV-8204.
HV-8419	D/E-6	2	B	Atmospheric dump valve. Exercising this valve during power operation could result in a low steam generator pressure indication which would shut the main steam isolation valve, and result in a plant shutdown. This valve will be full stroke exercised during cold shutdown.
HV-8421	C/F-6	2	B	Same as HV-8419.
6-124-C-599	A/B-7	2	C	Exercising this valve during power operation would result in placing unnecessary thermal stresses on the feedwater piping which could result in premature failure of this piping. This valve will be full stroke exercised during cold shutdown.
6-848-C-599	A/F-7	2	C	Same as 6-124-C-599.

COLD SHUTDOWN VALVE TESTING
JUSTIFICATION TABLE

UNIT 3

VALVE NUMBER	COORD.	CLASS	VALVE CAT.	JUSTIFICATION FOR COLD SHUTDOWN TESTING FREQUENCY OF VALVES
<u>HIGH PRESSURE FEEDWATER P&ID #40156S03</u>				
HV-1105	B/B-6	-	B	This valve cannot be full stroke exercised during power operation as this would challenge steam generator level control which could result in a plant shutdown. This valve will be full stroke exercised during cold shutdown.
HV-1106	B/E-6	-	B	Same as HV-1105.
HV-4047	B/F-4	-	B	Full stroke exercising this valve during power operation would result in loss of feedwater flow to the steam generator which could result in a plant shutdown. This valve will be full stroke exercised during cold shutdown.
HV-4048	B/F-2	2	B	Same as HV-4047.
HV-4051	B/B-4	-	B	Same as HV-4047.
HV-4052	B/B-2	2	B	Same as HV-4047.
<u>AUXILIARY FEEDWATER P&ID #40160S03</u>				
6-121-D-596	A/D-3	3	C	Same as 6-124-C-599 (P&ID 40141S03).
6-126-B-598	A/B-5	3	C	Same as 6-124-C-599 (P&ID 40141S03).
6-532-D-598	A/G-4	3	C	Same as 6-124-C-599 (P&ID 40141S03).
6-541-D-596	A/E-3	3	C	Same as 6-124-C-599 (P&ID 40141S03).
<u>FIRE PROTECTION P&ID #40189S03</u>				
HV-5686	B/D-3	2	A	This valve cannot be full stroke exercised during power operation since this will activate the Fire Protection System in Unit 2 containment. This valve will be full stroke tested during cold shutdown.
<u>COMPRESSED AIR SYSTEM P&ID #40191S03</u>				
HV-5388	G/G-6	2	A	Full stroke exercising this valve would isolate instrument air to containment. This could result in a plant shutdown. This valve will be full stroke exercised during cold shutdown.