

**ATTACHMENT 1**  
**SURVEILLANCE TEST ROUTING SHEET**  
 (STRS)

STS/STN NO: STS BG-206  
 (CIRCLE ONE)

REV. 4

TITLE: CVCS INSERVICE VALVE TEST

\*\*TEST FREQUENCY:

\*\*DUE DATE/TIME:

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\*\*LATE DATE/TIME:

MA 94-080

\*\*T/S REQUIRED MODE:

\*\*PROCEDURE REQUIRED MODE:

INITIATING DOCUMENT#(s) \_\_\_\_\_

\*\*RESPONSIBLE GROUP:  
 PRE-TEST COMMENTS

\*\*SUPPORT GROUP(s): \_\_\_\_\_

\*\* OPTIONAL INFORMATION-NOT REQUIRED TO BE FILLED IN

## 1) TEST PERFORMERS

SIG/DATE

Procedure verified to be the correct  
 revision with all temporary changes  
 attached and incorporated.

INT/DATE

## 2) PRE-TEST REVIEWS

SS/SO AUTH/NOTIF/NI

(CIRCLE)

(AS APPLICABLE)

SIG/DATE/TIME

3) \*TEST DEFICIENCY  
DESCRIPTION:

N/A

## 4) \*T/S FAILURE

YES / NO

(CIRCLE ONE)

S/S SIGNATURE

TP INT/DATE

DATE

IF NO-JUSTIFICATION: \_\_\_\_\_

## 5) ACTION TAKEN

EOL #

WR#

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

TEST SUSPENDED

YES / NO

(CIRCLE ONE)

SS SIGNATURE

DATE

## 6) POST TEST REVIEWS

TOTAL MAN HOURS:

TEST PERFORMER

SS/SO REVIEW/NOTIF

GROUP SUP.

SIG/

DATE /

TIME

10/24/94

1309

10/24/94

1312

10-27-94

10-26-94

☒ COMPLETE

☐ PARTIAL

(GROUP SUP. CHECK ONE)

SC/SURV. TECHNICIAN

R. Anderson

11-9-94

## 7) ADDITIONAL COMMENTS:

**ON THE SPOT CHANGE (OTSC)**OTSC Number: 94-0301Document Number: STS BG-206Current Revision Number: 4Document Title: CVCS INSERVICE VALVE TESTOriginator: Larry R. Veeder

Print Name

10/24/94

Date

Reason For Change: (Explain)

Delete prerequisite condition to stop all RCPs. Seal injection is maintained throughout this test as well as CCW to the RCP thermal barrier. No need exists to secure the RCPs. ☐ Continued on attached**OTSC SCREENING**

(A YES answer to any of the following questions indicates an OTSC can not be performed.)

- |  |                              |  |
|--|------------------------------|--|
| 1. Is this a change to the intent of the procedure as defined in the purpose or scope?       | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| 2. Will this change decrease or modify a hold point requirement or Quality inspection point? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| 3. Will the change result in a reduction of personnel or equipment safety?                   | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| 4. Will the change involve a USQD?   | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |

☒ A marked up copy of the proposed change is attached.☒ Regulatory Screenings and/or Evaluations (form KGF-115) has been completed and attached as required by KGP-1220.

SCREENING AND EVALUATING CHANGES, TESTS, AND EXPERIMENTS

**APPROVAL FOR IMMEDIATE USE**

Approved By:

Call Superintendent (for ACPs only)

Date

Approved By:

Patrick Gueve!  
WCNOC Staff MemberPatrick Gueve!  
Print Name10/24/94  
Date

Approved By:

S  
Cognizant Supervisor\*Dennis Moseley  
Print Name10/24/94  
Date

\* For Operations Department procedures, must hold a Senior Reactor Operator license per TS 6.8.3.

The remainder of this form shall be completed within 14 days as required by Technical Specification 6.8.3.

**QUALIFIED REVIEW**

Cross-Disciplinary Review Required By:

☐ NONE REQUIRED☐ Quality Assurance☐ Quality Control☐ Surveillance Coordinator☐ Other (Specify)

All cross-disciplinary reviews have been completed, reviewer comments have been resolved, and the recommended disposition of this OTSC has been identified in the FINAL APPROVAL section of this form.

Qualified Reviewer

Print Name

Date

**FINAL APPROVAL**☒ Approved:☐ Disapproved, cancel, remove from OTSC file, and initiate PIR☒ Maintain in active OTSC file until incorporated into future revision.

Incorporated by DRR number: \_\_\_\_\_

or OTSC number: \_\_\_\_\_

☐ Maintain in active OTSC file until specified date \_\_\_\_\_

This section for Administrative Control Procedures Only)

☐ Approved☐ Disapproved

PSRC Meeting No: \_\_\_\_\_

PSRC Chairmain (Initials)

Date

Vice-President Plant Operations

Date

Responsible Manager (For all OTSC except ACP's)

Date

DTSC 94-0301



## SCREENING FOR LICENSING BASIS CHANGES

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Document Number: STS BG-206

Revision: 4

## Description of Proposed Change:

Delete requirement to secure RCPs prior to running this surveillance. RCP seal flow is maintained throughout the test as is CCW flow. In addition, RCS temperature remains less than 200 F. Stopping RCPs at this time could cause surge line temperature swings and potentially "cock" the RCP seals. Plant stability is enhanced by leaving the RCPs running during the performance of this test.

Screening Questions: (Note: All questions must be answered except as provided in questions 1 and 2)

1. Has this change been previously approved for WCNOG by the NRC or covered by another Unreviewed Safety Question Determination (KGF-117)

☐ YES

No further screening is required.

Document # \_\_\_\_\_

Justify in "Clarification" Section if referencing a previously performed USQD, contact Licensing to update USQD log.

☒ NO

Note: If referencing another Unreviewed Safety Question Determination, ensure that it has been approved by the PSRC prior to implementing the change.

2. Would the change result in a revision to the Operating License including Appendices? (this includes the Technical Specifications)

☐ YES

Change may NOT be implemented prior to approval of a License Amendment (Note: No further screening is required since NRC approval must be obtained prior to implementing the change.)

☒ NO

3. Would the change involve one or more of the following:

- a change to plant structures, systems, components or equipment as outlined, summarized or described in the USAR such that accomplishment of the change would make information in the USAR no longer true or accurate, or would violate a requirement stated in the USAR?
- a change to procedures or administrative controls as outlined, summarized, or described in the USAR such that accomplishment of the change would make information in the USAR no longer true or accurate, or would violate a requirement stated in the USAR?
- tests or experiments NOT described in the USAR?

☐ YES

A formal Unreviewed Safety Question Determination using KGF-117 must be completed prior to implementing the change.

☒ NO

Identify USAR sections considered in answering these questions.

Sections Reviewed: 5.4.1, 9.3.4

NOTE: If yes, evaluate need for a USAR Change Request in accordance with KGP-1225.

(REF. KGP-1220)

OTSC 94-0301



# SCREENING FOR LICENSING BASIS CHANGES (continued)

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4. Does the proposed change involve one or more of the following:

- a. a change in the rate, volume, concentration, composition or flow path of nonradiological liquid or gaseous effluents?
- b. a change in the volume, concentration or composition of nonradiological solid waste?
- c. an increase in the thermal power above the current licensed level and/or an alteration in the magnitudes of thermally affected effluents?
- d. a physical change in an area outside of the owner controlled area boundary which was not disturbed by previous construction?

☐ Yes      An environmental impact determination must be completed by the Supv. Environmental Management using KGF-116 prior to implementing the change.      ☒ No

5. Could the change potentially result in a revision to:

- a. the Security Plan,
- b. the Safeguards Contingency Plan, or
- c. the Guard Training and Qualification Plan?

☐ Yes      An evaluation must be completed in accordance with 10CFR50.54(p) prior to implementing the change. This evaluation must be performed by the Manager Security or Manager NPE-Wichita using KGF-116.      ☒ No

6. Could the change potentially result in a revision to the Operating Quality Assurance Program commitment described in Chapter 17 of the USAR?      ☐ Yes      An evaluation must be completed in accordance with 10CFR50.54(A)(3) by the Manager QA using KGF-116 prior to implementing the change.

☒ No

7. Could the change potentially result in a revision to the Fire Protection Program described in USAR Section 9.5 and Appendices?      ☐ Yes      An evaluation must be completed in accordance with license NPF-42 paragraph 2.c(5) by the Manager Operations or Manager System Engineering using KGF-116 prior to implementing the change.

☒ No

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# SCREENING FOR LICENSING BASIS CHANGES (continued)

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8. Could the change potentially result in a revision to the Radiological Emergency Response Plan?

☐ Yes

An evaluation must be completed in accordance with 10CFR50.54(q) by the Manager Technical Services using KGF-116 prior to implementing the change.

☒ No

9. Could the change potentially result in a revision to the Licensed Operator Requalification Program as described in USAR Section 13.2.1.2?

☐ Yes

An evaluation must be completed in accordance with 10CFR50.54(i-1) by the Manager Training using KGF-116 prior to implementing the change.

☒ No

10a. Could the change potentially result in a change to an NRC commitment?

☐ Yes

An evaluation must be completed by the Manager Regulatory Services using Form KGF-116 prior to implementing the change.

☒ No

10b. Could the Change potentially result in changing or nullifying an INPO commitment?

☐ Yes

The basis for accepting the change will be provided below in the clarification section by the responsible manager. Coordinate with the Manager Plant Support to provide a basis for accepting the change to an INPO commitment.

☒ No

Clarification:

Disposition: Further Action Needed (Mark answer and explain below):

All Questions answered no.

☐ Yes☒ No

Prepared by:

Date:

10/24/94

Approved by:

Date:

10/24/94

WOLF CREEK NUCLEAR OPERATING CORPORATION  
WOLF CREEK GENERATING STATION

CVCS INSERVICE VALVE TEST

STS BG-206

Revision 4

Classification: Minor

<u><i>Tom H. Huse</i></u>	<u>8/24/93</u>
PREPARED BY	DATE
<u><i>M. J. Stewart</i></u>	<u>8-29-93</u>
INDEPENDENT REVIEW	DATE
<u><i>Gary Pendragon</i></u>	<u>9-2-93</u>
COGNIZANT GROUP SUPERVISOR	DATE
<u><i>[Signature]</i></u>	<u>9/10/93</u>
PSRC SUBCOMMITTEE CHAIRMAN APPROVAL	DATE
<u>N/A</u>	<u>DATE</u>
PSRC APPROVAL RECOMMENDATION (Revision 0 only)	
<u>N/A</u>	
VICE PRESIDENT PLANT OPERATIONS APPROVAL (As required per 6.9.7.1)	
<u>N/A</u>	<u>DATE</u>
QUALITY ENGINEERING (As required per 6.13.3)	<u>9-10-93</u>

DC12



1.0 PURPOSE

- 1.1 The purpose of this surveillance procedure is to demonstrate Chemical Volume Control System (CVCS) check valve BG-V591, Charging To Seal Inj Filters Check Vlv, operability.
- 1.2 This surveillance will perform check valve close testing as required by ASME/ANSI OMA-1988, Part 10.
- 1.3 This procedure satisfies CVCS check valve operability surveillance requirements of Technical Specification 4.0.5.

2.0 DISCUSSION

2.1 Scope

- 2.1.1 Check valve operability is verified by observing a maximum allowable pressure increase across valve.

2.2 Precautions, Limitations And Acceptance Criteria

2.2.1 Precautions

- 2.2.1.1 None

2.2.2 Limitations

- 2.2.2.1 Report any irregularities or component malfunctions to SS/SO immediately.

- 2.2.2.2 CVCS check valve testing, per this surveillance, shall be performed in Mode 5 or Mode 6.

- ~~2.2.2.3 Reactor Coolant Pumps (RCP) shall not be in service when testing BG-V591. DELETED~~

- 2.2.2.4 Centrifugal Charging Pump PBG05A (CCP "A") or PBG05B (CCP "B") shall be in service when testing BG-V591. IF PDP is in service, THEN shift from PDP to CCP in accordance with SYS BG-201, "Shifting Between Positive Displacement And Centrifugal Charging Pumps".

- 2.2.2.5 Boron Injection shall be available and operable to provide a flowpath through Boron Injection Tank (BIT) as required by Technical Specification 3.1.2.3.

### 2.2.3 Acceptance Criteria

**NOTE:** Failure to meet Acceptance Criteria given below may constitute a failure to comply with Technical Specifications.

- 2.2.3.1 Each check valve disk shall be verified to travel to respective safety function position.. Pressure shall not increase >50 psig to verify valve closure. IF required change of valve disk position is not obtained, ~~THEN~~ valve shall be declared inoperable and corrective action shall be initiated using ADM 01-057, "Work Request" and ADM 02-024, "Technical Specification Operability".

### 2.3 Definitions

- 2.3.1 None

### 3.0 REFERENCES

- 3.1 ADM 01-300, "Surveillance Testing"
- 3.2 ADM 05-200, "ASME Code Testing Of Pumps And Valves"
- 3.3 ADM 01-057, "Work Request"
- 3.4 ADM 02-024, "Technical Specification Operability"
- 3.5 PIR TS 92-0491
- 3.6 PIR TS 92-0485
- 3.7 PDR TS 91-0238
- 3.8 SYS BG-201, "Shifting Between Positive Displacement And Centrifugal Charging Pumps"
- 3.9 Generic Letter No. 89-04, "Guidance On Developing Acceptable Inservice Testing Programs"
- 3.10 WCOF-02, Inservice Testing Program For Pumps And Valves"
- 3.11 ASME/ANSI OMA-1988, Part 10, "Inservice Testing Of Valves In Light Water Reactor Power Plants"

### 4.0 TEST EQUIPMENT

- 4.1 None



5.0 PREREQUISITES

- 5.1 Consult with SS/SO and review following required prerequisites prior to performance of surveillance:

[Signature]  
SS/SO PERFORMER

- 5.2 CVCS is filled and vented. ☒

- 5.3 Plant is in Mode 5 or Mode 6. ☒

- ~~5.4 PEB01A, PEB01B, PEB01G OR PEB01D, Reactor Coolant Pumps (RCP) are not in operation. ☒ DELETED~~

- 5.5 Boron Injection is available and operable to provide a flowpath through BIT (Refer to Technical Specification 3.1.2.3). ☒

- 5.6 Required Precautions, Limitations and Acceptance Criteria have been reviewed. CH 11/11/94

6.0 PROCEDURE

- 6.1 BG-V591, Reactor Coolant Pump Seal Water Supply Check Valve, Exercise Test

- 6.1.1 Place in service or verify CCP "A" or CCP "B" is in service. IF PDP is in service, THEN shift from PDP to CCP in accordance with SYS BG-201, "Shifting Between Positive Displacement And Centrifugal Charging Pumps". Indicate below CCP placed in service: ☒

CCP "A" in service: Yes No  
CCP "B" in service: Yes No

- 6.1.2 Shift RCP Seal Injection from normal supply to emergency supply by opening BG HV-8357A or BG HV-8357B, CCP Disch To Seal Water Injection Filters Iso Valves, corresponding to CCP in service. Circle below valve opened: ☒

BG HV-8357A - opened

BG HV-8357B - opened

## INIT/DATE

- 6.1.3 Unlock and close BG-8483B, CCP A/B  
Dsch Hdr PCV-121 Outlet Iso Vlv. ☒
- 6.1.4 Unlock and close BG-8388, PDP Dsch Man  
Iso Vlv. ☒
- 6.1.5 At panel RL001 close or verify close  
BG HV-8105, Charging Pumps To Regen HX/CIV,  
by observing green light is illuminated\*  
for handswitch BG HIS-8105. ☒
- 6.1.6 At panel RL001 close or verify close  
BG HV-8106, Charging Pumps to Regen HX Iso  
Vlv, by observing green light is illuminated  
for handswitch BG HIS-8106. ☒
- 6.1.7 Verify an operable Boron Injection flowpath  
through Boron Injection Tank (BIT), as  
required by Technical Specification 3.1.2.3. ☒
- 6.1.8 Record below pressure as indicated on  
computer point BGP0120: THA 11/24/94
- BGP0120 44 psig
- 6.1.9 After 5 minutes record final pressure  
below as indicated on computer point  
BGP0120: THA 11/24/94
- BGP0120 450 psig
- 6.1.10 Calculate pressure increase below: THA 11/24/94

## BG-V591 CLOSURE TEST ACCEPTANCE CRITERIA

PRESS	PRESS	ACTUAL	MAX ALLOWABLE
6.1.9	6.1.8	PRESS	
<u>450</u>	<u>443</u>	<u>7</u>	<u>≤ 50 psig</u>

- 6.1.11 IF pressure calculated in Step 6.1.10  
was  $\leq 50$  psig, THEN check valve closure  
test for BG-V591 was acceptable. (IF  
pressure increase is greater than 50  
psig, THEN follow requirements of  
2.2.3.1 and this step is N/A). THA 11/24/94

7.0

RESTORATIONINIT/DATE

7.1

Lock open BG-8483B

TA 11/24/94  
 1st  
11/10/24/94  
 2nd

7.2

Lock open BG-8388

TA 11/24/94  
 1st  
11/10/24/94  
 2nd

7.3

Shift RCP Seal Injection from emergency supply to normal supply by closing BG HV-8357A or HV-8357B corresponding to CCP in service. Circle below valve closed:

TA 11/24/94  
 1st  
11/10/24/94  
 2nd

BG HV-8357A - closed

BG HV-8357B - closed

7.4

At panel RL001 open BG HV-8105 using handswitch BG HIS-8105.

TA 11/24/94  
 1st  
11/10/24/94  
 2nd

7.5

At panel RL001 open BG HV-8106 using handswitch BG HIS-8106.

TA 11/24/94  
 1st  
11/10/24/94  
 2nd

7.6

Verify affected systems and/or components have been aligned and/or returned to service as directed by SS/SO.

TA 11/24/94

## COMMENTS

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