SURVEILLANCE TEST	ROUTING SHEET (STRS)	AND 10 10 10 10 10 10 10 10 10 10 10 10 10
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DOCUMENT NUMBER: 515 DG 201	**DIP DAMP/MINT. 06000	10105
DOCUMENT TITLE: CVCS INSERVICE VALVE	TECT ++1. TT TATE / TIME: 06022	2/2135
	**T/S PROUTPRD MODE. 1	3456
	**PROCEDURE REQUIRED MO	DE: 1234
INITIATING DOCUMENT#(s):		
**RESPONSIBIE GROUP: OPS	**SUPPORT GROUP(s):	
PRE-TEST COMMENTS:	1. 1	
FILS K	equired morents	
*OPTIONAL INFORMATION NOT REQUIRED TO	BE FILLED IN	
1) PROCEDURE VERIFIED TO BE CORFCT REV	TIA PTTW WITH ALL	A / 2.22
TEMPORARY CHANGES ATTACHED AND INCOM	PORATED. INI	T / DATE
		, season
BST PERFORMERS: PRINT NAME INIT I	ATE PRINT NAME INT	T DATE
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Algok Joskins 71 3.	2294	
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Abel Contraction	1 3-24-80	6 083
3) *TEST DEFICIENCY DESCRIPTION:	-0 [3-24-90 for	
A) *TEST DEFICIENCY DESCRIPTION:	-0 3-24-90 TP INIT/I	
ALL S 3) *TEST DEFICIENCY DESCRIPTION:	J-24-90 TP INIT/I SS SIGNATURE	DATE
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A) *TEST DEFICIENCY DESCRIPTION:	J-24-90 TP INIT/I SS SIGNATURE	DATE
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Responsible Manager

Manager Operations

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

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Continuous Use

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1.0 PURPOSE

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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 Requ: Regions of Low Flow Cavitation Pump Op	rements With: perations
	3.1.15	CKL BG-120, CHEMICAL AND VOLUME CONTRO NORMAL VALVE LINEUP	L SYSTEM
	3.1.16	SYS BB-201, REACTOR COOLANT PUMP OPERA	TION
3.2	COMMITME	INTS	
	3.2.1	None	
4.0	PRECAUTI	ONS/LIMITATIONS	
4.1	Monitor maintain Flow Req Operatio	flow of CCP's to insure minimum flow re ed in accordance with WCGS Standing Ord uirements Within Regions Of Low Flow Ca ms".	quirements an ler "Minimum vitation Pump
4.2	Report a immediat	ny irregularities or component malfunct ely and refer to USAR LCO 16.1.2.2.	ions to SS/SC
4.3	CVCS val not mode	ve testing, in accordance with this sur dependent.	veillance, is
4.4	IF CVCS THEN ref	valve testing is performed during Modes er to USAR LCO 16.1.2.3.	4, 5 or 6,
4.5	Performa secured. CCP to b	nce of section 8.2 and 8.3 require the Performance of Section 8.4 and 8.5 re e secured.	A CCP to be quire the B
4.6	Measured determin	parameters shall be compared to accept e component operability.	able limits t
4.7	Stroke t of a sec	ime measurements should be recorded to ond.	nearest tenth
5.0	TEST BOUT	IPMENT	
	ere og angen skol av renne være hver ange	NOTE	
If in	equivalent "Comments"	t equipment is used, justification shall " section of procedure and accuracies no	l be provided oted.
5.1	Calibrate	ed stopwatch with ± 0.1 second accuracy	
	Stopwatch	w C number: 15996	

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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 OMA-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 <u>IF</u> a Limiting Value is exceeded, <u>THEN</u> value shall be declared inoperable and corrective action shall be initiated using references 3.1.3 and 3.1.4.
- 6.2 Value stroke times shall not be greater than the Alert High Value or less than the Alert Low Value specified as part of the value stroke acceptance criteria.

NCTE

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

- 6.2.1 IF measured value is less than the alert low or exceeds the alert high value, <u>THEN</u> value shall be retested. <u>IF</u> a retest cannot be performed, <u>THEN</u> declare value inoperable and initiate corrective action using references 3.1.3 and 3.1.4.
- 6.2.2 IF value is retested and the measured value is less than the alert low or exceeds the alert high value, <u>THEN</u> data shall be analyzed by ASME IST Engineer within 96 hours. The ASME IST Engineer will verify that the value represents acceptable value operation or determine that the value be declared inoperable with corrective action initiated using references 3.1.3 and 3.1.4.
- 6.2.3 <u>IF</u> second measured value exceeds the alert low and is less than the alert high values, <u>THEN</u> cause of initial deviation shall be analyzed by Engineering and documented in "Comments" section of this procedure.

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CHEMICAL & VOLUME CONTROL SYSTEM INSERVICE VALVE TEST

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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 <u>IF</u> required change of valve stem or disk position is not obtained, <u>THEN</u> 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

EL

3-24-96

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.

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Conti	nuous Use	INSERVICE VAL	LVE TEST	Page 6	of 14
8.0	PROCEDU			989-94-94-94-94-94-94-94-94-94-94-94-94-94	INIT/D
8.1	BG HV-8:	4. EMERGENCY BORATE TO	CHG PUMP SUCT.	STROKE	TEST/P
	8.1.1	At panel RL002, place Control Selector Swite	BG HS-25, RCS M, ch, to OFF posit:	/U ton.	
	8.1.2	At panel RL001, place Transfer Pump, in Pull handswitch BG HIS-5A.	PBG02A, Boric Ad -To-Lock (PTL) 1	cid Ising	N.
	8.1.3	At panel RL001, place Transfer Pump, in Pull handswitch BG HIS-6A.	PBG02B, Boric Ad -To-Lock (PTL) (id . sing .	- La
	8.1.4	At panel RL001 close o BG HV-8104, Emergency Pump Suction valve, us BG HIS-8104.	or ensure closed Borate To Chargi ling handswitch	valve	-
	8.1.5	Check the following cl	osed indications		-
		 Green indicating 1 is lit. 	ight on BC HIS-8	104	V
		 Red indicating lig out. 	ht on BG HIS-810	4 is	10
		 Computer point BGD is shut. 	8104 indicates v	alve	E
	8.1.6	IF PIT is being perform operator in the vicini Rmergency Borate To Cha valve, to observe valve	med, <u>THEN</u> static ty of BG HV-8104 arging Pump Suct e stem travel.	ion an	
	8.1.7	At panel RL001, simulta valve stroke time while Emergency Borate To Cha valve, using handswitch	aneously measure e opening BG HV- arging Pump Suct h BG HIS-8104.	8104, ion	M it
	8.1.8	Check the open indicat: ATTACHMENT A for BG HV Borate To Charging Pump record results on ATTAC	ions listed on ~8104, Emergency p Suction valve, CHMENT A.	and	1
	8.1.9	Record full stroke oper BG HV-8104 on ATTACHMEN	ning time for NT A.		
	8.1.10	At panel RL001, simulta valve stroke time while Rmergency Borate To Cha valve, using handswitch	Encously measure e closing BG HV- arging Pump Suct h BG HIS-8104.	8104, ion	NA 13/2

Revis	ion: 14	CHEMICAL & VOLUME CONTROL SYSTEM	STS BG-20
Conti	nuous Use	INSERVICE VALVE TEST	Page 7 of 14
opilati dunuman	an ann an the same and an and a first sector of the same of the		TATTO /D
	8.1.11	Verify valve BG HV-8104 closed using indication lights on handswitch BG HIS-8104.	1 17 13
		Verifi	ed 213
	8.1.12	Record full stroke closing time for BG HV-8104 on ATTACHMENT A.	$\langle \cdot \rangle$
	8.1.13	At panel RL002, place BG HS-25, RCS M/I Control Selector Switch, to AUTO posit:	on. 11.
		Verif	ied NIN
	8.1.14	At panel RL001, place PBG02A, Boric Ac: Transfer Pump, in AUTO using handswitch BG HIS-5A.	id h
		Verif	ied 7 13
	8.1.15	At panel RL001, place PBG02B, Boric Ac: Transfer Pump, in AUTO using handswitch BG HIS-6A.	id h <u>13/</u>
		Verif:	ied 7 15.
8.2	BG HV-81	10, CCP A RECIRC VLV STROKE TEST/PIT	
	8.2.1	Secure or ensure CCP "A" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.	Ø
	8.2.2	At panel RL001, open or ensure opened BG HV-8110, CCP A Recirc valve, using handswitch BG HIS-8110.	D/
	8.2.3	At panel RL018, place ESF Status Panel SA-066X Mode Sel switch, SA HS-23 in Check/Pull-To-Lock.	P
	8.2.4	Check the following open indications:	
		 Green indicating light on BG HIS-81 is out. 	110
		 Red indicating light on BG HIS-8110 lit. 	is 🔽
		3. ESFAN Status Panel SA066X (down 11, across 7) is out.	Z
		 Computer point BGE8110 indicates va is open. 	lve

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Conti	nuous Use	INSERVICE VALVE TEST Page	8 of 14
a a and a second a grant second			TNTT /T
	8.2.5	<u>IF</u> 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.	
	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.	7/12
	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.	P
	8.2.8	Record full stroke closing time for BG HV-8110 on ATTACHMENT A.	D
	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.	7 13
	8.2.10	Verify valve BG HV-8110 open using indication lights on handswitch BG HIS-8110.	7_13
		Verified	MAI
	8.2.11	Record full stroke opening time for BG HV-8110 on ATTACHMENT A.	D-
	8.2.12	At panel RL018, place ESF Status Panel SA-066X Mode Sel switch, SA HS-23 in Normal.	œ
8.3	BG HV-83	57A, CCP A TO RCP SEAL FLOW CONTROL VLV STROK	E TEST/
	9.3.1	Secure or ensure CCP "A" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.	D-
	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.	P
	8.3.3	Check the following closed indications:	
		 Green indicating light on BG HIS-8357A is lit. 	D2-
		 Red indicating light on BG HIS-8357A is out. 	P

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Continue	ous Use	INSERVICE VALVE TEST Page	9 of 14
			THIT / TO
,	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.	
ł	3.3.5	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.	711
1	3.3.6	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.	Ē
1	8.3.7	Record full stroke opening time for BG HV-8357A on ATTACHMENT A.	D)
	8.3.8	At panel RL001, simultaneously measure valve stroke time while closing BC HV-8357A, CCP A RCP Seal Flow Control valve, using handswitch BG HIS-8357A.	7-13
l	3.3.9	Verify valve BG HV-8357A closed using indication lights on handswitch BG HIS-8357A.	ge 13
		Verified	PA 13
i	3.3.10	Record full stroke closing time for BG HV-8357A on ATTACHMENT A.	
8.4	3G HV-81	11. CCP B RECIRC VLV STROKE TEST/PIT	
4	9.4.1	Secure or ensure CCP "B" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.	Ja
ŧ	3.4.2	At panel RL001, open or ensure opened BG HV-8111, CCP B Recirc valve, using handswitch BG HIS-8111.	9
	9.4.3	At panel RL018, place ESF Status Panel SA-066Y Mode Sel switch, SA HS-24 in Check/Pull-To-Lock.	
E	3.4.4	Check the following open indications:	
		 Green indicating light on BG HIS-8111 is out. 	
		2. Red indicating light on BG HIS-8111 is lit.	

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Revision: 14	ALTRATOL - TALER ALTRA ALTRA	STS BG-201
Continuous Use	INSERVICE VALVE TEST	Page 10 of 14
	 ESFAS Status Panel SA066Y (down 11, across 7) is out. 	INIT/DAT
	 Computer point BGE8111 indicates va is open. 	lve
8.4.5	IF PIT is being performed, THEN station operator in the vicinity of BG HV-8111, B Recirc valve, to observe valve stem travel.	an CCP
8.4.6	At panel RL001, simultaneously measure valve stroke time while closing BG HV-8 CCP B Recirc valve, using handswitch BG HIS-8111.	111. Ma 3/11
8.4.7	Check the closed indications listed on ATTACHMENT A for BG HV-8111, CCP B Reci- valve, and record results on ATTACHMENT	rc A.
8.4.8	Record full stroke closing time for BG HV-8111 on ATTACHMENT A.	E
8.4.9	At panel RL001, simultaneously measure valve stroke time while opening BG HV-8 CCP B Recirc valve, using handswitch BG HIS-8111.	121, MR 3/14
8.4.10	Verify valve BG HV-8111 open using indication lights on handswitch BG HIS-8111.	Mo spec
	Verified	7/3-22-
8,4,11	Record full stroke opening time for BG HV-8111 on ATTACHMENT A.	P
8.4.12	At panel RL018, place ESF Status Panel SA-066Y Mode Sel switch, SA HS-24 in Normal.	
8.5 BG HV-3	357B, CCP B TO RCP SEAL FLOW CONTROL VLV S	STROKE TEST/PI
0.5.1	Secure or ensure CCP "B" is secured in accordance with SYS BG-201, SHIFTING CHARGING PUMPS.	10
8.5.2	At panel RL001 close or ensure closed BG HV-8357B, CCP B To RCP Seal Flow Cont valve, using handswitch BG HIS-8357B.	rol

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Conti	nuous Use	INSERVIC	E VALVE TEST	Page	11 of 1
	0 5 3	Charle the follow			INIT/D
	0.5.5	Check the Iollowi	ng closed indication	18:	
		 Green indicat is lit. 	ing light on BG HIS-	8357B	D
		 Red indicatin out. 	g light on BG HIS-83	57B is	D
	8.5.4	IF PIT is being p operator in the v CCP B To RCP Seal observe valve ste	erformed, <u>THEN</u> stati icinity of BG HV-835 Flow Control valve, m travel.	on an 7B, to	E
	8.5.5	At panel RL001, s	imultaneously measur	e	
		Valve stroke time BG HV-8357B, CCP valve, using hand	while opening B To RCP Seal Flow C switch BG HIS-8357B.	ontrol	PN 131
	8.5.6	Check the open in ATTACHMENT A for Seal Flow Control on ATTACHMENT A.	dications listed on BG HV-8357B, CCP B T valve, and record r	o RCP esults	
	8.5.7	Record full strok BG HV-8357B on AT	e opening time for TACHMENT A.		
	8.5.8	At panel RL001, s valve stroke time BG HV-8357B, CCP i valve, using hand	imultaneously measur while closing B RCP Seal Flow Cont switch BG HIS-8357B.	e rol	MR 13
	8.5.9	Verify valve BG H indication lights BG HIS-8357B.	V-8357B closed using on handswitch		mi
			Verif	ieđ	× 13-
	8.5.10	Record full stroke BG HV-8357B on AT	e closing time for TACHMENT A.		
9.0	RESTORAT	ON			
9.1	Ensure a data rec provided	l data sheet entr: rders have signed	ies are complete and data sheet in the s	all pace	N
9.2	Verify a aligned	fected systems and nd/or returned to	d/or components have service as directed	been by	11

Continuous Use CHEMICAL & VOLUME CONTROL SYSTEM Page 12 of 14 Page 12 of 14 Page 12 of 14 INIT/D3 Page 12 of 14 INIT/D3 INIT/D		ion: 14			STS BG-20
9.3 Record Comments:	Contin	uous Use	INSERVICE VA	LVE TEST	Page 12 of 1
10.0 RECORDS	9.3	Record Con	ments:		INIT/D.
10.0 RECORDS NOTE					
	10.0	RECORDS	NOTE		
		(Mag. 6 - 7 7	ing QA records are ge	enerated by this	procedure:
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	10.1	10.1.1 S	ection 5.0, 7.0, 8.0 TTACHMENT A	and 9.0 of this	test.

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STS BG-201

		ATTAC (Page DATA	HMENT A 1 of 2) SHEET				
STEP	BE HV-8104 INDICATIO	W AND PIT F	ARAMETERS			SAT/UNSAT	REQUIRED
	Green indicating light on BG HI	S-8104 is a	NIT			(EYU	2
	Red Indicating light on BG HIS-	8104 is lit		and the second second second	and the second se	Vexu	2
8.1.6	Computer point BGD8104 Indicate	s valve ope	n			(S)U	2
	IF PIT war performed, THEN veri	fy valve mo	ved from clos	ed to ope	n position	(s) U N/A	1
STEP	STROKE TEST PARAMETERS	ALERT	MEASURED	ALERT	LIMITING	SAT/UNSAT	REQUIRED
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	86 HV-8104 closing stroke time	6.9 sec	9.2 500	N/A	10.0 sec	(s) u	1,3
STEP	BG HV-B110 INDICATION	AND PIT P	ARAMETERS			SAT/UNSAT	REQUIRED
	Green indicating light on BG KI	5-8110 is t	it		And the other states of the states of the	Gu	2
	Red indicating light on BG MIS-6	still is out				(S) U	2
8.2.7	ESFAS Status Panel SA066X (down	11, across	7) white light	nt is lit	•	Qu	2
	Computer point BGE8110 indicates	valve clos	sed			DU	2
	IF PIT was performed, THEN verif	y valve mov	ned from open	to close	d position	DI U N/A	1
STEP	STROKE TEST PARAMETERS	ALERT	MEASLIRED	ALERT HIGH	LIMITING	SAT/UNSAT	REQUIRED
8.2.8	BG MV-8110 closing stroke time	5.2 sec	7.0 sec	8.7 sec	10.0 sec	(U V	1.3
8.2.11	BG HV-8110 opening stroke time	5.4 600	7.2 500	9.0 sec	10.0 sec	Qu	1,3
STEP	BG HV-8357A INDICATIO	N AND PIT P	ARANETERS			SAT/UNSAT	REQUIRED
	Green indicating light on BG HIS	-8357A is o	ut	T mit of the second statement		() U	2
8.3.6	Red indicating light on BG HIS-S	357A is lit				Qu	2
····	IF PIT was performed, THEN verif	y valve nacy	ed from close	d to open	position	DI U N/A	1
STEP	STROKE TEST PARAMETERS	ALERT	NEASURED	ALERT	LIMITING VALUE	SAT/UNSAT	REQUIRED
8.3.7	BG WV-8357A opening stroke time	12.1 880	14.1 500	20.1 sec	24.1 sec	QU	1,3
8.3.10	BG HV-8357A missing stroke time	12.2 sec	16. 4 sec	20.4 sec	24.5 sec	Qu	1,3
quired An quired Ac quired Ac	and is inoperable. Initi ADN 02-024, TECHNICAL SPE tion 2: If this value is UNSAT if AP 16C-001, ACTION REQUES if the actual value is le then the ASME Engineer of	nform the l ate correct CIFICATION form the St T. This at as than the	S/SO that the tive action us OPERABILITY. J/SO that corr tustion does minimum eler	s valve h bing AP 1 rective an not meke t or gree	as failed t 6C-001, ACT ction shoul the valve ster than t	this surveille IOW REQUEST d be initiate inoperable. he maximum al	ance test and ed using ert value,

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ATTACHMENT A (Page 2 of 2) DATA SHEET

	BG HV-8111 INDICATIO	M AND PIT P	ARAMETERS			SAT/UNSAT	ACTION
	Green indicating light on BG HI	S-8111 is l	it			610	2
	Red indicating light on BG HIS-	8111 is out				(S)/U	2
8.4.7	ESFAS Status Panel SA066Y (down	11, across	7) white lig	ht is lit		610	2
	Computer point BGE8111 Indicate	s valve clo	sed			1010	Z
	IF PIT was performed, THEN veri	fy valve mo	ved from open	to close	d position	JU N/A	1
STEP	STROKE TEST PARAMETERS	ALERT	MEASURED	ALERT	LIMITING	SAT/UNSAT	REQUIRE
8.4.8	BG HV-8111 closing stroke time	5.2 sec	6.9 sec	8.6 sec	10.0 sec	6/10	1,3
8.4.11	BG RV-8111 opening stroke time	5.2 sec	7.00 800	8.6 sec	10.0 sec	15/10	1,3
STEP	BG HV-8357B INDICATIO	ON AND PIT P	PARAMETERS			SAT/UNSAT	REQUIRE
Budde ay op bereine	Green indicating light on BG His	s-83578 is a	tuo			6) U	2
8.5.6	Red Indicating Light on BG HIS-8	357B is Lit	t			G/U	2
	During the second s		-			19	
	IF PIT was performed, THEN verif	fy valve neov	red from clas	ed to oper	position (DIU N/A	1
STEP	IF PIT was performed, THEN verif	ALERT	MEASURED	ALERT HIGH	LIMITING VALUE	SAT/UNSAT	1 REQUIRE ACTION
STEP 8.5.7	IF PIT was performed, THEN verif STROKE TEST PARAMETERS BG HV-83578 opening stroke time	ALERT LOW 12.6 sec	MEASURED	ALERT HIGH 21.1 Sec	LIMITING VALUE 25.3 sec	S) U N/A SAT/UNISAT	1 REQUIRE ACTION
STEP 8.5.7 8.5.10	IF PIT was performed, THEN verif STROKE TEST PARAMETERS BG HV-83578 opening stroke time BG HV-83578 closing stroke time	ALERT LOW 12.6 sec 12.8 sec	MEASURED 16.9 SOC 17. / SOC	ALERT HIGH 21.1 Sec 21.3 Sec	LIMITING VALUE 25.3 sec 25.6 sec	(5)/ U N/A SAT/UNSAT (5)/ U (5)/ U (5)/ U	1 REQUIRE ACTION 1,3 1,3
STEP 8.5.7 8.5.10 quired A quired A a Record	IF PIT was performed, THEN verif STROKE TEST PARAMETERS BG HV-83578 opening stroke time BG HV-83578 closing stroke time Con 1: If this value is UNSAT, and is inoperable. Init ADM 02-024, TECHNICAL SP ction 2: If this value is UNSAT i AP 16C-001, ACTION REQUE ction 3: If the actual value is I then the ASME Engineer s velue as SAT or UNSAT. ed by: <u>Feld Sugger</u> 1	ALERT LOW 12.6 sec 12.8 sec inform the secification nform the S ST. This a ess than th hould be co	MEASURED /6.9 sec /7. / sec SS/SO that the trive action to POPERABILITY. S/SO that con- ituation does a minimum ele- intacted to de	ALERT HIGH 21.1 Sec 21.3 Sec 21.3 Sec 21.3 Sec 21.3 Sec 21.5 Sec 21.5 Sec 21.5 Sec 21.5 Sec 21.5 Sec	LIMITING VALUE 25.3 sec 25.6 sec 25.6 sec as failed t 6C-001, ACT ction shoul the valve ater than t perability	S)/U N/A SAT/UNSAT S)/U S)/U D/U this surveill TON REQUEST d be initiat Inoperable. he maximum a prior to mar	1 REQUIRE ACTION 1,3 1,3 1,3 ance test and ed using lert valu king the
STEP 8.5.7 8.5.10 quired A quired A quired A a Record	IF PIT was performed, THEN verif STROKE TEST PARAMETERS BG HV-83578 opening stroke time BG HV-83578 closing stroke time ction 1: If this value is UNSAT, and is inoperable. Init ADM 02-024, TECHNICAL SP ction 2: If this value is UNSAT i AP 16C-001, ACTION REQUE ction 3: If the actual value is I then the ASME Engineer s value as SAT or UNSAT. March. Isakist Print Name	ALERT LOW 12.6 sec 12.8 sec 12.8 sec inform the tate correc ECIFICATION mform the S ST. This s ess than th hould be co SI gnature	MEASURED /6.7 sec /7. / sec /7. / sec ss/so that th trive action to operability s/so that con itustion does a minimum site intacted to de	ALERT HIGH 21.1 Sec 21.3 Sec 21.3 Sec 21.3 Sec 21.3 Sec 21.5 Sec 2	LIMITING VALUE 25.3 sec 25.6 sec 25.6 sec as failed t 6C-001, ACT ction should the valve ater than t perability / /	Sign	1 REQUIRE ACTION 1,3 1,3 1,3 ance test and ed using lert valu king the