

CAROLINA POWER & LIGHT COMPANY  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2  
IN-SERVICE INSPECTION PROGRAM

INTERVAL 2

MARCH 7, 1981 TO MARCH 7, 1991

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ABSTRACT  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2  
IN-SERVICE INSPECTION PROGRAM  
INTERVAL 2 - MARCH 7, 1981 TO MARCH 7, 1991

In accordance with 10CFR 50.55a(g)(4)(ii) the H. B. Robinson Unit 2 ISI Program is being updated to ASME Section XI, 1977 Edition with addenda through the summer, 1978, addenda. Steam generator inspections will continue to be inspected under Plant Technical Specifications. Specific reliefs are requested in accordance with 10CFR 50.55a(g)(5)(iii).

The interval for which this program is applicable will commence on March 7, 1981, and end on March 7, 1991. Class 1, 2, and 3 inspections required to be completed during the first interval will be completed at the next refueling outage currently scheduled for the first quarter of 1982.

The ISI Program was developed employing the classification guidelines contained in 10CFR 50.2(v) for Quality Group A. Regulatory Guide 1.26, Revision 2 was used for classification of items in Quality Groups B and C, along with ANSI N18.2, 1973 and ANSI N18.2a, 1975. Quality Groups A, B, and C are the same as ASME classes 1, 2 and 3 respectively.

The List of Drawings identifies the drawings used in developing the program.

Attachment A describes the Class 1, 2, and 3 component inspection program developed in accordance with Subsections IWB, IWC, and IWD of ASME Section XI.

Attachment B describes the Class 1, 2, and 3 pump and valve inspection program developed in accordance with Subsections IWP and IWV of ASME Section XI.

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2  
IN-SERVICE INSPECTION PROGRAM  
LIST OF DRAWINGS

<u>Drawing #</u>	<u>Sheets</u>	<u>Title</u>
ISI-5379-353		Sampling System
ISI-5379-376	1 of 3	Component Cooling System
	2 of 3	
	3 of 3	
ISI-5379-684		Chemical and Volume Control System
ISI-5379-685	1 of 3	Chemical and Volume Control System
	2 of 3	
	3 of 3	
ISI-5379-686	1 of 2	Chemical and Volume Control System
	2 of 2	
ISI-5379-920	1 of 4	(Liquid) Waste Disposal System
ISI-5379-921	1 of 2	(Gaseous) Waste Disposal System
	2 of 2	
ISI-5379-1082	1 of 2	Safety Injection System
	2 of 2	
ISI-5379-1484		Residual Heat Removal System
ISI-5379-1485		Spend Fuel Pit Coolant System
ISI-5379-1971	1 of 2	Reactor Coolant System
	2 of 2	
ISI-G-190196	1 of 3	Main, Extraction and Aux. Steam Sys.
ISI-G-190197	2 of 3	Feedwater, Condensate and Air Evacuation Sys.
ISI-G-190199	1 of 7	Service & Cooling Water System
	2 of 7	
	3 of 7	
ISI-G-190234	1 of 2	Steam Generator Blow-Down System
ISI-G-190261	3 of 8	Penetration Pressurization System
	7 of 8	
	8 of 8	
ISI-G-190262		Isolation Valve Seal Water
ISI-G-190304	1 of 2	HVAC - Turb, Fuel, Aux, and Reactor Buildings
ISI-HBR2-6490		Post Accident Sampling System
ISI-HBR2-6933		Post Accident Containment Venting System
ISI-HBR2-7063		Flow Diagram Legend
ISI-SK-1		Fire Protection System
ISI-SK-2		Fuel Transfer Tube

Attachment A

ASME SECTION XI COMPONENT INSPECTION PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

The component inspection program to be conducted in accordance with Subsections IWB, IWC, and IWD of ASME Section XI will be developed and submitted prior to March 1, 1982.

Attachment B

ASME SECTION XI PUMP & VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

The pump and valve testing program shall be conducted in accordance with Subsections IWP and IWV of Section XI of the 1977 Edition of the ASME Boiler and Pressure Vessel Code through the Summer, 1978 Addenda, except for specific relief requested in accordance with 10CFR50.55a(g) (5)(iii), which is identified in Tables 2 and 3 for pumps and valves respectively.

The interval for which this pump and valve testing program is applicable commences on March 7, 1981, and expires on March 7, 1991.

The pump and valve testing program was developed employing the classification guidelines contained in 10CFR50.2(v) for Quality Group A and Regulatory Guide 1.26, Revision 2 for Quality Groups B and C along with ANSI N18.2, 1973, and N18.2a, 1975. Quality Groups A, B, and C are the same as ASME Class 1, 2, and 3, respectively.

The List of Drawings identifies the drawings used to develop the pump and valve testing program.

Table 1 lists the codes and symbols used throughout the program.

Table 2 lists all safety related Class 1, 2, and 3 pumps included in the testing program. The test parameters measured and the testing frequency are also listed.

Table 3 lists all safety related Class 1, 2, and 3 valves included in the program. Specifically excluded per IWV-1200 are valves used for operating convenience only, such as manual vent, drain, instrument, test maintenance, pressure regulating, thermal relief, and system control valves. Test methods and frequencies are also listed. Valve maximum stroke times are listed. Valves which cannot be tested during normal operation have the next acceptable frequency listed as allowed by IWV-3412(a), IWV-3415 and IWV-3416.

Cold shutdown testing, when required, will commence 48 hours after initiation of cold shutdown conditions as defined in Technical Specifications, except for refueling outages. Testing will continue until completed or until the plant is ready to return to operation. Completion of all testing will not be a prerequisite to returning to operation. Testing not completed at one shutdown will be continued during subsequent shutdowns.

TABLE 1

## H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

## CODES AND SYMBOLS

Valve Types

BF . . . . . Butterfly  
 CK . . . . . Check  
 DA . . . . . Diaphragm  
 GA . . . . . Gate  
 GL . . . . . Globe  
 ND . . . . . Needle  
 REG . . . . . Regulator  
 RV . . . . . Relief/Safety  
 3W . . . . . 3-Way  
 VB . . . . . Vacuum Breaker

Actuator Types

AO . . . . . Air  
 M . . . . . Manual  
 MO . . . . . Motor  
 SA . . . . . Self Actuate  
 SO . . . . . Solenoid

Valve Position

CL . . . . . Closed  
 O . . . . . Open  
 LC . . . . . Locked Closed  
 LO . . . . . Locked Open

Valve Test Methods

F . . . . . Observe Failure Mode  
 FF . . . . . Normally closed check valves  
                   are given a forward flow test  
                   to verify that disc opens.  
 J . . . . . Category A containment isolation  
                   valve tested in accordance with  
                   10CFR50 App. J.  
 LT . . . . . Leak Test  
 RF . . . . . Normally open check valves are  
                   given a reverse flow test to show  
                   that disc seats.  
 RV . . . . . Relief Valve (Test per IWV-3510)  
 S . . . . . Full Stroke  
 T . . . . . Measure Time  
 VI . . . . . Verify Remote Indication

Test Intervals

W . . . . . Weekly  
 M . . . . . Monthly  
 Q . . . . . Quarterly  
 C . . . . . Cold Shutdown  
 R . . . . . Refueling  
 A . . . . . Annual  
 X . . . . . Frequency Determined from  
                   Table IWV-3510-1  
 J . . . . . Frequency Determined by  
                   10CFR50 App. J.

Misc. Symbols

NA . . . . . Not Applicable  
 NR . . . . . Not Required

## TABLE 2

### H. B. ROBINSON UNIT 2 SPECIFIC REQUESTS FOR RELIEF

This section provides justification for the specific relief requested from Code test requirements as provided for in 10CFR50.55a(g)(5)(iii). Each request is identified by a unique number and identifies the pump(s) for which the request is being made. The specific Code test requirement found to be impractical is defined and the basis for exclusion from Code requirements is presented. Any testing performed in lieu of Code requirements is specified.

#### 1. Specific Relief Request:

##### Monthly In service Test

##### Applicable To:

All pumps

##### Basis for Relief Request:

Monthly Section XI operability testing has been a plant requirement for most of these pumps since operation began. An analysis of the results of these tests and comparable data from other operating plants has shown no significant changes in performance. Based on this analysis, the continuation of Section XI monthly testing would not significantly increase plant safety.

Monthly pump testing requires a total of at least 250 hours per year of pump operation, at least 575 man-hours per year, for data acquisition, and at least 50 man-hours per year for data reduction, analysis, and record keeping. This amounts to a total of 525 man-hours per year. At a conservative total cost of \$20 per man-hour, this amounts to \$12,500 per year. Based upon the average exposure rates in the pump access areas, the total man-rem exposure per year for pump testing is approximately 1.0 man-rem. At the present conservatively estimated cost of \$10,000 per man-rem to plant personnel, this exposure costs an additional \$10,000 per year. Total cost to our customers is approximately \$25,200 per year, for no significant increase in safety.

##### Alternate Testing:

Pumps will be tested in compliance with ASME Section XI and this program once per quarter. This is in agreement with changes that were implemented in Subsection IWP of the Code in the Winter, 1979, addenda.



TABLE 2

H. B. ROBINSON UNIT 2  
SPECIFIC REQUESTS FOR RELIEF

2. Specific Relief Request:

Measuring pump bearing temperature annually.

Applicable to:

All pumps.

Basis for Relief Request:

The referenced Edition of the Code requires bearing temperature to be recorded annually. It has been demonstrated by experience that bearing temperature rise occurs only minutes prior to bearing failure. Therefore, the detection of possible bearing failure by a yearly temperature measurement is extremely unlikely. It requires at least an hour of pump operation to achieve stable bearing temperatures. The small probability of detection of bearing failure by temperature measurement does not justify the additional pump operating time required to obtain the measurements.

Alternate Testing:

NONE. This is in agreement with present changes that are being implemented in Subsection IWP of the Code to delete yearly bearing temperature measurement. Deletion of bearing temperature has been approved and will be included in future Addenda. See minutes of the November 28, 1979, meeting of the Operating and Maintenance Working Group - Testing of Pumps and Valves in San Jose, California, dated January 9, 1980.

3. Specific Relief Request:

A. Flow rate measurements as required by IWP-3000.

B. Differential pressure measurements as required by IWP-3000.

Applicable To:

Service Water Pumps

Basis for Relief Request:

The service water pumps are used for removing heat from certain secondary system components during normal operation. Since heat load varies and inlet temperatures vary, automatic temperature control valves will vary the flow rates through

## TABLE 2

### H. B. ROBINSON UNIT 2 SPECIFIC REQUESTS FOR RELIEF

the individual components, thus varying pump resistance. The system has no installed flow measuring devices capable of measuring flow from the pumps. The piping is concrete lined which prohibits the use of ultrasonic flow measuring techniques. There is insufficient room on the outlet piping of each individual pump to allow installation of any accurate flow devices.

H. B. Robinson currently verifies service water system operation during refueling by conducting a "dead head" (zero flow) test on each pump. This test provides a point for comparison to determine the condition of the pumps since the previous tests. These tests will be used as an alternative to the monthly Section XI test. If a pump is declared inoperable and maintenance is required on that pump, the pump will be tested in the manner in which the refueling tests are performed. Vibration and normal pump parameters will be checked on a quarterly basis as per the ISI Program requirements.

#### Alternate Testing:

Verification of system operation during refueling by conducting "dead head" (zero flow) test on each pump.

#### 4. Specific Relief Request:

Measure Flow Rate.

#### Applicable To:

Auxiliary Feedwater A, B, and SD, Safety Injection A, B, and C, Residual Heat Removal A and B, Containment Spray A and B, Component Cooling A and B, and Boric Acid Transfer A and B.

#### Basis for Relief Request:

Instrumentation is not installed to measure flow rate for testing.

For the first ISI interval, these pumps (except Boric Acid Transfer A and B) were tested in a fixed resistance configuration so that any change in performance would be indicated by a change in differential pressure. This method of testing has proven satisfactory and will be continued.

#### Alternate Testing:

NONE.

TABLE 2  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2  
PUMP TEST PROGRAM

Page \_\_\_\_ of \_\_\_\_

Pump Name & Drawing Number	Pump No.	Test Parameter Measured							Relief Request
		Speed n	Inlet Pressure $P_i$	Differential Pressure $\Delta P$	Flow Rate Q	Vibration Amplitude V	Lubricant Level or Pressure	Bearing Temperature $T_b$	
Auxiliary Feedwater G-190197	AFW-A*	NR	Q	Q	NR	Q	Q	NR	1,2,4
	AFW-B*	NR	Q	Q	NR	Q	Q	NR	1,2,4
	AFW-SD	Q	Q	Q	NR	Q	Q	NR	1,2,4
Safety Injection 5379-1082	SI-A*	NR	Q	Q	NR	Q	Q	NR	1,2,4
	SI-B*	NR	Q	Q	NR	Q	Q	NR	1,2,4
	SI-C*	NR	Q	Q	NR	Q	Q	NR	1,2,4
Residual Heat Removal 5379-1484	RHR-A*	NR	Q	Q	NR	Q	Q	NR	1,2,4
	RHR-B*	NR	Q	Q	NR	Q	Q	NR	1,2,4
Containment Spray 5379-1082	CS-A*	NR	Q	Q	NR	Q	Q	NR	1,2,4
	CS-B*	NR	Q	Q	NR	Q	Q	NR	1,2,4
Service Water G-190199 Sh. 1	SW-A*	NR	Q	R	NR	Q	Q	NR	1,2,3
	SW-B*	NR	Q	R	NR	Q	Q	NR	1,2,3
	SW-C*	NR	Q	R	NR	Q	Q	NR	1,2,3
	SW-D*	NR	Q	R	NR	Q	Q	NR	1,2,3
Component Cooling 5379-376 Sh. 1	CCW-B*	NR	Q	Q	NR	Q	Q	NR	1,2,4
	CCW-C*	NR	Q	Q	NR	Q	Q	NR	1,2,4
Service Water Booster G-190199 Sh. 2	SWBP-A*	NR	Q	Q	Q	Q	Q	NR	1,2
	SWBP-B*	NR	Q	Q	Q	Q	Q	NR	1,2

\*Synchronous or induction motors do not require speed check (IWP-4400).

## TABLE 2

Pump Name & Drawing Number	Pump No.	Test Parameter Measured							Relief Request
		Speed n	Inlet Pressure $P_i$	Differential Pressure $\Delta P$	Flow Rate Q	Vibration Amplitude v	Lubricant Level or Pressure	Bearing Temperature $T_b$	
Charging 5379-685 Sh. 2	CVC-B	Q	Q	Q	Q	Q	Q	NR	1,2
	CVC-C	Q	Q	Q	Q	Q	Q	NR	1,2
Boric Acid Transfer 5379-685 Sh. 3	A*	NR	Q	Q	NR	Q	NR	NR	1,2,4
	B*	NR	Q	Q	NR	Q	NR	NR	1,2,4

\*Synchronous or induction motors do not require speed check (IWP-4400).

TABLE 3 - VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2  
SPECIFIC REQUESTS FOR RELIEF

This section provides justification for specific requests for relief from code requirements as provided for in 10CFR50.55a(g)(5)(iii). Each relief requested is identified by a unique number and identifies the valve(s) for which the relief request is being made. The code test requirement found to be impractical is defined and the basis for exclusion from code requirements is presented. Any alternate testing is specified.

1. Specific Relief Request:

Seat leak testing and Category A valves as required by IWV-3420.

Applicable to:

All Category A valves for which test method is designated as J.

Basis for Relief Request:

10CFR50 Appendix J requires periodic leak testing of Containment Isolation Valves. All Section XI Category A valves for this plant are containment isolation valves and require Section XI leak testing. In order to preclude redundant test requirements on these valves, the Appendix J requirements will be met in lieu of the Section XI requirements.

The H. B. Robinson containment has two features in its design that assure adequate integrity during and following a loss of Coolant Accident. These are the Isolation Valve Seal Water System and the Penetration Pressurization System. These two systems are conservatively designed, seismically qualified, and operated in accordance with Unit Technical Specifications and the requirements of 10CFR50 Appendix J for seal systems that can be used in lieu of local Type C valve testing.

Alternate Testing:

The PPS and IVSW systems will be tested as required by 10CFR50 Appendix J.

2. Specific Relief Request:

Exercising of valves as required by IWV-3520.

TABLE 3 - VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2  
SPECIFIC REQUESTS FOR RELIEF

Applicable to:

MS-VI-3A-C

Basis for Relief Request:

These valves are the Main Steam check valves downstream of the MSIV's. Normal steam flow verifies the proper opening of the valves. Section XI requires reverse flow seating of the valves. Due to the design of the system, no meaningful test can be performed to prove this seating at any operating condition. Therefore, a special test method must be employed to verify reverse flow seating due to the special requirements that will be necessary. The frequency will be refueling outage intervals.

3. SPECIFIC RELIEF REQUEST:

Full Stroke Testing as Required by IWV-3520

APPLICABLE TO:

Valves 875D, 875E, and 875F

BASIS FOR RELIEF REQUEST:

These Accumulator Check Valves are partially stroked at cold shutdown by varying reactor coolant system pressure and observing increases and decreases in accumulator level. Stroke verification by passing design flow during cold shutdown is not practical due to the large volume of water that would be added to the Reactor Coolant System. Calculations have shown that a differential pressure of approximately 25 psi will shear any particles that may attempt to prevent the valve from functioning (FSAR Section 6.2.3). Based on this calculation and partial stroke testing presently performed full stroke testing requirements are waived.

4. SPECIFIC RELIEF REQUEST:

Full Stroke Testing as Required by IWV-3520

APPLICABLE TO:

Valves 889A and 889B

BASIS FOR RELIEF REQUEST:

Partial stroke testing is accomplished quarterly by running the containment spray pumps on the recirculation loop. The spray additive tank discharge valves cannot be opened during this quarterly test due to the addition of sodium hydroxide to the refueling water storage tank that would result. These valves cannot be full stroked during cold shutdown because no alignment of the containment spray system can accomplish this short of initiating flow through the header nozzles.

5. SPECIFIC RELIEF REQUEST:

Full Stroke Testing as Required by IWV-3520

APPLICABLE TO:

Valves 873A, 873B, 873C, 873D, 873E, 873F, 874A, and 874B

BASIS FOR RELIEF REQUEST:

These valves in the Safety Injection System can only be tested by adding water to the Reactor Coolant System. During normal operation, this is not possible. Injection during cold shutdown is not practical due to boron concentration of the water added. At refueling intervals, these valves are full stroked during the Safety Injection System Test while the reactor vessel head is removed and the refueling cavity can be filled. This constitutes the only practical interval that this test can be performed.

6. SPECIFIC RELIEF REQUEST:

Full Stroke Testing as Required by IWV-3520

APPLICABLE TO:

Valve SW-544

BASIS FOR RELIEF REQUEST:

This valve is partially stroked quarterly by verifying flow through a downstream tell-tale drain. Valve SW-544 is in the service water supply to the Auxiliary Feedwater (AFW) Pump Suction Line. It is a back-up water supply that would only be initiated in emergency conditions (condensate tank level less than 10%). The deep well water system also serves as a back-up AFW pump suction supply source.

Full stroke testing can only be accomplished by adding untreated lake water to the AFW System which has controlled water chemistry. Therefore, system design does not allow

full stroke testing. Dismantling the valve at refueling intervals is not considered necessary nor practical. Disassembly for full stroke verification only does not add to the safety margin verified by a quarterly partial stroke test. In fact, disassembly for full stroke verification may prove detrimental and could possibly add to services water system leakage during operation. The position taken is, considering partial stroke testing now performed quarterly and the redundant role this system shares with the deep well water system, no other testing or periodic disassembly for testing purposes is required.

7. SPECIFIC RELIEF REQUEST:

Individual Full Stroke Verification of Valves

APPLICABLE TO:

Valves SW-542 and SW-543

BASIS FOR RELIEF REQUEST:

These valves are installed in parallel, non-isolable flowpaths. Therefore, full stroke verification cannot be performed individually on each valve. Flow through these valves is verified collectively at quarterly intervals.

8. SPECIFIC RELIEF REQUEST:

Full Stroke Testing as Required by IWV-3520

APPLICABLE TO:

Valves 879A, 879B, and 879C

BASIS FOR RELIEF REQUEST:

These valves are partially stroked quarterly while performing the Safety Injection Pump Test while aligned for recirculation operation. Full stroke testing during normal plant operation would require injection into the reactor coolant loops which is not possible. These valves are, however, full stroke exercised during performance of the Safety Injection System Test at each refueling outage. Therefore, exemption to the cold shutdown stroking requirement of IWV-3520 is claimed.

9. SPECIFIC RELIEF REQUEST:

Full Stroke Testing as Required by IWV-3520

APPLICABLE TO:

Valves 890A and 890B



BASIS FOR RELIEF REQUEST:

These valves are tested at cold shutdown by injecting air upstream and observing a pressure increase on a temporary test gauge downstream. The cold shutdown test constitutes the only method to verify disk travel short of initiating flow through the spray nozzles.

Disassembly of the valve for manual stroking will not increase the reliability of proper valve operation. Also, post-maintenance testing as required by IWV-3200 would have to be performed by the air test method now in use.

10. SPECIFIC RELIEF REQUEST:

Reverse Flow Testing

APPLICABLE TO:

Valve V8-5

BASIS FOR RELIEF REQUEST:

This valve, in the instrument air supply line to containment, cannot be aligned for a reverse flow test. This valve is subject to a reverse flow test during the containment integrated leak rate test which is conducted at intervals not to exceed three refueling outages.

Instrument air is a closed system inside containment with valve IA-PCV-1716 serving as the boundary isolation valve.

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Sampling System

P&ID No.

ISI-200-5379-353

Page 1 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
956A	2	B-5	X					3/8	GL	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
956B	2	B-6	X					3/8	GL	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
956C	2	C-5	X					3/8	GL	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
956D	2	C-6	X					3/8	GL	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
956E	2	E-5	X					3/8	GL	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40

System Name

## Sampling System

P&ID No.

ISI-200-5379-353

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
956F	2	E-6	X					3/8	GL	AO	CL	Y	S F T T VI J	Q Q Q Q Q J	1	60	P.T. 40
956G	2	G-5	X					3/8	GL	AO	CL	Y	S F T T VI J	Q Q Q Q Q J	1	60	P.T. 40
956H	2	G-6	X					3/8	GL	AO	CL	Y	S F T T VI J	Q Q Q Q Q J	1	60	P.T. 40

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Auxiliary Coolant Sys. Component      P&ID No. ISI-200-5379-376, Sh. 1 of 3      Page 1 of 1  
Cooling

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
702A	3	H-5		X				16	CK	SA	O/C	N	FF RF	Q			P.T. 36.2
702B	3	K-5		X				16	CK	SA	O/C	N	FF RF	Q			P.T. 36.2
702C	3	M-5		X				16	CK	SA	O/C	N	FF RF	Q			P.T. 36.2
707	3	B-4		X				3x4	RV	SA	CL	N	RV	X			P.T. 36.1

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Auxiliary Coolant Sys. Component  
Cooling

P&ID No. ISI-200-5379-376, Sh. 3 of 3

Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
791D	3	L-10			X			3/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1
791E	3	I-10			X			3/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1
791J	3	C-4			X			3/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1
791K	3	E-5			X			3/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Auxiliary Coolant Sys. Component  
Cooling

P&ID No. ISI-200-5379-376, Sh. 2 of 3

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
FCV-626	2	K-14	X					3	GA	MO	O	Y	S T VI J	C C C J	1	60	P.T. 42.0
715	2	N-12			X			3x4	RV	SA	CL	Y	RV	X			P.T. 36.1
716A	3	J-3		X				6	GA	MO	O	Y	S T VI	C C C		60	P.T. 42.0
716B	2	J-3	X					6	GA	MO	O	Y	S T J VI	C C J C	1	60	P.T. 42.0
722A	3	M-8			X			8/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1
722B	3	I-8			X			8/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1
722C	3	K-8			X			8/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1
729	2	H-13			X			3x4	RV	SA	CL	Y	RV	X			P.T. 36.1
730	2	I-14	X					6	GA	MO	O	Y	S T J VI	C C J C	1	60	P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Auxiliary Coolant Sys. Component Cooling        P&ID No. ISI-200-5379-376, Sh. 2 of 3

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
735	3	J-16	X					3	GL	MO	O	Y	S T VI J	C C C J	1 120		P.T. 42.0
737A	2	N-3	X					3	GA	M	O	Y	S	Q			P.T. 36.2
739	2	M-14	X					3	GL	AO	CL	Y	S F T VI	Q Q Q Q	60		P.T. 36.2
749A	3	D-3	X					16	GA	MO	CL	Y	S T VI	Q Q Q	300		P.T. 2.8A
749B	3	D-6	X					16	GA	MO	CL	Y	S T VI	Q Q Q	300		P.T. 2.8A
791A	3	B-15	X					3/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1
791B	3	D-15	X					3/4x1	RV	SA	CL	Y	RV	X			P.T. 36.1

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

CVCS

P&amp;ID No.

ISI-200-5379-685, Sh. 3 of 3

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
397A	3	L-7			X			2	CK	SA	CL	N	FF	Q			P.T. 18.2A
397B	3	L-8			X			2	CK	SA	CL	N	FF	Q			P.T. 18.2A



TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name CVCS

P&ID No. ISI-200-5379-685, Sh. 2 of 3

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
FCV-113A	3	J-13		X				1	GL	AO	C	Y	S F T VI	C C C C		300	P.T. 42.0
LCV-115B	2	K-9		X				4	BF	AO	CL	N	S F T VI	C C C C		300	P.T. 42.0
LCV-115C	2	H-7		X				4	GA	MO	O	Y	S T VI	C C C		300	P.T. 42.0
209	2	B-7			X			2x3	RV	SA	CL	Y	RV	X			P.T. 25.4
257	2	C-8			X			2x3	RV	SA	CL	Y	RV	X			P.T. 25.4
266	2	I-7			X			4	CK	SA	O	Y	FF	Q			Verified by normal charging pump flow.
283A	2	J-3			X			3/4x2	RV	SA	CL	Y	RV	X			P.T. 25.4
283B	2	K-3			X			3/4x2	RV	SA	CL	Y	RV	X			P.T. 25.4
283C	2	M-3			X			3/4x2	RV	SA	CL	Y	RV	X			P.T. 25.4

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name CVCS

P&ID No. ISI-200-5379-685, Sh. 2 of 3

Page 2 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
350	2	L-13		X				2	GA	MO	CL	Y	S T VI	C C C		60	P.T. 42.0
351	2	L-13			X			2	CK	SA	CL	Y	FF	C			G.P. 6
355	3	J-13			X			1	CK	SA	CL	Y	FF	Q			P.T. 18.2A
357	2	K-10			X			4	CK	SA	CL	Y	FF	M			P.T. 7.1

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name CVCS

P&ID No. ISI-200-5379-685, Sh. 1 of 3

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
200A	2	B-9		X				2	GL	AO	C	Y	S F T VI	Q Q Q Q		10	P.T. 18.2A
200B	2	B-11		X				2	GL	AO	C	Y	S F T VI	Q Q Q Q		10	P.T. 18.2A
200C	2	B-10		X				2	GL	AO	O	Y	S F T VI	Q Q Q Q		10	P.T. 18.2A
202A	2	C-15	X					3	GA	M	O	N	S J	C J			P.T. 42.0
203	2	A-9			X			2x3	RV	SA	CL	Y	RV	X			P.T. 25.4

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name CVCS

P&ID No. ISI-200-5379-685, Sh. 1 of 3

Page 2 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
204A	2	A-13	X					2	GL	AO	O	Y	S F T VI	C C C J		10	P.T. 42.0
204B	2	A-13	X					2	GL	AO	O	Y	J S F T VI	C C C J	1	60	P.T. 42.0
282	2	D-14	X					2	GL	M	O	Y	J S J	C J	1		P.T. 42.0
292A	2	N-14	X					3/4	GL	M	O	N	S J	C J	1		P.T. 42.0
293A	2	M-14	X					2	GL	M	o/c	N	S J	C J	1		P.T. 42.0
293C	2	L-14	X					2	GL	M	o/c	N	S J	C J	1		P.T. 42.0
295	2	N-15	X					3	GL	M	C	N	S J	C J	1		P.T. 42.0
297A	2	M-1	X					2	ND	M	O	N	S J	C J	1		P.T. 42.0
297B	2	A-19	X					2	ND	M	O	N	S J	C J	1		P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

CVCS

P&amp;ID No.

ISI-200-5379-685, Sh. 1 of 3

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
297C	2	M-10	X					2	ND	M	O	N	S J	C J	1		P.T. 42.0
309A	2	D-15	X			X		2	GL	M	CL	N	S	C	1		P.T. 42.0
381	2	G-14	X					3	GA	MO.	O	N	S T VI J	C C C J	1	60	P.T. 42.0
382	2	F-13		X				3	RV	SA	CL	Y	RV	X			P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

CVCS

P&amp;ID No.

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
1118A	3	B-6			X			2x3	RV	SA	CL	YES	RV	X			P.T. 25.4
1118B	3	E-6			X			2x3	RV	SA	CL	YES	RV	X			P.T. 25.4
1118C	3	G-6			X			2x3	RV	SA	CL	YES	RV	X			P.T. 25.4

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Waste Disposal

 PID No.                      ISI-406-5379-920, Sh. 1 of 4

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
1721	2	J-10	X					3	DA	AO	O	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
1722	2	J-9	X					3	DA	AO	O	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
1723	2	L-9	X					2	DA	AO	O	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
1728	2	L-10	X					2	DA	AO	O	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
1786	2	F-11	X					1	DA	AO	O	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40

System Name

Waste Disposal

P&ID No.

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2  
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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
1787	2	E-11	X					1	DA	AO	O	Y	S F T VI J	Q Q Q Q Q Q Q J	1	60	P.T. 40
1789	2	F-10	X					3/4	DA	AO	O	Y	S F T VI J	Q Q Q Q Q Q Q J	1	60	P.T. 40
1793	2	E-11		X				1	DA	M	O	Y	S	Q			P.T. 40
1794	2	G-11	X					3/4	DA	AO	O	Y	S F T VI J	Q Q Q Q Q Q Q J	1	60	P.T. 40



System Name

Waste Disposal

P&amp;ID No.

5379-921 Sh. 2 of 2

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TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
1621	3	C-14			X			1x2	RV	SA	CL	NO	RV	X			P.T. 25.4
1622	3	B-14			X			1x2	RV	SA	CL	NO	RV	X			P.T. 25.4
1623	3	G-14			X			1x2	RV	SA	CL	NO	RV	X			P.T. 25.4
1624	3	E-14			X			1x2	RV	SA	CL	NO	RV	X			P.T. 25.4

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Safety Injection

P&ID No.

ISI-200-5379-1082, Sh. 1

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
RV-842	2	H-1															
841A	2	D-9		X				1	RV GL	SA AO	CL O	N	RV S F T VI	X Q Q Q Q Q		30	P.T. 25.4 P.T. 2.7A
841B	2	D-9		X				1	GL	AO	O	N	S F T VI	Q Q Q Q Q		30	P.T. 2.7A
845A	3	J-7		X				2	GL	MO	C	N	S T VI	C C C C C		60	P.T. 42.0
845B	3	J-7		X				2	GL	MO	C	N	S T VI	C C C C C		60	P.T. 42.0
857A	2	D-1			X			3/4x1	RV	SA	CL	Y	RV	X			P.T. 25.4
864A	2	D-16		X				16	GA	MO	O	N	S T VI	C C C C C		120	P.T. 42.0
864B	2	D-16		X				16	GA	MO	O	N	S T VI	C C C C C		120	P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Safety Injection P&ID No. ISI-5379-1082, Sh. 2

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
862A	2	J-16	X					14	GA	MO	O	YES	S T VI	C C C		120	P.T. 42.0
862B	2	K-16	X					14	GA	MO	O	YES	S T VI	C C C		120	P.T. 42.0
863A	2	I-12	X					8	GA	MO	CL	YES	S T VI	C C C		120	P.T. 42.0
863B	2	J-12	X					8	GA	MO	CL	YES	S T VI	C C C		120	P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Safety Injection

P&ID No. ISI-200-5379-1082, Sh. 1

Page 2 of 4

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
867A	2	F-7		X				4	GA	MO	CL	Y	S T VI	Q Q Q		10	P.T. 2.7A
867B	2	F-7		X				4	GA	MO	CL	Y	S T VI	Q Q Q		10	P.T. 2.7A
869	2	B-1	X					3	GA	MO	O	N	S T VI J	C C C J	1	60	P.T. 42.0
870A	2	G-1	X					3	GA	MO	CL	N	S T VI J	Q Q Q J		10	P.T. 2.7A
870B	2	G-1	X					3	GA	MO	CL	N	S T VI J	Q Q Q J	1	10	P.T. 2.7A
872	3	H-6			X			3/4x1	RV	SA	CL	N	RV	X			P.T. 25.4
878A	3	F-10		X				4	GA	MO	O	N	S T VI	Q Q Q		120	P.T. 2.7A

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Safety Injection

P&ID No. ISI-200-5379-1082, Sh. 1

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
878B	3	D-10		X				4	GA	MO	O	N	S T VI	Q Q Q		120	P.T. 2.7A  Refueling - P.T. 2.9 (Partial Stroke Quarterly P.T. 2.7A)
879A	3	H-11			X			3	CK	SA	CL	N	FF	R	8		Refueling - P.T. 2.9 (Partial Stroke Quarterly P.T. 2.7A)
879B	2	E-11			X			3	CK	SA	CL	N	FF	R	8		Refueling - P.T. 2.9 (Partial Stroke Quarterly P.T. 2.7A)
879C	2	C-11			X			3	CK	SA	CL	N	FF	R	8		Refueling - P.T. 2.9 (Partial Stroke Quarterly P.T. 2.7A)
880A	2	M-9		X				6	GA	MO	CL	N	S T VI	Q Q Q		60	P.T. 3.4A
880B	2	N-9		X				6	GA	MO	CL	N	S T VI	Q Q Q		60	P.T. 3.4A
880C	2	K-9		X				6	GA	MO	CL	N	S T VI	Q Q Q		60	P.T. 3.4A
880D	2	K-9		X				6	GA	MO	CL	N	S T VI	Q Q Q		60	P.T. 3.4A
883L	2	H-2		X				1	GL	M	LC	N	J	J	1		
883W	2	G-3		X				1	GL	M	LC	N	J	J	1		

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Safety Injection

P&ID No. ISI-200-5379-1082, Sh. 1

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
889A	2	L-13			X			2	CK	SA	CL	N	FF	Q	4		P.T. 3.4A Partial Stroke
889B	2	L-13			X			2	CK	SA	CL	N	FF	Q	4		P.T. 3.4A Partial Stroke
890A	2	M-8			X			6	CK	SA	CL	N	FF	C	9		P.T. 42.0 Partial Stroke
890B	2	K-8			X			6	CK	SA	CL	N	FF	C	9		P.T. 42.0 Partial Stroke
891A	2	N-5	X					6	GA	M	O	N	S J	C J	1		P.T. 42.0
891B	2	K-5	X					6	GA	M	O	N	S J	C J	1		P.T. 42.0
894	3	F-5			X			1	CK	SA	CL	Y	RF	Q			P.T. 7.1A
895V	2	A-2	X			X		3/4	GL	M	LC	N	J	J	1		
898F	2	A-2	X			X		3/4	GL	M	LC	N	J	J	1		

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Safety Injection

P&ID No. ISI-200-5379-1082, Sh. 2

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
858A	2	B-11			X			2x3	RV	SA	CL	Y	RV	X			P.T. 25.4
858B	2	E-11			X			2x3	RV	SA	CL	Y	RV	X			P.T. 25.4
858C	2	H-11			X			2x3	RV	SA	CL	Y	RV	X			P.T. 25.4
859	2	C-1			X			3x4	RV	SA	CL	N	RV	X			P.T. 25.4
860A	2	N-8		X				14	GA	MO	CL	Y	S T VI	Q Q Q		120	P.T. 2.8A
860B	2	N-8		X				14	GA	MO	CL	Y	S T VI	Q Q Q		120	P.T. 2.8A
861A	2	N-9		X				14	GA	MO	CL	Y	S T VI	Q Q Q		120	P.T. 2.8A
861B	2	N-9		X				14	GA	MO	CL	Y	S T VI	Q Q Q		120	P.T. 2.8A

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Safety Injection

P&ID No. ISI-200-5379-1082, Sh. 2

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
865A	2	D-9		X				10	GA	MO	O	Y	S T VI	C C C		10	P.T. 2.5
865B	2	G-9		X				10	GA	MO	O	Y	S T VI	C C C		10	P.T. 2.5
865C	2	J-9		X				10	GA	MO	O	Y	S T VI	C C C		10	P.T. 2.5
866A	1	G-1		X				2	GA	MO	CL	Y	S T VI	C C C		60	P.T. 42.0
866B	1	G-2		X				2	GA	MO	CL	Y	S T VI	C C C		60	P.T. 42.0
873A	2	H-2			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9
873B	2	G-2			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9
873C	2	G-3			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9
873D	2	L-2			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9



TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Safety Injection

P&ID No. ISI-200-5379-1082, Sh. 2

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
873E	2	K-3			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9
873F	2	I-4			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9
874A	1	H-1			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9
874B	1	H-2			X			2	CK	SA	CL	Y	FF	R	5		P.T. 2.9
875A	1	J-3			X			10	CK	SA	CL	Y	FF	C			P.T. 42.0
875B	1	K-3			X			10	CK	SA	CL	Y	FF	C			P.T. 42.0
875C	1	M-2			X			10	CK	SA	CL	Y	FF	C			P.T. 42.0
875D	1	D-7			X			10	CK	SA	CL	Y	FF	C	3		P.T. 2.5 Partial Stroke
875E	1	G-7			X			10	CK	SA	CL	Y	FF	C	3		P.T. 2.5 Partial Stroke
875F	1	J-7			X			10	CK	SA	CL	Y	FF	C	3		P.T. 2.5 Partial Stroke
876A	1	D-6			X			8	CK	SA	CL	Y	FF	C			P.T. 42.0
876B	1	G-6			X			8	CK	SA	CL	Y	FF	C			P.T. 42.0
876C	1	J-6			X			8	CK	SA	CL	Y	FF	C			P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Residual Heat Removal

P&ID No. ISI-200-5379-1484

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Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
706	2	L-1			X			2x3	RV	SA	CL	Y	RV	X			P.T 25.4
744A	2	M-1		X				10	GA	MO	CL	Y	S T VI	Q Q Q		15	P.T. 2.8A
744B	2	M-3		X				10	GA	MO	CL	Y	S T VI	Q Q Q		15	P.T. 2.8A
750	1	N-16		X				14	GA	MO	CL	Y	S T VI	C C C		300	P.T. 42.0
751	1	M-16		X				14	GA	MO	CL	Y	S T VI	C C C		300	P.T. 42.0
753A	2	G-10			X			10	CK	SA	CL	Y	FF	C			Full Stroke Cold Shutdown (GP-6) Partial Stroke Quarterly (P.T. 2.8
753B	2	G-10			X			10	CK	SA	CL	Y	FF	C			Full Stroke Cold Shutdown (GP-6) Partial Stroke Quarterly (P.T. 2.8
759A	2	G-5		X				10	GA	MO	O	Y	S T VI	Q Q Q		120	P.T. 2.8A
759B	2	D-5		X				10	GA	MO	O	Y	S T VI	Q Q Q		120	P.T. 2.8A

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Reactor Coolant

P&ID No. ISI-100-5379-1971, Sh. 2

Page 1 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
PCV-455C	1	E-17		X				3	GL	AO	CL	Y	S F T VI	C C C C		2	P.T. 42.0
PCV-456	1	D-17		X				3	GL	AO	CL	Y	S F T VI	C C C C		2	P.T. 42.0
516	2	C-1	X					3/8	GL	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
519A	2	F-1	X					3	DA	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Reactor Coolant

P&ID No.

ISI-100-5379-1971, Sh. 2

Page 2 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
519B	2	F-2	X					3	DA	AO	CL	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40
535	1	D-17	X					3	GA	MO	O	Y	S T VI	C C C		60	P.T. 42.0
536	1	E-17	X					3	GA	MO	O	Y	S T VI	C C C		60	P.T. 42.0
550	2	E-2	X					3/4	DA	AO	O	Y	S F T VI	C C C C		120	P. T. 42.0
551A	1	B-11		X				4x6	RV	SA	CL	Y	RV	R			P.T. 25.1
551B	1	B-13		X				4x6	RV	SA	CL	Y	RV	R			P.T. 25.1
551C	1	B-15		X				4x6	RV	SA	CL	Y	RV	R			P.T. 25.1
553	2	C-2	X					3/8	GL	AO	C	Y	S F T VI J	Q Q Q Q J	1	60	P.T. 40

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

Main Extraction & Auxiliary Steam  
System Name \_\_\_\_\_

ISI-G-190196, Sh. 1  
P&ID No. \_\_\_\_\_

Page 1 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
MS-V1-3A	2	J-16			X			26	CK	SA	O	N	RF	R	2		
MS-V1-3B	2	E-16			X			26	CK	SA	O	N	RF	R	2		
MS-V1-3C	2	A-16			X			26	CK	SA	O	N	RF	R	2		
MS-V1-3A Isol.	2	J-15		X				26	GA	AO	O	N	S F T VI	C C C C		5	P.T. 41
MS-V1-3B Isol.	2	E-15		X				26	GA	AO	O	N	S F T VI	C C C C		5	P.T. 41
MS-V1-3C Isol.	2	A-15		X				26	GA	AO	O	N	S F T VI	C C C C		5	P.T. 41
MS-V1-8A	2	K-15		X				2	GL	MO	C	N	S T VI	Q Q Q		120	P.T. 22.1A
MS-V1-8B	2	G-15		X				2	GL	MO	C	N	S T VI	Q Q Q		120	P.T. 22.1A

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Main Extraction & Auxiliary Steam

P&ID No. ISI-G-190196, Sh. 1

Page 2 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
MS-V1-8C	2	C-15		X				2	GL	MO	C	N	ST VI	QQ Q		120	P.T. 22.1A
MS-V1-9A	3	K-15			X			2	CK	SA	CL	N	FF	Q			P.T. 22.1A
MS-V1-9B	3	G-16			X			2	CK	SA	CL	N	FF	Q			P.T. 22.1A
MS-V1-9C	3	C-16			X			2	CK	SA	CL	N	FF	Q			P.T. 22.1A
SV1-1A	2	J-10			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-2A	2	J-11			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-3A	2	J-12			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-4A	2	J-13			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-1B	2	F-10			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-2B	2	F-11			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-3B	2	F-12			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-4B	2	F-13			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-1C	2	B-10			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SV1-2C	2	B-11			X			6	RV	SA	C	N	RV	R			P.T. 25.2

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Main Extraction & Auxiliary Steam P&ID No. ISI-G-190196, Sh. 1

Page 3 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
SVI-3C	2	B-12			X			6	RV	SA	C	N	RV	R			P.T. 25.2
SVI-4C	2	B-13			X			6	RV	SA	C	N	RV	R			P.T. 25.2

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Feedwater Condensate & Air Evacuation P&ID No. ISI-G-190197, Sh. 2

Page 1 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
AFW-2	3	I-17			X			6	CK	SA	CL	N	FF	C			Partial Stroke Quarterly-P.T. 22.1A
AFW-19	3	H-11			X			6	CK	SA	CL	N	FF	C			Full Stroke Cold Shutdown-OP-14
AFW-20A	3	L-8		X				4	GA	MO	O	N	S	Q		60	Full Stroke Cold Shutdown-OP-14
AFW-20B	3	M-8		X				4	GA	MO	O	N	VI	Q		60	Partial Stroke Quarterly-P.T. 22.1A
AFW-24	3	L-14		X				6	GA	M	LC	N	S	Q			P.T. 22.1A
AFW-40	3	L-10			X			4	CK	SA	CL	N	FF	C			P.T. 40
AFW-41	3	N-10			X			4	CK	SA	CL	N	FF	C			Partial Stroke Quarterly-P.T. 22-1A
AFW-68	2	M-5			X			4	CK	SA	CL	Y	FF	C			Full Stroke Cold Shutdown-OP-14
AFW-69	2	L-5			X			4	CK	SA	CL	Y	FF	C			OP-14
AFW-70	2	N-5			X			4	CK	SA	CL	Y	FF	C			OP-14
AFW-V2-14A	2	C-10		X				4	GA	MO	CL	Y	S	Q		60	Partial Stroke Quarterly-P.T. 22.1C
AFW-V2-14B	2	E-10		X				4	GA	MO	CL	Y	VI	Q		60	Full Stroke Cold Shutdown-OP-14



TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Feedwater Condensate & Air Evacuation P&ID No. ISI-G-190197, Sh. 2

Page 2 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
AFW-V2-14C	2	G-10		X				4	GA	MO	CL	Y	S T VI	Q Q Q		60	P.T. 22.1C
AFW-V2-16A	2	M-7		X				4	GA	MO	CL	N	S T VI	Q Q Q		60	P.T. 22.1A
AFW-V2-16B	2	L-7		X				4	GA	MO	CL	N	S T VI	Q Q Q		60	P.T. 22.1B
AFW-V2-16C	2	N-7		X				4	GA	MO	CL	N	S T VI	Q Q Q		60	P.T. 22.1C
DW-19	3	K-17		X				6	GA	M	LC	N	S	Q		NA	P.T. 40
DW-21	3	K-16		X				6	GA	M	LC	N	S	Q		NA	P.T. 40
FCV-479	2	B-11		X				4	GL	AO	CL	Y	S F T VI	C C C C		60	P.T. 41
FCV-489	2	D-11		X				4	GA	AO	CL	Y	S F T VI	C C C C		60	P.T. 41

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Feedwater Condensate & Air Evacuation P&ID No. ISI-G-190197, Sh. 2

Page 3 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
FCV-499	2	F-11		X				4	GL	AO	CL	Y	S F T VI	C C C C		60	P.T. 41
FW-V2-6A	2	B-12		X				16	GA	MO	O	N	S T VI	C C C		120	P.T. 41
FW-V2-6B	2	D-12		X				16	GA	MO	O	N	S T VI	C C C		120	P.T. 41
FW-V2-6C	2	F-12		X				16	GA	MO	O	N	S T VI	C C C		120	P.T. 41

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Service and Cooling Water P&ID No. ISI-G-190199, Sh. 1 Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
374	3	K-2			X			18	CK	SA	O/C	N	FF RF	Q Q			P.T. 4.1A
375	3	K-5			X			18	CK	SA	O/C	N	FF RF	Q Q			P.T. 4.1A
376	3	K-3			X			18	CK	SA	O/C	N	FF RF	Q Q			P.T. 4.1A
377	3	K-6			X			18	CK	SA	O/C	N	FF RF	Q Q			P.T. 4.1A

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

Service and Cooling Water

System Name

P&amp;ID No.

ISI-G-190199, Sh. 2

Page 1 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
V6-33A	2	H-8		X			6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1A	
V6-33B	2	H-7		X			6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1A	
V6-33C	2	H-7		X			6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1A	
V6-33D	2	H-6		X			6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1A	
V6-33E	2	H-8		X			6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1A	
V6-33F	2	J-7		X			6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1A	
V6-34A	2	D-16		X			6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1C	

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Service and Cooling Water

P&amp;ID No.

ISI-G-190199, Sh. 2

Page 2 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
V6-34B	2	C-16	X					6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1C
V6-34C	2	C-16	X					6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1C
V6-34D	2	B-16	X					6	BF	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1C
V6-35A	2	B-12	X					1	GL	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1B
V6-35B	2	B-11	X					1	GL	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1B
V6-35C	2	B-11	X					1	GL	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1B
V6-35D	2	B-10	X					1	GL	MO	O	N	S T VI	Q Q Q		300	P.T. 10.1B

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Service and Cooling Water

P&ID No.

ISI-G-190199, Sh. 2

Page 3 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
560	3	J-7			X			12	CK	SA	O/C	N	FF	Q			P.T. 4.1A
561	3	J-8			X			12	CK	SA	O/C	N	FF	Q			P.T. 4.1A

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

Rev. 1

System Name Service and Cooling Water

P&ID No. ISI-G-190199, Sh. 3

Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
V6-16A	3	N-20		X				16	GA	MO	O	N	S T VI	Q Q Q		300	P.T. 4.1A
V6-16B	3	M-20		X				16	GA	MO	O	N	S T VI	Q Q Q		300	P.T. 4.1A
118	3	M-20		X				6	GA	M	LC	N	S	Q		NA	P.T. 40
530	3	L-25			X			1	CK	SA	CL	N	FF	Q			P.T. 22.1A
541	3	I-19			X			30	CK	SA	O/C	N	FF	Q			P.T. 4.1A
542	3	M-19			X			1	CK	SA	CL	N	FF	Q	7		P.T. 22.1A
543	3	M-19			X			1	CK	SA	CL	N	FF	Q	7		P.T. 22.1A
544	3	M-20			X			6	CK	SA	CL	N	FF	Q	6		P.T. 40
545	3	M-20			X			30	CK	SA	O/C	N	FF	Q			P.T. 4.1A

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Steam Generator Blowdown

P&ID No. ISI-G-190234

Page 1 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
FCV-1930A	2	B-5		X				3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
FCV-1930B	2	B-5		X				3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
FCV-1931A	2	F-5		X				3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
FCV-1931B	2	F-5		X				3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
FCV-1932A	2	K-5		X				3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
FCV-1932B	2	K-5		X				3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40



TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Steam Generator Blowdown

P&ID No.

ISI-G-190234

Page 2 of 2

Rev 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
ECV-1933A	2	C-4	X					3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
ECV-1933B	2	D-4	X					3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
ECV-1934A	2	G-4	X					3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
ECV-1934B	2	H-4	X					3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
ECV-1935A	2	K-4	X					3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40
ECV-1935B	2	L-4	X					3/4	GA	AO	O	N	S F T VI	Q Q Q Q		10	P.T. 40

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Penetration Pressurization (PPS) P&ID No. ISI-G-190261, Sh. 8 of 8

Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
EV-1723	2	A-12	X					1	3W	SO	-	N	S J	C J	1		P.T. 42.0
EV-1724	2	A-16	X					1	3W	SO	-	N	S J	C J	1		P.T. 42.0
241C	2	A-16	X				X	3/8	GA	M	CL	M	J	J	1		
248A	2	A-12	X				X	3/8	GA	M	CL	N	J	J	1		
274C	2	G-12	X		X			3/8	CK	SA	-	N	J	J	1		

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Penetration Pressurization (PPS)

P&ID No. ISI-G-190261, Sh. 7 of 8

Page 1 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
EV-H2A	2	E-2	X					1	3W	SO	-	N	S J	C J	1		P.T. 42.0
EV-H2B	2	E-5	X					3/8	3W	SO	-	N	S J	C J	1		P.T. 42.0
EV-1722	2	E-9	X					1	3W	SO	-	N	S J	C J	1		P.T. 42.0
EV-1727	2	D-5	X					3/8	3W	SO	-	N	S J	C J	1		P.T. 42.0
EV-1728	2	A-5	X					3/8	3W	SO	-	N	S J	C J	1		P.T. 42.0
225C	2	A-5	X					3/8	GA	M	CL	N	J	J	1		
226C	2	C-5	X				X	3/8	GA	M	CL	N	J	J	1		

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

PPS

P&amp;ID No.

ISI-G-190261, Sh. 7 of 8

Page 2 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
235C	2	E-5	X				X	3/8	GA	M	CL	N	J	J	1		
245A	2	E-9	X				X	3/8	GA	M	CL	N	J	J	1		
251C	2	E-2	X				X	3/8	GA	M	CL	N	J	J	1		

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Isolation Valve Seal Water P&ID No. ISI-G-190262 Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
Check valves at class boundaries	2		X						CK	SA	O/CL	Y	J	J			

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

HVAC

PID No.

ISI-G-190304, Sh. 1 of 2

Page 1 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
RMS-1	2	I-19	X					1	GA	AO	O	N	S F T VI J	Q Q Q Q J	1	60	P.T. 40
RMS-2	2	I-19	X					1	GA	AO	O	N	S F T VI J	Q Q Q Q J	1	60	P.T. 40
RMS-3	2	I-19	X					1	GA	AO	O	N	S F T VI J	Q Q Q Q J	1	60	P.T. 40
RMS-4	2	I-19	X					1	GA	AO	O	N	S F T VI J	Q Q Q Q J	1	60	P.T. 40
VI2-6	2	F-10	X					42	BF	AO	O	N	S F T VI J	C C C C J	1	60	P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name HVAC

P&ID No. ISI-G-190304, Sh. 1 of 2

Page 2 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
V12-7	2	F-11	X					42	BF	AO	O	N	S F T VI J	C C C C J	1	60	P.T. 42.0
V12-8	2	G-18	X					42	BF	AO	O	N	S F T VI J	C C C C J	1	60	P.T. 42.0
V12-9	2	G-17	X					42	BF	AO	O	N	S F T VI J	C C C C J	1	60	P.T. 42.0
V12-10	2	H-18	X					6	BF	AO	C	Y	S F T VI J	C C C C J	1	60	P.T. 42.0
V12-11	2	H-17	X					6	BF	AO	C	Y	S F T VI J	C C C C J	1	60	P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

HVAC

P&ID No.

ISI-G-190304, Sh. 1 of 2

Page 3 of 3

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
V12-12	2	G-10	X					6	BF	AO	O	N	S F T VI J	C C C C J	1	60	P.T. 42.0
V12-13	2	G-11	X					6	BF	AO	O	N	S F T VI J	C C C C J	1	60	P.T. 42.0



TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Post Accident Sampling

P&ID No. ISI-HBR2-6490

Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
PAS-1	2	C-5	X				X	3/8	GL	M	CL	N	LT	R			
PAS-2	2	D-5	X				X	3/8	GL	M	CL	N	LT	R			
PAS-3	2	C-5	X				X	3/8	GL	M	CL	N	LT	R			
PAS-4	2	D-5	X				X	3/8	GL	M	CL	N	LT	R			
PAS-5	2	D-5	X				X	3/8	GL	M	CL	N	LT	R			
PAS-6	2	D-5	X				X	3/8	GL	M	CL	N	LT	R			

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Post Accident Cont. Vent & Ins. Gas P&ID No. ISI-HBR2-6933

Page 1 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max Stroke Time (sec.)	Remarks
			A	B	C	D											
PCV-1716	2	G-4	X					2	GA	AO	O	N	S F VI J	C C C J	1	60	P.T. 42.0
SA-43	2	G-4	X				X	2	DA	M	LC	N	J	J	1		
SA-44	2	G-3	X				X	2	DA	M	LC	N	J	J	1		
V8-5	2	G-3			X			2	CK	SA	O/C	N	RF	Q	10		
V12-14	2	B-1	X					3	DA	AO	C	N	S F T VI J	C C C C J	1	60	P.T. 42.0
V12-15	2	B-3	X					3	DA	AO	C	N	S F T VI J	C C C C J	1	60	P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name \_\_\_\_\_ Post Accident Cont. Vent & Ins. Gas P&ID No. \_\_\_\_\_ ISI-HBR2-6933

Page 2 of 2

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
VI2-18	2	D-2	X					3	DA	AO	C	Y	S F T VI J	C C C C C C J	1	60	P.T. 42.0
VI2-19	2	D-4	X					3	DA	AO	C	N	S F T VI J	C C C C C C J	1	60	P.T. 42.0

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Fire Protection

P&amp;ID No.

ISI-SK-1

Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
FP-248	2	-	X					4	GA	MO	O	Y	S T VI LT	Q Q Q R		60	S, T, VI - P.T. 40
FP-249	2	-	X					4	GA	MO	O	Y	S T VI LT	Q Q Q R		60	S, T, VI - P.T. 40
FP-256	2	-	X					4	GA	MO	O	Y	S T VI LT	Q Q Q R		60	S, T, VI - P.T. 40
FP-258	2	-	X					4	GA	MO	O	Y	S T VI LT	Q Q Q R		60	S, T, VI - P.T. 40

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name

Fuel Transfer Tube

P&ID No.

ISI-SK-2

Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
FP GATE	2	-	X				X	20	GA	M	CL	Y	J	J			

TABLE 3 VALVE TEST PROGRAM  
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

System Name Emergency Diesel Generator

P&ID No. G-190204A, Sh. 1 of 3

Page 1 of 1

Valve Number	Class	Drawing Coordinates	Valve Category				Passive	Size (inches)	Valve Type	Actuator Type	Normal Position	High Radiation Area	Test Method	Test Frequency	Relief Request	Max. Stroke Time (sec.)	Remarks
			A	B	C	D											
FO-14	3	M-2		X				2	GL	M	CL	N	S	Q			P.T. 40
FO-9B-2	3	G-5		X				2	GA	SO	CL	N	S	Q			P.T. 40
FO-10B	3	G-5		X				2	GL	M	CL	N	S	Q			P.T. 40
FO-9B-1	3	F-5		X				2	GA	SO	CL	N	S	Q			P.T. 40
FO-10A	3	M-5		X				2	GL	M	CL	N	S	Q			P.T. 40
FO-9A-2	3	N-5		X				2	GA	SO	CL	N	S	Q			P.T. 40
FO-9A-1	3	M-5		X				2	GA	SO	CL	N	S	Q			P.T. 40
DG-AS-14	3	D-15		X				3/4	GL	M	CL	N	S	Q			P.T. 40
DG-ASA-1	3	F-15			X			3/4	CK	SA	-	N	FF	Q			P.T. 40
DG-AS-10	3	D-13		X				2	GL	M	CL	N	S	Q			P.T. 40
DG-ASB-1	3	C-15			X			3/4	CK	SA	-	N	FF	Q			P.T. 40