

SURVEILLANCE TEST ROUTING SHEET (STRS)

DOCUMENT NUMBER: STS BG 201

**TEST FREQ: Q

DOCUMENT TITLE: CVCS INSERVICE VALVE TEST

**DUE DATE/TIME: 960229/2135

**LATE DATE/TIME: 960323/2135

**T/S REQUIRED MODE: 123456

**PROCEDURE REQUIRED MODE: 123456

INITIATING DOCUMENT#(s):

**RESPONSIBLE GROUP: OPS

**SUPPORT GROUP(s):

PRE-TEST COMMENTS:

PIT's Required 3-22-96

**OPTIONAL INFORMATION NOT REQUIRED TO BE FILLED IN

1) PROCEDURE VERIFIED TO BE CORRECT REVISION WITH ALL
TEMPORARY CHANGES ATTACHED AND INCORPORATED.

INIT / DATE
M / 3-22-96

TEST PERFORMERS:	PRINT NAME	INIT	DATE	PRINT NAME	INIT	DATE
	Dale L. Barry	B	3-22-96			
	Althausen	M	3-22-96			
	Mark Jenkins	J	3-22-96			
	G PERKINS	P	3-22-96			
	JOHN STONE	V	3-22-96			

2) PRE-TEST REVIEWS:
SS/SO AUTH. :

SIGNATURE
[Signature]

DATE TIME
3-22-96 / 0932
3-24-96 / 0833

3) *TEST DEFICIENCY DESCRIPTION:

4) *T/S FAILURE YES NO

TP INIT/DATE

IF NO-JUSTIFICATION:

SS SIGNATURE

DATE

5) *ACTION TAKEN:

TEST SUSPENDED: YES NO

EOL#

WR#

SS SIGNATURE

DATE

*SECTIONS 3, 4, AND 5 ARE COMPLETED IF A TEST DEFICIENCY OCCURS, OTHERWISE
MARK N/A

6) POST TEST REVIEWS: (GROUP SUP. CHECK ONE)

COMPLETE PARTIAL

TOTAL MAN HOURS: 2

TEST PERFORMERS:

SS/SO AUTH. :

GROUP SUPERVISOR:

ISI :

SIGNATURE

DATE

TIME

[Signatures]

3-24-96 / 0947
3-24-96 / 0947
3-24-96
3-26-96

SC/SURV. TECHNICIAN:

R. Anderson

3-26-96

7) ADDITIONAL COMMENTS: STEP 8, 13 N/A due to Boron concentration @ 2451 in RCS.
SG HS-25 phospha manual. M. 3-22-96

IMPROVED DESIGN



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CHEMICAL & VOLUME CONTROL SYSTEM
INSERVICE VALVE TEST

Responsible Manager

Manager Operations

Revision Number	14
Use Category	Continuous
Administrative Controls Procedure	No
Infrequently Performed Procedure	No
Program Number	29B

DC 34
4/10/96

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1.0 PURPOSE

1.1 This surveillance procedure tests the following components:

- o BG HV-8104, Emergency Borate To Charging Pump Suction Valve
- o BG HV-8110, CCP A Recirc Valve
- o BG HV-8111, CCP B Recirc Valve
- o BG HV-8357A, CCP A To RCP Seal Flow Control Valve
- o BG HV-8357B, CCP B To RCP Seal Flow Control Valve

2.0 SCOPE

2.1 This procedure satisfies CVCS System valve operability surveillance requirements of Technical Specification 4.0.5.

2.2 This procedure satisfies quarterly Stroke Time Testing and Fail Safe Testing (FST) as required by ASME/ANSI OMa-1988, Part 10 for the CVCS valves.

2.3 This procedure satisfies biennial Position Indication Testing (PIT) as required by ASME/ANSI OMa-1988, Part 10.

3.0 REFERENCES AND COMMITMENTS

3.1 REFERENCES

- 3.1.1 AP 29B-003, SURVEILLANCE TESTING
- 3.1.2 AP 29B-002, ASME CODE TESTING OF PUMPS AND VALVES
- 3.1.3 AP 16C-001, ACTION REQUEST
- 3.1.4 ADM 02-024, TECHNICAL SPECIFICATION OPERABILITY
- 3.1.5 PDR TS 91-0238
- 3.1.6 PIR TS 92-0485
- 3.1.7 PIR TS 92-0490
- 3.1.8 PIR TS 92-0491
- 3.1.9 PIR TS 92-0493
- 3.1.10 ASME/ANSI OMa-1988, Part 10, Inservice Testing Of Valves In Light Water Reactor Power Plants
- 3.1.11 WCOP-02, INSERVICE TESTING PROGRAM FOR PUMPS AND VALVES
- 3.1.12 Generic Letter No. 89-04, Guidance On Developing Acceptable Inservice Testing Programs
- 3.1.13 SYS BG-201, SHIFTING CHARGING PUMPS

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3.1.14 WCGS Standing Order Minimum Flow Requirements Within Regions of Low Flow Cavitation Pump Operations

3.1.15 CKL BG-120, CHEMICAL AND VOLUME CONTROL SYSTEM NORMAL VALVE LINEUP

3.1.16 SYS BB-201, REACTOR COOLANT PUMP OPERATION

3.2 COMMITMENTS

3.2.1 None

4.0 PRECAUTIONS/LIMITATIONS

4.1 Monitor flow of CCP's to insure minimum flow requirements are maintained in accordance with WCGS Standing Order "Minimum Flow Requirements Within Regions Of Low Flow Cavitation Pump Operations".

4.2 Report any irregularities or component malfunctions to SS/SO immediately and refer to USAR LCO 16.1.2.2.

4.3 CVCS valve testing, in accordance with this surveillance, is not mode dependent.

4.4 IF CVCS valve testing is performed during Modes 4, 5 or 6, THEN refer to USAR LCO 16.1.2.3.

4.5 Performance of section 8.2 and 8.3 require the A CCP to be secured. Performance of Section 8.4 and 8.5 require the B CCP to be secured.

4.6 Measured parameters shall be compared to acceptable limits to determine component operability.

4.7 Stroke time measurements should be recorded to nearest tenth of a second.

5.0 TEST EQUIPMENT

NOTE

If equivalent equipment is used, justification shall be provided in "Comments" section of procedure and accuracies noted.

5.1 Calibrated stopwatch with ± 0.1 second accuracy.

Stopwatch WC number: 15996

Stopwatch cal. due date: 5/2/96

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6.0 ACCEPTANCE CRITERIA

NOTES

- o Failure to meet Acceptance Criteria given below may constitute a failure to comply with USAR LCO 16.1.2.2.
- o Technical Specification 4.0.5 limits are established through implementation of the ASME Boiler and Pressure Vessel Code, Section XI and ASME/ANSI CMA-1988, Part 10.

6.1 Valve stroke times shall not exceed Limiting Values specified as part of the valve stroke acceptance criteria.

6.1.1 IF a Limiting Value is exceeded, THEN valve shall be declared inoperable and corrective action shall be initiated using references 3.1.3 and 3.1.4.

6.2 Valve stroke times shall not be greater than the Alert High Value or less than the Alert Low Value specified as part of the valve stroke acceptance criteria.

NOTE

Retests are documented using A. 29B-002, ASME CODE TESTING OF PUMPS AND VALVES, ATTACHMENT E VALVE RETEST FORM.

6.2.1 IF measured value is less than the alert low or exceeds the alert high value, THEN valve shall be retested. IF a retest cannot be performed, THEN declare valve inoperable and initiate corrective action using references 3.1.3 and 3.1.4.

6.2.2 IF valve is retested and the measured value is less than the alert low or exceeds the alert high value, THEN data shall be analyzed by ASME IST Engineer within 96 hours. The ASME IST Engineer will verify that the value represents acceptable valve operation or determine that the valve be declared inoperable with corrective action initiated using references 3.1.3 and 3.1.4.

6.2.3 IF second measured value exceeds the alert low and is less than the alert high values, THEN cause of initial deviation shall be analyzed by Engineering and documented in "Comments" section of this procedure.

UNCLASSIFIED 04/18/96

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6.3 PIT shall be performed with an Operator at the valve to verify actual valve movement in proper direction or by other means specified in the procedure. Verification of valve movement shall be compared to remote indication.

6.3.1 IF remote indication is unsatisfactory, THEN initiate corrective action using reference 3.1.3.

6.3.2 IF required change of valve stem or disk position is not obtained, THEN valve shall be declared inoperable and corrective action shall be initiated using references 3.1.3 and 3.1.4.

7.0 PREREQUISITES

INIT/DATE

NOTES

- o The Surveillance Test Routing Sheet (STRS), "Pre-Test Comments" section indicates whether PIT is required during the performance of this surveillance.
- o The following prerequisites may be performed in any order.

7.1 IF PIT will be performed, THEN ensure an operator is available to observe valve stem movement. ☒

7.2 Charging System is aligned for normal operation in accordance with CKL BG-120, CHEMICAL AND VOLUME CONTROL SYSTEM NORMAL VALVE LINEUP for the current plant mode. ☒

7.3 IF the plant is in Mode 4, 5 or 6, THEN review and adhere to the requirements of USAR LCO 16.1.2.3. ☒

7.4 Verify SIS is not inserted. ☒

7.5 Required Precautions and Limitations have been reviewed.

MS 13/22/16
3.24.96

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8.0 PROCEDURE

INIT/DATE

8.1 BG HV-8104, EMERGENCY BORATE TO CHG PUMP SUCT. STROKE TEST/PIT

8.1.1 At panel RL002, place BG HS-25, RCS M/U Control Selector Switch, to OFF position. ☒

8.1.2 At panel RL001, place PBG02A, Boric Acid Transfer Pump, in Pull-To-Lock (PTL) using handswitch BG HIS-5A. ☒

8.1.3 At panel RL001, place PBG02B, Boric Acid Transfer Pump, in Pull-To-Lock (PTL) using handswitch BG HIS-6A. ☒ *4/2/06*

8.1.4 At panel RL001 close or ensure closed valve BG HV-8104, Emergency Borate To Charging Pump Suction valve, using handswitch BG HIS-8104. ☒

8.1.5 Check the following closed indications:

1. Green indicating light on BG HIS-8104 is lit. ☒

2. Red indicating light on BG HIS-8104 is out. ☒

3. Computer point BGD8104 indicates valve is shut. ☒

8.1.6 IF PIT is being performed, THEN station an operator in the vicinity of BG HV-8104, Emergency Borate To Charging Pump Suction valve, to observe valve stem travel. ☒

8.1.7 At panel RL001, simultaneously measure valve stroke time while opening BG HV-8104, Emergency Borate To Charging Pump Suction valve, using handswitch BG HIS-8104. *WA, 3/22/06*

8.1.8 Check the open indications listed on ATTACHMENT A for BG HV-8104, Emergency Borate To Charging Pump Suction valve, and record results on ATTACHMENT A. ☒

8.1.9 Record full stroke opening time for BG HV-8104 on ATTACHMENT A. ☒

8.1.10 At panel RL001, simultaneously measure valve stroke time while closing BG HV-8104, Emergency Borate To Charging Pump Suction valve, using handswitch BG HIS-8104. *WA, 3/22/06*

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		INIT/DATE
8.1.11	Verify valve BG HV-8104 closed using indication lights on handswitch BG HIS-8104.	<i>M</i> 13/22/16
	Verified	<i>2</i> 13-22-96
8.1.12	Record full stroke closing time for BG HV-8104 on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.1.13	At panel RL002, place BG HS-25, RCS M/U Control Selector Switch, to AUTO position.	13-22-96
	Verified	<i>NIN</i>
8.1.14	At panel RL001, place PBG02A, Boric Acid Transfer Pump, in AUTO using handswitch BG HIS-5A.	<i>M</i> 13/24/16
	Verified	<i>2</i> 13-22-96
8.1.15	At panel RL001, place PBG02B, Boric Acid Transfer Pump, in AUTO using handswitch BG HIS-6A.	<i>M</i> 13/22/16
	Verified	<i>2</i> 13-22-96
8.2	<u>BG HV-8110, CCP A RECIRC VLV STROKE TEST/PIT</u>	
8.2.1	Secure or ensure CCP "A" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.	<input checked="" type="checkbox"/>
8.2.2	At panel RL001, open or ensure opened BG HV-8110, CCP A Recirc valve, using handswitch BG HIS-8110.	<input checked="" type="checkbox"/>
8.2.3	At panel RL018, place ESF Status Panel SA-066X Mode Sel switch, SA HS-23 in Check/Pull-To-Lock.	<input checked="" type="checkbox"/>
8.2.4	Check the following open indications:	
	1. Green indicating light on BG HIS-8110 is out.	<input checked="" type="checkbox"/>
	2. Red indicating light on BG HIS-8110 is lit.	<input checked="" type="checkbox"/>
	3. ESFAC Status Panel SA066X (down 11, across 7) is out.	<input checked="" type="checkbox"/>
	4. Computer point BGE8110 indicates valve is open.	<input checked="" type="checkbox"/>

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		INIT/DATE
8.2.5	IF PIT is being performed, <u>THEN</u> station an operator in the vicinity of BG HV-8110, CCP A Recirc valve, to observe valve stem travel.	<input checked="" type="checkbox"/>
8.2.6	At panel RL001, simultaneously measure valve stroke time while closing BG HV-8110, CCP A Recirc valve, using handswitch BG HIS-8110.	<input checked="" type="checkbox"/> 1/24/96
8.2.7	Check the closed indications listed on ATTACHMENT A for BG HV-8110, CCP A Recirc valve, and record results on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.2.8	Record full stroke closing time for BG HV-8110 on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.2.9	At panel RL001, simultaneously measure valve stroke time while opening BG HV-8110, CCP A Recirc valve, using handswitch BG HIS-8110.	<input checked="" type="checkbox"/> 1/24/96
8.2.10	Verify valve BG HV-8110 open using indication lights on handswitch BG HIS-8110.	<input checked="" type="checkbox"/> 1/24/96
	Verified	<input checked="" type="checkbox"/> 1/24/96
8.2.11	Record full stroke opening time for BG HV-8110 on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.2.12	At panel RL018, place ESF Status Panel SA-066X Mode Sel switch, SA HS-23 in Normal.	<input checked="" type="checkbox"/>
8.3	<u>BG HV-8357A, CCP A TO RCP SEAL FLOW CONTROL VLV STROKE TEST/PIT</u>	
9.3.1	Secure or ensure CCP "A" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.	<input checked="" type="checkbox"/>
8.3.2	At panel RL001 close or ensure closed BG HV-8357A, CCP A To RCP Seal Flow Control valve, using handswitch BG HIS-8357A.	<input checked="" type="checkbox"/>
8.3.3	Check the following closed indications:	
	1. Green indicating light on BG HIS-8357A is lit.	<input checked="" type="checkbox"/>
	2. Red indicating light on BG HIS-8357A is out.	<input checked="" type="checkbox"/>

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INIT/DATE:

8.3.4 IF PIT is being performed, THEN station an operator in the vicinity of BG HV-8357A, CCP A To RCP Seal Flow Control valve, to observe valve stem travel.

☒

8.3.5 At panel RL001, simultaneously measure valve stroke time while opening BG HV-8357A, CCP A To RCP Seal Flow Control valve, using handswitch BG HIS-8357A.

7/13/24/96

8.3.6 Check the open indications listed on ATTACHMENT A for BG HV-8357A, CCP A To RCP Seal Flow Control valve, and record results on ATTACHMENT A.

☒

8.3.7 Record full stroke opening time for BG HV-8357A on ATTACHMENT A.

☒

8.3.8 At panel RL001, simultaneously measure valve stroke time while closing BG HV-8357A, CCP A RCP Seal Flow Control valve, using handswitch BG HIS-8357A.

7/13/24/96

8.3.9 Verify valve BG HV-8357A closed using indication lights on handswitch BG HIS-8357A.

7/13/24/96

Verified

7/13/24/96

8.3.10 Record full stroke closing time for BG HV-8357A on ATTACHMENT A.

☒

8.4 BG HV-8111, CCP B RECIRC VLV STROKE TEST/PIT

8.4.1 Secure or ensure CCP "B" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.

☒

8.4.2 At panel RL001, open or ensure opened BG HV-8111, CCP B Recirc valve, using handswitch BG HIS-8111.

☐

8.4.3 At panel RL018, place ESF Status Panel SA-066Y Mode Sel switch, SA HS-24 in Check/Pull-To-Lock.

☐

8.4.4 Check the following open indications:

1. Green indicating light on BG HIS-8111 is out.

☐

2. Red indicating light on BG HIS-8111 is lit.

☐

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	INIT/DATE
3. ESFAS Status Panel SA066Y (down 11, across 7) is out.	<input checked="" type="checkbox"/>
4. Computer point BGE8111 indicates valve is open.	<input checked="" type="checkbox"/>
8.4.5 IF PIT is being performed, THEN station an operator in the vicinity of BG HV-8111, CCP B Recirc valve, to observe valve stem travel.	<input checked="" type="checkbox"/>
8.4.6 At panel RL001, simultaneously measure valve stroke time while closing BG HV-8111, CCP B Recirc valve, using handswitch BG HIS-8111.	<i>MS</i> , 3/22/94
8.4.7 Check the closed indications listed on ATTACHMENT A for BG HV-8111, CCP B Recirc valve, and record results on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.4.8 Record full stroke closing time for BG HV-8111 on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.4.9 At panel RL001, simultaneously measure valve stroke time while opening BG HV-8111, CCP B Recirc valve, using handswitch BG HIS-8111.	<i>MS</i> , 3/22/94
8.4.10 Verify valve BG HV-8111 open using indication lights on handswitch BG HIS-8111.	<i>MS</i> , 3/22/94
Verified	<i>MS</i> , 3/22/94
8.4.11 Record full stroke opening time for BG HV-8111 on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.4.12 At panel RL018, place ESF Status Panel SA-066Y Mode Sel switch, SA HS-24 in Normal.	<input checked="" type="checkbox"/>
8.5 <u>BG HV-8357B, CCP B TO RCP SEAL FLOW CONTROL VLV STROKE TEST/PIT</u>	
8.5.1 Secure or ensure CCP "B" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.	<input checked="" type="checkbox"/>
8.5.2 At panel RL001 close or ensure closed BG HV-8357B, CCP B To RCP Seal Flow Control valve, using handswitch BG HIS-8357B.	<input checked="" type="checkbox"/>

ATTACHED 04/10/96

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	INIT/DATE
8.5.3 Check the following closed indications:	
1. Green indicating light on BG HIS-8357B is lit.	<input checked="" type="checkbox"/>
2. Red indicating light on BG HIS-8357B is out.	<input checked="" type="checkbox"/>
8.5.4 IF PIT is being performed, THEN station an operator in the vicinity of BG HV-8357B, CCP B To RCP Seal Flow Control valve, to observe valve stem travel.	<input checked="" type="checkbox"/>
8.5.5 At panel RL001, simultaneously measure valve stroke time while opening BG HV-8357B, CCP B To RCP Seal Flow Control valve, using handswitch BG HIS-8357B.	<u>MS 13/22/96</u>
8.5.6 Check the open indications listed on ATTACHMENT A for BG HV-8357B, CCP B To RCP Seal Flow Control valve, and record results on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.5.7 Record full stroke opening time for BG HV-8357B on ATTACHMENT A.	<input checked="" type="checkbox"/>
8.5.8 At panel RL001, simultaneously measure valve stroke time while closing BG HV-8357B, CCP B RCP Seal Flow Control valve, using handswitch BG HIS-8357B.	<u>MS 13/24/96</u>
8.5.9 Verify valve BG HV-8357B closed using indication lights on handswitch BG HIS-8357B.	<u>MS 13/24/96</u>
	Verified <u>7 13-22-96</u>
8.5.10 Record full stroke closing time for BG HV-8357B on ATTACHMENT A.	<input checked="" type="checkbox"/>
9.0 <u>RESTORATION</u>	
9.1 Ensure all data sheet entries are complete and all data recorders have signed data sheet in the space provided.	<input checked="" type="checkbox"/>
9.2 Verify affected systems and/or components have been aligned and/or returned to service as directed by SS/SO.	<u>MS 13/24/96</u>

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9.3 Record Comments:

10.0 RECORDS

NOTE

The following records are Plant Life Extension records.

10.1 The following QA records are generated by this procedure:

10.1.1 Section 5.0, 7.0, 8.0 and 9.0 of this test.

10.1.2 ATTACHMENT A

-END-

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ATTACHMENT A
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DATA SHEET

STEP	BG HV-8104 INDICATION AND PIT PARAMETERS	SAT/UNSAT or N/A	REQUIRED ACTION
8.1.8	Green indicating light on BG HIS-8104 is out	(S) U	2
	Red indicating light on BG HIS-8104 is lit	(S) U	2
	Computer point BGD8104 indicates valve open	(S) U	2
	IF PIT was performed, THEN verify valve moved from closed to open position	(S) U N/A	1

STEP	STROKE TEST PARAMETERS	ALERT LOW	MEASURED	ALERT HIGH	LIMITING VALUE	SAT/UNSAT	REQUIRED ACTION
8.1.9	BG HV-8104 opening stroke time	7.3 sec	9.7 sec	N/A	10.0 sec	(S) U	1,3
8.1.12	BG HV-8104 closing stroke time	6.9 sec	9.2 sec	N/A	10.0 sec	(S) U	1,3

STEP	BG HV-8110 INDICATION AND PIT PARAMETERS	SAT/UNSAT or N/A	REQUIRED ACTION
8.2.7	Green indicating light on BG HIS-8110 is lit	(S) U	2
	Red indicating light on BG HIS-8110 is out	(S) U	2
	ESFAS Status Panel SA066X (down 11, across 7) white light is lit.	(S) U	2
	Computer point BGE8110 indicates valve closed	(S) U	2
	IF PIT was performed, THEN verify valve moved from open to closed position	(S) U N/A	1

STEP	STROKE TEST PARAMETERS	ALERT LOW	MEASURED	ALERT HIGH	LIMITING VALUE	SAT/UNSAT	REQUIRED ACTION
8.2.8	BG HV-8110 closing stroke time	5.2 sec	7.0 sec	8.7 sec	10.0 sec	(S) U	1,3
8.2.11	BG HV-8110 opening stroke time	5.4 sec	7.2 sec	9.0 sec	10.0 sec	(S) U	1,3

STEP	BG HV-8357A INDICATION AND PIT PARAMETERS	SAT/UNSAT or N/A	REQUIRED ACTION
8.3.6	Green indicating light on BG HIS-8357A is out	(S) U	2
	Red indicating light on BG HIS-8357A is lit	(S) U	2
	IF PIT was performed, THEN verify valve moved from closed to open position	(S) U N/A	1

STEP	STROKE TEST PARAMETERS	ALERT LOW	MEASURED	ALERT HIGH	LIMITING VALUE	SAT/UNSAT	REQUIRED ACTION
8.3.7	BG HV-8357A opening stroke time	12.1 sec	16.1 sec	20.1 sec	24.1 sec	(S) U	1,3
8.3.10	BG HV-8357A closing stroke time	12.2 sec	16.4 sec	20.4 sec	24.5 sec	(S) U	1,3

Required Action 1: If this value is UNSAT, inform the SS/SO that the valve has failed this surveillance test and is inoperable. Initiate corrective action using AP 16C-001, ACTION REQUEST and ADM 02-024, TECHNICAL SPECIFICATION OPERABILITY.

Required Action 2: If this value is UNSAT inform the SS/SO that corrective action should be initiated using AP 16C-001, ACTION REQUEST. This situation does not make the valve inoperable.

Required Action 3: If the actual value is less than the minimum alert or greater than the maximum alert value, then the ASME Engineer should be contacted to determine operability prior to marking the value as SAT or UNSAT.

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STEP	BG HV-8111 INDICATION AND PIT PARAMETERS	SAT/UNSAT or N/A	REQUIRED ACTION
8.4.7	Green indicating light on BG HIS-8111 is lit	(S) / U	2
	Red indicating light on BG HIS-8111 is out	(S) / U	2
	ESFAS Status Panel SA066Y (down 11, across 7) white light is lit.	(S) / U	2
	Computer point BGE8111 indicates valve closed	(S) / U	2
	IF PIT was performed, THEN verify valve moved from open to closed position	(S) / U N/A	1

STEP	STROKE TEST PARAMETERS	ALERT LOW	MEASURED	ALERT HIGH	LIMITING VALUE	SAT/UNSAT	REQUIRED ACTION
8.4.8	BG HV-8111 closing stroke time	5.2 sec	6.9 sec	8.6 sec	10.0 sec	(S) / U	1,3
8.4.11	BG HV-8111 opening stroke time	5.2 sec	7.0 sec	8.6 sec	10.0 sec	(S) / U	1,3

STEP	BG HV-8357B INDICATION AND PIT PARAMETERS	SAT/UNSAT or N/A	REQUIRED ACTION
8.5.6	Green indicating light on BG HIS-8357B is out	(S) / U	2
	Red indicating light on BG HIS-8357B is lit	(S) / U	2
	IF PIT was performed, THEN verify valve moved from closed to open position	(S) / U N/A	1

STEP	STROKE TEST PARAMETERS	ALERT LOW	MEASURED	ALERT HIGH	LIMITING VALUE	SAT/UNSAT	REQUIRED ACTION
8.5.7	BG HV-8357B opening stroke time	12.6 sec	16.9 sec	21.1 sec	25.3 sec	(S) / U	1,3
8.5.10	BG HV-8357B closing stroke time	12.8 sec	17.1 sec	21.3 sec	25.6 sec	(S) / U	1,3

Required Action 1: If this value is UNSAT, inform the SS/SO that the valve has failed this surveillance test and is inoperable. Initiate corrective action using AP 16C-001, ACTION REQUEST and ADM 02-024, TECHNICAL SPECIFICATION OPERABILITY.

Required Action 2: If this value is UNSAT inform the SS/SO that corrective action should be initiated using AP 16C-001, ACTION REQUEST. This situation does not make the valve inoperable.

Required Action 3: If the actual value is less than the minimum alert or greater than the maximum alert value, then the ASME Engineer should be contacted to determine operability prior to marking the value as SAT or UNSAT.

Data Recorded by: Feldhauser, J. Mark

Mark Jenkins

Print Name

Signature

Print Name

Signature

- END -