

LANE ARNOLD ENERGY CENTER

UNIT NO. 1

IOWA ELECTRIC LIGHT AND POWER COMPANY

REV. 15 APPROVAL

SURVEILLANCE TEST PROCEDURE NO. 42G001

REACTOR HIGH PRESSURE (RPT-ARI TRIP)

INSTRUMENT FUNCTIONAL TEST/CALIBRATION

FOR INFORMATION ONLY

Verified by: [Signature]

Date: 7-22-87

Approved by: [Signature]
Electrical Maintenance Supervisor

Date: 7/23/87

Approved by: [Signature]
Plant Performance Supervisor

Date: 7-31-87

Approved by: [Signature]
Quality Control Supervisor

Date: 7-29-87

Reviewed by: [Signature]
ALARA Coordinator

Date: 7-23-87

Reviewed by: [Signature]
Chairman, Operations Committee

Date: 8/12/87

Approved by: [Signature]
Plant Superintendent - Nuclear

Date: 8/12/87

Implementation Date August 13, 1987

8711240277 871113
PDR ADOCK 05000331
P PDR

FOR INFORMATION ONLY

REACTOR HIGH PRESSURE (RPT-ARI TRIP)
INSTRUMENT FUNCTIONAL TEST/CALIBRATION

1.0 Purpose

The purpose of this test is to demonstrate operability of the reactor high pressure (recirc trip) instrument channels of the Reactor Recirculation System. In accordance with the surveillance requirements of the DAEC Technical Specifications, Section 4.2.G, this includes a functional test and calibration annually.

2.0 General Instructions

- 2.1 There are four instrument channels to be tested and calibrated as part of this procedure. The instructions of Section 6 are to be performed for each channel.
- 2.2 This procedure contains data sheets which are to be used to document the data obtained.
- 2.3 All steps of this procedure are to be performed in sequence. Only one instrument channel is to be tested and calibrated at a time.
- 2.4 Steps 4.12 and 4.21 are not to be used for functional test. These steps are required only for calibration.
- 2.5 The Operations Shift Supervisor must be notified immediately and Section 3.2.G of the DAEC Technical Specifications (LCO) referred to whenever problems are encountered during the test and calibration.
- 2.6 The Electrical Maintenance Supervisor (or designated alternate) should be notified whenever a procedural step cannot be completed as stated or if any other problem develops during the test and calibration. No maintenance, or instrument replacement is permitted without his authorization.
- 2.7 A Deviation Report should be completed for any problems encountered during the test and calibration.

NOTE: Calibration cards will be completed for all instruments calibrated by this STP and calibration stickers completed and affixed to all indicating equipment.

- 2.8 The instructions of Field Calibration Procedure PS-004 are to be implemented for setpoint adjustment and a calibration data card completed for each instrument calibrated.

NOTE: FCP PS-004 does not affect operability of pressure switch. No Post-Testing required other than Post-Test Valve Verification.

2.9 Test equipment required for this procedure:

- a. Pressure Gage, 0-2000 psi (0.1%) or equal
- b. Hand Pump
- c. VOM or equivalent
- d. Control Room Panel Jumpers

2.10 All test equipment required for this procedure should be functional and properly maintained; e.g., calibration date should not have expired for test instruments. Calibration due dates will be recorded beside the instrument number on the data sheet. If temporary test equipment is used other than specified, the instrument number and calibration due date will be recorded in Section 5 (Comments Section).

2.11 Personnel required for this procedure:

<u>Group</u>	<u>Number</u>
<u>Electrical Maintenance</u>	<u>2</u>
<u>Operations</u>	<u>2</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

FOR INFORMATION ONLY

2.12 At the completion of testing and calibration, Test Completion Criteria Section 5, the completed Test Data Sheets and any Deviation Report(s) should be submitted to the Electrical Maintenance Supervisor for review and approval.

2.13 After Section 6.0 of this procedure is completed, a separate check of all manual valve positions will be conducted utilizing Attachment A ("Post-STP Completion--Valve Position Verification"). This verification must be performed by a qualified operator who has not participated in the performance of the STP outside of the Control Room. This provides an independent verification of valve position.

2.14 Attachment B ("Pressure Switch") shows the basic configuration of a Pressure Switch (PS). In order to valve out the pressure switch, the isolation valve must be closed.

3.0 Special Precautions

3.1 To prevent an inadvertant RPT-ARI trip, the high pressure signal must be reset, with both red lights on panel 1C-421 A[B] extinguished, before placing the ATWS Channel Test Switch, HS-1363A[1864A], in the RUN position.

4.0 Procedure

Section 4.0 steps have been incorporated into Section 6.0, Test Data Sheets, for each channel to be tested.

FOR INFORMATION ONLY

FOR INFORMATION ONLY

Test Date _____

5.0 Test Completion Criteria

The surveillance requirements will have been satisfied when the following items have been completed and signed off.

5.1 This Surveillance Test Procedure was performed for the following reason:

- a. Reactor High Pressure (ATWS RPT-ARI) Functional Test
- b. Other (define) _____

5.2 The Test Data Sheets have been completed, reviewed, signed and attached for each instrument channel.

- a. Channel A (PS 4593A) _____
- b. Channel B (PS 4593B) _____
- c. Channel C (PS 4593C) _____
- d. Channel D (PS 4593D) _____

5.3 Attachment "A" has been completed, reviewed, signed and attached, and results are acceptable. _____

5.4 The surveillance test results, as documented by the Test Data Sheets, are as follows:

	<u>Unacceptable</u>	<u>Acceptable</u>
a. Channel A (PS 4593A)	_____	_____
b. Channel B (PS 4593B)	_____	_____
c. Channel C (PS 4593C)	_____	_____
d. Channel D (PS 4593D)	_____	_____

5.5 Were any problems encountered during the test? _____

- a. Procedural (Related Document Change Form(s) attached)? DCF# _____
- b. Equipment (A Ply of Related Deviation Report(s) attached)? DR# _____

5.6 If Item 5.4 indicates any unacceptable surveillance results or unresolvable problems were encountered, has General Instruction 2.4 been implemented? _____

5.7 Test Comments:

Electrical Maintenance Supervisor

Date

Surveillance Performance Coordinator

Date

FOR INFORMATION ONLY

6.0 Test Data Sheets
 6.1 Instrument Channel Under Test A
 6.2 Test Date _____

Procedure Step	Required Action	Initials									
	The Test Data Sheets must be completed as each step is completed.										
4.1	At panel 1C421A, place ATWS CH A TEST SWITCH, HS-1863A, in the TEST position.										
4.2	At panel 1C421A, verify the following:										
4.2.a	Annunciator ATWS CH A IN TEST is activated.										
4.2.b	RPT CH A ACTUATED red light is OFF.										
4.2.c	ARI CH A ACTUATED red light is OFF.										
4.3	At panel 1C05, verify the following:										
4.3.a	ATWS CHANNEL A TEST (1C05B, E-2) annunciator is activated.										
4.3.b	ATWS CHANNEL A TRIP (1C05B, F-2) annunciator is OFF.										
	<u>NOTE:</u> Step 4.4 simulates a RPV high pressure signal from PS-4593C.										
4.4	At panel 1C55A, jumper internal terminals DD-1 and DD-2.										
4.4.a	At panel 1C421A, verify that both red lights remain OFF.										
4.4.b	At panel 1C421B, verify that both red lights remain OFF.										
	<u>NOTE:</u> Do not depressurize switch while performing Step 4.5.										
4.5	PS 4593A valved out of service.										
4.6	At panel 1C56A, perform the following:										
4.6.a	Connect the calibration equipment to PS-4593A.										
4.6.b	Connect the VOM to internal terminals DD-1 and DD-2.										
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Pressure Gauge, 0-2000 + .1% psig, or equal	_____	_____									
VOM or equal	_____	_____									

6.0 Test Data Sheets
 6.1 Instrument Channel Under Test A
 6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials
4.7	Gage and outlet of the valve pumped to within 50 psi of the system pressure using a hand pump attached at the drain/calibration valve. <u>CAUTION:</u> Step 4.8 will generate an ATWS Channel A trip if ATWS TRIP SWITCH handswitch HS-1863A on panel 1C421A is not in the TEST position.	
4.8	The drain/calibration valve slowly opened.	
4.9	Instrument trip verified at 1154 +0, -15 psig (1140 psig setpoint + 14 psig head correction) psig increasing. If the as found value is >1154 psig, recalibrate per Step 4.12. As found _____ psig	
4.10	At panel 1C421A, verify the following:	
4.10.a	Annunciator ATWS CH A IN TEST is activated.	
4.10.b	RPT CH A ACTUATED red light is ON.	
4.10.c	ARI CH A ACTUATED red light is ON.	
4.11	At panel 1C05, verify the following:	
4.11.a	ATWS CHANNEL A TEST (1C05B, E-2) annunciator is ON.	
4.11.b	ATWS CHANNEL A TRIP (1C05B, F-2) annunciator is ON. <u>NOTE:</u> Step 4.12 is required only if Step 4.9 could not be verified, or if a calibration is being conducted. Observe General Instructions 2.4 to 2.10.	
4.12	Pressure switch under test calibrated to 1154 + 0 -15 psig increasing. As left value _____ psig	
4.13	Pressurize within 50 psi of system pressure then drain/calibration valve closed, sensor under test returned to service.	
4.14	Calibration equipment disconnected from PS-4593A.	
4.15	At local panel 1C56A, disconnect the VOM from internal terminals DD-1 and DD-2.	

- 6.0 Test Data Sheets
- 6.1 Instrument Channel Under Test A
- 6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials
4.16	At panel 1C55A, remove the jumper from internal terminals DD-1 and DD-2.	
4.17	At panel 1C05, verify the following:	
4.17.a	ATWS CHANNEL A TRIP (1C05B, F-2) annunciator reset.	
4.18	At panel 1C421A, verify the following:	
4.18.a	RPT CH A ACTUATED red light is OFF.	
	<u>NOTE:</u> The ARI actuated light will remain ON for 45 seconds after the high pressure signal is reset.	
4.18.b	ARI CH A ACTUATED red light is OFF.	
	<u>CAUTION:</u> To prevent an inadvertant RPT-ARI trip, the high pressure signal must be reset, with both red lights on panel 1C421A[B] off, before placing the ATWS CH A[B] TEST handswitch in the RUN position.	
4.19	At panel 1C421A, perform the following:	
4.19.a	Place ATWS CH A TEST SWITCH, HS-1363A, in the RUN position.	
4.19.b	Verify that annunciator ATWS CH A IN TEST is OFF.	
4.20	At panel 1C05, verify ATWS CHANNEL A TEST (1C05B, E-2) annunciator is reset.	
4.21	Calibration card completed.	
Performed by _____ Date _____ Time _____		

6.0 Test Data Sheets

6.1 Instrument Channel Under Test B

6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials									
	The Test Data Sheets must be completed as each step is completed.										
4.1	At panel 1C421B, place ATWS CH B TEST SWITCH, HS-1864A, in the TEST position.										
4.2	At panel 1C421B, verify the following:										
4.2.a	Annunciator ATWS CH B IN TEST is activated.										
4.2.b	RPT CH B ACTUATED red light is OFF.										
4.2.c	ARI CH B ACTUATED red light is OFF.										
4.3	At panel 1C05, verify the following:										
4.3.a	ATWS CHANNEL B TEST (1C05B, E-3) annunciator is activated.										
4.3.b	ATWS CHANNEL B TRIP (1C05B, F-3) annunciator is OFF.										
	<u>NOTE:</u> Step 4.4 simulates a RPV high pressure signal from PS-4593D.										
4.4	At panel 1C55A, jumper internal terminals CC-1 and CC-2.										
4.4.a	At panel 1C421B, verify that both red lights remain OFF.										
4.4.b	At panel 1C421A, verify that both red lights remain OFF.										
	<u>NOTE:</u> Do not depressurize switch while performing Step 4.5.										
4.5	PS 4593B valved out of service.										
4.6	At panel 1C56A, perform the following:										
4.6.a	Connect the calibration equipment to PS-4593B.										
4.6.b	Connect the VOM to internal terminals CC-1 and CC-2.										
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Pressure Gauge, 0-2000 + .1% psig, or equal	_____	_____									
VOM or equal	_____	_____									

FOR INFORMATION ONLY

6.0 Test Data Sheets

6.1 Instrument Channel Under Test B

6.2 Test Date _____

Procedure Step	Required Action	Initials
4.7	Gage and outlet of the valve pumped to within 50 psi of the system pressure using a hand pump attached at the drain/calibration valve. <u>CAUTION:</u> Step 4.8 will generate an ATWS Channel B trip if ATWS TRIP SWITCH handswitch HS-1864A on panel 1C421B is not in the TEST position.	
4.8	The drain/calibration valve slowly opened.	
4.9	Instrument trip verified at 1154 +0, -15 psig (1140 psig setpoint + 14 psig head correction) psig increasing. If the as found value is >1154 psig, recalibrate per Step 4.12. As found _____ psig	
4.10	At panel 1C421B, verify the following:	
4.10.a	Annunciator ATWS CH B IN TEST is activated.	
4.10.b	RPT CH B ACTUATED red light is ON.	
4.10.c	ARI CH B ACTUATED red light is ON.	
4.11	At panel 1C05, verify the following:	
4.11.a	ATWS CHANNEL B TEST (1C05B, E-3) annunciator is ON.	
4.11.b	ATWS CHANNEL B TRIP (1C05B, F-3) annunciator is ON.	
	<u>NOTE:</u> Step 4.12 is required only if Step 4.9 could not be verified, or if a calibration is being conducted. Observe General Instruction 2.4 to 2.10.	
4.12	Pressure switch under test calibrated to 1154 + 0 -15 psig increasing. As left value _____ psig	
4.13	Pressurize within 50 psi of system pressure then drain/calibration valve closed, sensor under test returned to service.	
4.14	Calibration equipment disconnected from PS-4593B.	
4.15	At local panel 1C56A, disconnect the VOM from internal terminals CC-1 and CC-2.	

FOR INFORMATION ONLY

- 6.0 Test Data Sheets
- 6.1 Instrument Channel Under Test B
- 6.2 Test Date _____

Procedure Step	Required Action	Initials
4.16	At panel 1C55A, remove the jumper from internal terminals CC-1 and CC-2.	
4.17	At panel 1C05, verify the following:	
4.17.a	ATWS CHANNEL B TRIP (1C05B, F-3) annunciator reset.	
4.18	At panel 1C421B, verify the following:	
4.18.a	RPT CH B ACTUATED red light is OFF.	
4.18.b	<p><u>NOTE:</u> The ARI actuated light will remain ON for 45 seconds after the high pressure signal is reset.</p>	
	<p><u>CAUTION:</u> To prevent a inadvertant RPT-ARI trip, the high pressure signal must be reset, with both red lights on panel 1C421B[A] off, before placing the ATWS CH B[A] TEST SWITCH HS-1864A[1863A] in the RUN position.</p>	
4.19	At panel 1C421B, perform the following:	
4.19.a	Place ATWS CH B TEST SWITCH, HS-1864A, in the RUN position.	
4.19.b	Verify that annunciator ATWS CH B IN TEST is OFF.	
4.20	At panel 1C05, verify ATWS CHANNEL B TEST (1C05B, E-3) annunciator is reset.	
4.21	Calibration card completed.	
<p>Performed by _____ Date _____ Time _____</p>		

- 6.0 Test Data Sheets
- 6.1 Instrument Channel Under Test C
- 6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials									
	The Test Data Sheets must be completed as each step is completed.										
4.1	At panel 1C421A, place ATWS CH A TEST SWITCH, HS-1863A, in the TEST position.										
4.2	At panel 1C421A, verify the following:										
4.2.a	Annunciator ATWS CH A IN TEST is activated.										
4.2.b	RPT CH A ACTUATED red light is OFF.										
4.2.c	ARI CH A ACTUATED red light is OFF.										
4.3	At panel 1C05, verify the following:										
4.3.a	ATWS CHANNEL A TEST (1C05E, E-2) annunciator is activated.										
4.3.b	ATWS CHANNEL A TRIP (1C05F, F-2) annunciator is OFF.										
	<u>NOTE:</u> Step 4.4 simulates a RPV high pressure signal from PS-4593A.										
4.4	At panel 1C56A, jumper internal terminals DD-1 and DD-2.										
4.4.a	At panel 1C421A, verify that both red lights remain OFF.										
4.4.b	At panel 1C421B, verify that both red lights remain OFF.										
	<u>NOTE:</u> Do not depressurize switch while performing Step 4.5.										
4.5	PS 4593C valved out of service.										
4.6	At panel 1C55A, perform the following:										
4.6.a	Connect the calibration equipment to PS-4593C.										
4.6.b	Connect the VOM to internal terminals DD-1 and DD-2.										
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VOM or equal	_____	_____									

FOR INFORMATION ONLY

- 6.0 Test Data Sheets
- 6.1 Instrument Channel Under Test C
- 6.2 Test Date _____

Procedure Step	Required Action	Initials
4.7	Gage and outlet of the valve pumped to within 50 psi of the system pressure using a hand pump attached at the drain/calibration valve. <u>CAUTION:</u> Step 4.8 will generate an ATWS Channel A trip if ATWS TRIP SWITCH handswitch HS-1863A on panel 1C421A is not in the TEST position.	
4.8	The drain/calibration valve slowly opened.	
4.9	Instrument trip verified at 1166.4 +0, -15 psig (1140 psig setpoint + 26.4 psig head correction) psig increasing. If the as found value is >1166.4 psig, recalibrate per Step 4.12. As found _____ psig	
4.10	At panel 1C421A, verify the following:	
4.10.a	Annunciator ATWS CH A IN TEST is activated.	
4.10.b	RPT CH A ACTUATED red light is ON.	
4.10.c	ARI CH A ACTUATED red light is ON.	
4.11	At panel 1C05, verify the following:	
4.11.a	ATWS CHANNEL A TEST (1C05B, E-2) annunciator is ON.	
4.11.b	ATWS CHANNEL A TRIP (1C05B, F-2) annunciator is ON.	
	<u>NOTE:</u> Step 4.12 is required only if Step 4.9 could not be verified, or if a calibration is being conducted. Observe General Instruction 2.4 to 2.10.	
4.12	Pressure switch under test calibrated to 1166.4 + 0 -15 psig increasing. As left value _____ psig	
4.13	Pressurize within 50 psi of system pressure then drain/calibration valve closed, sensor under test returned to service.	
4.14	Calibration equipment disconnected from PS-4593C.	
4.15	At local panel 1C56A, disconnect the VOM from internal terminals DD-1 and DD-2.	

- 6.0 Test Data Sheets
- 6.1 Instrument Channel Under Test C
- 6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials
4.16	At panel 1C56A, remove the jumper from internal terminals DD-1 and DD-2.	
4.17	At panel 1C05, verify the following:	
4.17.a	ATWS CHANNEL A TRIP (1C05B, F-2) annunciator reset.	
4.18	At panel 1C421A, verify the following:	
4.18.a	RPT CH A ACTUATED red light is OFF.	
	<u>NOTE:</u> The ARI actuated light will remain ON for 45 seconds after the high pressure signal is reset.	
4.18.b	ARI CH A ACTUATED red light is OFF.	
	<u>CAUTION:</u> To prevent a inadvertant RPT-ARI trip, the high pressure signal must be reset, with both red lights on panel 1C421A[B] extinguished, before placing the ATWS CHANNEL TEST SWITCH, HS-1863A[1864A], in the RUN position.	
4.19	At panel 1C421A, perform the following:	
4.19.a	Place ATWS CH A TEST SWITCH, HS-1863A, in the RUN position.	
4.19.b	Verify that annunciator ATWS CH A IN TEST is OFF.	
4.20	At panel 1C05, verify ATWS CHANNEL A TEST (1C05B, E-2) annunciator is reset.	
4.21	Calibration card completed.	
_____ Performed by		
_____ Date		
_____ Time		

6.0 Test Data Sheets

6.1 Instrument Channel Under Test D

6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials									
	The Test Data Sheets must be completed as each step is completed.										
4.1	At panel 1C421B, place ATWS CH B TEST SWITCH, HS-1864A, in the TEST position.										
4.2	At panel 1C421B, verify the following:										
4.2.a	Annunciator ATWS CH B IN TEST is activated.										
4.2.b	RPT CH B ACTUATED red light is OFF.										
4.2.c	ARI CH B ACTUATED red light is OFF.										
4.3	At panel 1C05, verify the following:										
4.3.a	ATWS CHANNEL B TEST (1C05B, E-3) annunciator is activated.										
4.3.b	ATWS CHANNEL B TRIP (1C05B, F-3) annunciator is OFF.										
	<u>NOTE:</u> Step 4.4 simulates a RPV high pressure signal from PS-4593B.										
4.4	At panel 1C56A, jumper internal terminals CC-1 and CC-2.										
4.4.a	At panel 1C421B, verify that both red lights remain OFF.										
4.4.b	At panel 1C421A, verify that both red lights remain OFF.										
	<u>NOTE:</u> Do not depressurize switch while performing Step 4.5.										
4.5	PS 4593D valved out of service.										
4.6	At panel 1C55A, perform the following:										
4.6.a	Connect the calibration equipment to PS-4593D.										
4.6.b	Connect the VOM to internal terminals CC-1 and CC-2.										
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Pressure Gauge, 0-2000 + .1% psig, or equal	_____	_____									
VOM or equal	_____	_____									

6.0 Test Data Sheets

6.1 Instrument Channel Under Test D

6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials
4.7	Gage and outlet of the valve pumped to within 50 psi of the system pressure using a hand pump attached at the drain/calibration valve. <u>CAUTION:</u> Step 4.8 will generate an ATWS Channel B trip if ATWS TRIP SWITCH handswitch HS-1864A on panel 1C421B is not in the TEST position.	
4.8	The drain/calibration valve slowly opened.	
4.9	Instrument trip verified at 1166.4 +0, -15 psig (1140 psig setpoint + 26.4 psig head correction) psig increasing. If the as found value is >1166.4 psig, recalibrate per Step 4.12. As found _____ psig	
4.10	At panel 1C421B, verify the following:	
4.10.a	Annunciator ATWS CH B IN TEST is activated.	
4.10.b	RPT CH B ACTUATED red light is ON.	
4.10.c	ARI CH B ACTUATED red light is ON.	
4.11	At panel 1C05, verify the following:	
4.11.a	ATWS CHANNEL B TEST (1C05B, E-3) annunciator is ON.	
4.11.b	ATWS CHANNEL B TRIP (1C05B, F-3) annunciator is ON.	
	<u>NOTE:</u> Step 4.12 is required only if Step 4.9 could not be verified, or if a calibration is being conducted. Observe General Instruction 2.4 to 2.10.	
4.12	Pressure switch under test calibrated to 1166.4 + 0 -15 psig increasing. As left value _____ psig	
4.13	Pressurize within 50 psi of system pressure then drain/calibration valve closed, sensor under test returned to service.	
4.14	Calibration equipment disconnected from PS-4593D.	
4.15	At local panel 1C55A, disconnect the VOM from internal terminals CC-1 and CC-2.	

6.0 Test Data Sheets

6.1 Instrument Channel Under Test D

6.2 Test Date _____

FOR INFORMATION ONLY

Procedure Step	Required Action	Initials
4.16	At panel 1C56A, remove the jumper from internal terminals CC-1 and CC-2.	
4.17	At panel 1C05, verify the following:	
4.17.a	ATWS CHANNEL B TRIP (1C05B, F-3) annunciator reset.	
4.18	At panel 1C421B, verify the following:	
4.18.a	RPT CH B ACTUATED red light is OFF.	
	<u>NOTE:</u> The ARI actuated light will remain ON for 45 seconds after the high pressure signal is reset.	
4.18.b	ARI CH B ACTUATED red light is OFF.	
	<u>CAUTION:</u> To prevent a inadvertant RPT-ARI trip, the high pressure signal must be reset, with both red lights on panel 1C421B[A] off, before placing the ATWS CHANNEL B[A] TEST SWITCH, HS-1864A[1863A], in the RUN position.	
4.19	At panel 1C421B, perform the following:	
4.19.a	Place ATWS CH B TEST SWITCH, HS-1864A, in the RUN position.	
4.19.b	Verify that annunciator ATWS CH B IN TEST is OFF.	
4.20	At panel 1C05, verify ATWS CHANNEL B TEST (1C05B, E-3) annunciator is reset.	
4.21	Calibration card completed,	
Performed by _____ Date _____ Time _____		

ATTACHMENT A

POST-STP COMPLETION -- VALVE POSITION VERIFICATION

FOR INFORMATION ONLY

STP Title: REACTOR HIGH PRESSURE (RECIRC. TRIP) INSTRUMENT

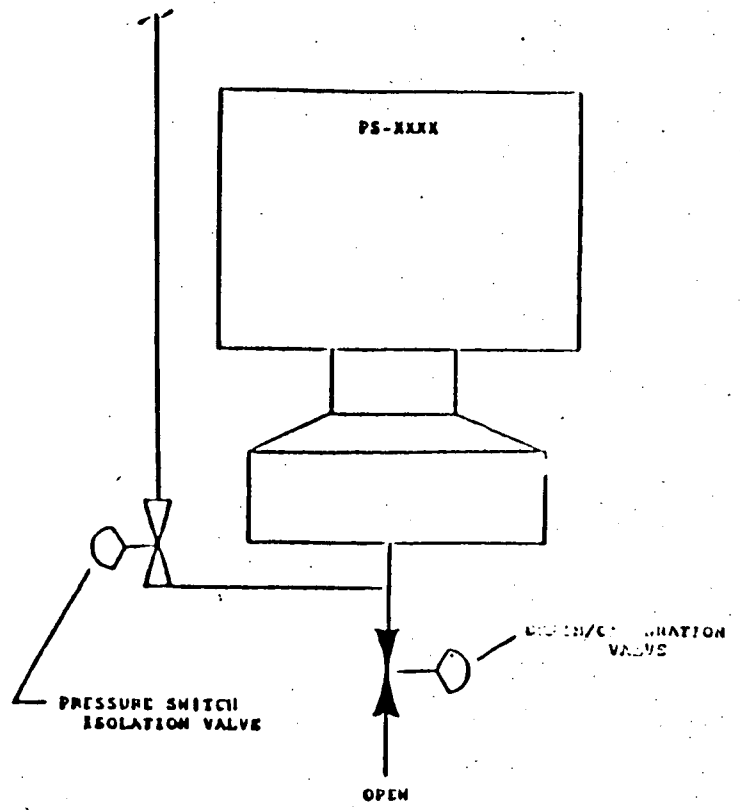
FUNCTIONAL TEST/CALIBRATION

Valve Number	Valve Location	Valve Description	Valve Position	Initial
PS-4593A	1C56	Drain/Calibration Vv	CL	
PS-4593A	1C56	Pressure Switch Isol Vv	OP	
PS-4593B	1C56	Drain/Calibration Vv	CL	
PS-4593B	1C56	Pressure Switch Isol Vv	OP	
PS-4593C	1C55	Drain/Calibration Vv	CL	
PS-4593C	1C55	Pressure Switch Isol Vv	OP	
PS-4593D	1C55	Drain/Calibration Vv	CL	
PS-4593D	1C55	Pressure Switch Isol Vv	OP	

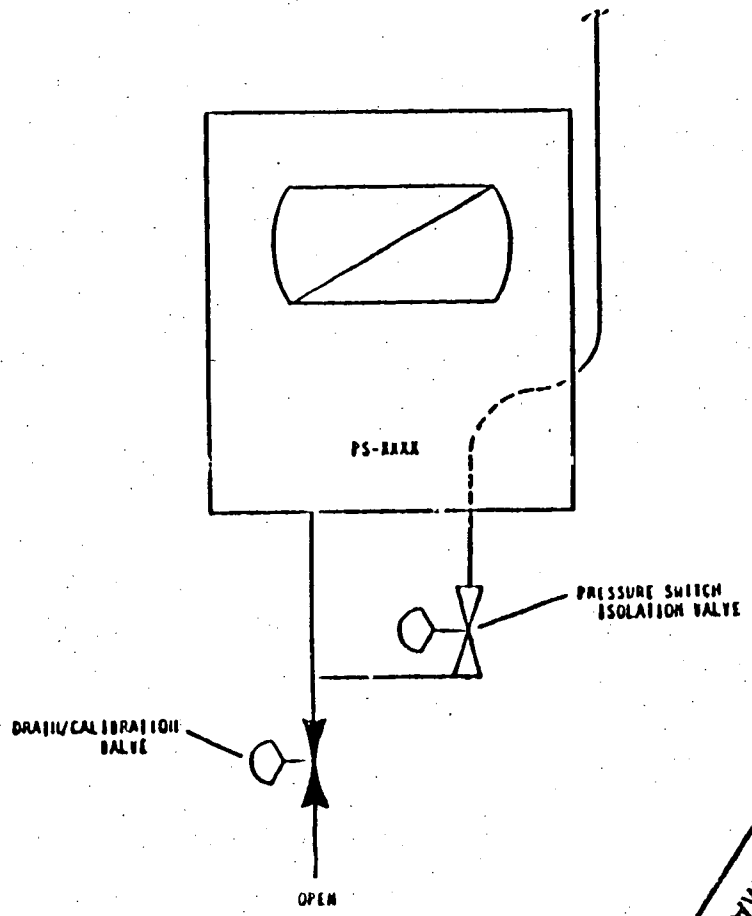
Signature of Individual Performing Verification: _____

O.S.S. Verification Completion Approval: _____ Date: _____

STATIC "O" RING (Model)



BARKSDALE (Model)



ATTACHMENT B
PRESSURE SWITCH (PS)

FOR INFORMATION ONLY

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