Approval	Vogtle Electric Generating Plant	Procedure No.
[signature]	NUCLEAR OPERATIONS	22721-C
Date		Revision No.
12-5-91	Unit COMMON	3
	Georgia Power	Page No. 1 of 10

PRESSURE SWITCH CALIBRATION

FOR INFO ONLY

1.0 PURPOSE

The purpose of this procedure is to provide instructions for calibration of a Pressure Switch.

2.0 PRECAUTIONS AND LIMITATIONS

2.1 All steps in this procedure are to be performed in sequence except as noted. [ ]

2.2 Performance of procedure steps, as identified by a double asterisk (*/*), shall be initialed on "Checklist" except when recording data on Data Sheet. [ ]

2.3 Any calculations necessary for the performance of this procedure shall be shown on "Calculation Sheet". [ ]

2.4 The instrument may be located in a radiation area, service a contaminated process fluid, or be contaminated. If so, follow instructions on "Radiation Work Permit". [ ]

2.5 For Safety-Related systems, an Independent Restoration Verification shall be performed, after completion of Test/Calibration, and initialed in "Restoration Verification" section of "Checklist". [ ]

2.6 Ensure that each lead (wire) to be lifted is marked with a completed and installed jumper and lifted wire tag. Instead of "Control No.", the "Procedure No." should be identified on the tag. [ ]

2.7 If this procedure is completed and temporary jumper(s) must remain installed and/or lifted wire(s) cannot be reconnected, a Jumper and Lifted Wire Clearance must be obtained per procedure 00306-C, "Temporary Jumper And Lifted Wire Control". [ ]

2.8 This procedure may be performed in any plant operational mode. [ ]

2.9 For Non-Safety Related systems QC Hold Points may be marked non-applicable (N/A) on "Checklist". [ ]

2.10 If, during performance of this procedure, any of the following occur, immediately notify I&C Foreman:

2.10.1 Any personnel error, procedure inadequacy, or malfunction is identified which could prevent fulfillment of "Acceptance Criteria". [ ]

2.10.2 Any test exceeds specified limits. [ ]

3.0 PREREQUISITES OR INITIAL CONDITIONS

3.1 */* Notify Shift Supervisor, or designee, of work to be performed and obtain signature authorization. [ ]

3.2 */* Notify Reactor Operator (RO) instruments associated with pressure switch may be erratic or inoperable during performance of this procedure and obtain RO signature. [ ]

3.3 TEST EQUIPMENT REQUIRED

3.3.1 Variable Pressure Source [ ]

3.3.2 Pressure Test Gauge [ ]

3.3.3 Triplett VOM Model 630 or equivalent [ ]

3.4 */* Verify all Prerequisites or Initial Conditions are met. [ ]

4.0 MAIN BODY

4.1 CALCULATIONS

4.1.1 */* Obtain instrument setpoint/range data from applicable controlled document(s) and record document number in "Comments" section of "Data Sheet". [ ]

4.1.2 */* Calculate and record expected trip point values in "Expected" section of "Data Sheet". [ ]

4.1.3 */* Calculate and record Hi and Lo Limits in "Hi Limit" and "Lo Limit" sections of "Data Sheet". [ ]

4.2 REMOVAL FROM SERVICE

4.2.1 */* Disconnect lead wires from switch as required. (For Safety-Related systems, an Independent Verification is required.) [ ]

4.2.2 Close isolation valves, if applicable. [ ]

WARNING

ANY TRAPPED FLUID VENTED DURING ISOLATION FROM OR RESTORATION TO SERVICE MAY BE CONTAMINATED. A SUITABLE CONTAINER, AS RECOMMENDED BY THE HEALTH PHYSICS DEPARTMENT, SHALL BE USED TO ENTRAP THIS FLUID. THE FLUID SHOULD BE DISPOSED OF IN ACCORDANCE WITH HEALTH PHYSICS DEPARTMENT PROCEDURES.

4.3 CALIBRATION

4.3.1 Connect pressure source and test gauge to input test ports. []

4.3.2 Connect VOM across appropriate switch contacts. []

4.3.3 Adjust pressure until switch contacts are reset. []

4.3.4 Adjust pressure until switch contacts trip. []

4.3.5 Adjust pressure until switch resets. []

4.3.6 */* Record trip/reset values in appropriate "As Found" sections of "Data Sheet". []

4.3.7 */* If As Found values are within limits specified on "Data Sheet" and more accurate values are not desired, record values in "As Left" section of "Data Sheet" and proceed to subsection 4.4. []

4.3.8 */* QC Hold Point

Obtain QC authorization to proceed before continuing with procedure. []

4.3.9 If As Found values are not within limits specified on "Data Sheet", or more accurate values are desired, proceed as follows:

a. Adjust switch settings as required to obtain correct value. []

b. Adjust pressure until contracts actuate. []

c. Adjust pressure until contacts reset. []

d. Repeat steps 4.3.9a thru 4.3.9c until no further adjustments are necessary. []

4.3.10 If pressure switch has more than one switch contact, repeat steps 4.3.2 thru 4.3.9 as required. [ ]

4.3.11 */* Record final values obtained in "As Left" section of "Data Sheet". [ ]

4.4 RESTORE TO SERVICE

4.4.1 */* QC Hold Point

Obtain QC authorization to proceed before continuing with procedure. [ ]

4.4.2 */* Remove all test equipment installed during performance of this procedure. [ ]

4.4.3 */* Slowly open pressure switch isolation valves. [ ]

4.4.4 */* Reconnect lead wires to pressure switch. [ ]

4.4.5 */* Inspect valves, tubing, and instrument for leaks. Immediate action shall be taken to correct any leaks found. [ ]

4.4.6 */* Verify instrument reflects current plant conditions after it is restored to service. [ ]

4.4.7 */* For Safety-Related systems, have an Independent Restoration Verification performed by designated personnel. [ ]

4.4.8 Notify RO that instrument has been returned to service. [ ]

4.4.9 */* Notify Shift Supervisor, or designee, of completion of work including Test results and obtain Signature on "Completion Sheet". [ ]

5.0 ACCEPTANCE CRITERIA

5.1 The Acceptance Criteria for this procedure is that the instrument is within limits specified on Data Sheet.

5.2 Satisfactory Completion of this procedure has been met when I&C foreman has evaluated data obtained per Acceptance Criteria of this procedure, reviewed and signed Data Sheet provided.

6.0 REFERENCES

6.1 Appropriate Instruction Manual

6.2 Appropriate Electrical and Mechanical Drawings

6.3 Procedure 00306-C, "Temporary Jumper And Lifted Wire Control"

END OF PROCEDURE TEXT

DATA SHEET SHEET 1 OF 1

Inst. No. _____ Location _____ Serial No. _____

Description Pressure Switch Manufacturer _____ Model No. _____

NOTES: N/A

ACTION	UNITS	EXPECTED	LO LIMIT	HI LIMIT	AS FOUND	AS LEFT
Trip						
Reset						
ACTION	UNITS	EXPECTED	LO LIMIT	HI LIMIT	AS FOUND	AS LEFT
Trip						
Reset						

COMMENTS:

TEST EQUIPMENT		
I.D. NO.	MODEL NO.	CALIBRATION DUE DATE

PERFORMED BY: DATE

REVIEWED BY: DATE

APPROVED BY: DATE

CALCULATION SHEET

Show all calculations performed during course of this procedure in the space below.

Completed by: _____ Date _____

Reviewed by: _____ Date _____

Approved by: _____ Date _____

CHECKLIST SHEET 1 OF 1

3.1 Shift Supervisor Authorization

Signature Date

3.2. Reactor Operator (RO) Notified

Signature Date

Step Verification

Step/Substep		Initial	Step/Substep		Initial
3.4	Prerequisites are met		4.4.3	Isolation valves open	
4.2.1	Lead wires disconnected		4.4.4	Lead wires reconnected	
4.2.1	Independent Verification		4.4.5	Leak inspection	
4.3.8	QC Notified		4.4.6	Current conditions reflected	
4.4.1	QC Notified				
4.4.2	Test equipment removed				

RESTORATION VERIFICATION

	Initial
1. Isolation valves open	
2. Lead wires reconnected	

Performed by: Date:

Reviewed by: Date:

COMPLETION SHEET

PROCEDURE TITLE PRESSURE SWITCH CALIBRATION

TIME TEST STARTED _____ BY _____ DATE _____

DEFICIENCIES OCCURRED AND ACTIONS TAKEN

TEST RESULTS: ACCEPTABLE [] UNACCEPTABLE []

PRESSURE SWITCH RESTORED TO SERVICE []

PRESSURE SWITCH COMMITTED TO REPAIR []

TEST COMPLETED BY _____ TIME _____ DATE _____

SHIFT SUPERVISOR NOTIFIED _____ _____ _____
Signature Time Date

REVIEWED BY: _____ DATE _____

APPROVED BY: _____ DATE _____