ENGINEERING CHANGE NOTICE

2. ECN Category (mark one)
   - Supplemental
   - Direct Revision
   - Change
   - Temporary
   - Standby
   - Supersede
   - Cancel/Void

3. Originator's Name, Organization, MSIN, and Telephone No.
   Treah Nuxall, SNF CVD, R3-47, 372-3739

4. USQ Required?
   [ ] Yes  [X] No

5. Date
   6/22/99

6. Project Title/No./Work Order No.
   "W-441"

7. Bldg./Sys./Fac. No.
   CVDF

8. Approval Designator
   SQ

9. Document Numbers Changed by this ECN (includes sheet no. and rev.)
   SNF-3221, SNF-3926, SNF-3927, SNF-3929, SNF-3888, SNF-4416-RD

10. Related ECN No(s).
    N/A

11. Related PO No.
    N/A

12a. Modification Work
   [ ] Yes (fill out Blk. 12b)
   [X] No (NA Blks. 12b, 12c, 12d)

12b. Work Package No.
    N/A

12c. Modification Work Complete
    N/A

12d. Restored to Original Condition (Temp. or Standby ECN only)
    N/A

12. Design Authority/Cog. Engineer Signature & Date

13a. Description of Change
   Revision to meet SEL, Rev. 6a

13b. Design Baseline Document?
   [ ] Yes  [X] No

14a. Justification (mark one)
   - Criteria Change
   - Design Improvement
   - Environmental
   - Facility Deactivation
   - As-found
   - Facilitate Const
   - Const. Error/Omission
   - Design Error/Omission

14b. Justification Details
   Revision to SEL.

15. Distribution (include name, MSIN, and no. of copies)
   - C. Miska: R3-86 1
   - C. Van Katwijk: R3-47 1
   - CVD Library (K. Boes): R3-86 1
   - T. Hays: R3-86 1
   - J. Brehm: R3-26 1
   - AVS-P. Morrell: G1-50 1
   - AI-M. Evarts: N1-29 1

RELEASE STAMP
JUL 01 1999
DATE
MANFORD
ID: 4
ST: 1
A-7900-013-2 (05/96) GEF095

A-7900-013-1
1. ECN (use no. from pg. 1)

647508

16. Design Verification Required

[ ] Yes

( X) No

17. Cost Impact

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19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Slide 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

- SDD/DD
- Functional Design Criteria
- Operating Specification
- Criticality Specification
- Conceptual Design Report
- Equipment Spec.
- Const. Spec.
- Procurement Spec.
- Vendor Information
- OM Manual
- FSAR/SAR
- Safety Equipment List
- Radiation Work Permit
- Environmental Impact Statement
- Environmental Report
- Environmental Permit

- Seismic/Stress Analysis
- Stress/Design Report
- Interface Control Drawing
- Calibration Procedure
- Installation Procedure
- Maintenance Procedure
- Engineering Procedure
- Operating Instruction
- Operating Procedure
- IFFD Drawing
- Cell Arrangement Drawing
- Essential Material Specification
- Fac. Proc. Samp. Schedule
- Inspection Plan
- Inventory Adjustment Request

- Tank Calibration Manual
- Health Physics Procedure
- Spares Multiple Unit Listing
- Test Procedures/Specification
- Component Index
- ASME Coded Item
- Human Factor Consideration
- Computer Software
- Electric Circuit Schedule
- ICRS Procedure
- Process Control Manual/Plan
- Process Flow Chart
- Purchase Requisition
- Tickler File

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

<table>
<thead>
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<th>Document Number/Revision</th>
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21. Approvals

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<td>PE</td>
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DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval Signature

ADDITIONAL
ASHCROFT PRESSURE SWITCH - MONITOR FOR LOW SCHe SUPPLY BOTTLE PRESSURE

Carl Van Katwijk
Nuinatec Hanford, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

Key Words: Ashcroft Pressure Switch - Monitor for Low SCHe Supply Bottle Pressure

Abstract: Ashcroft Pressure Switch - Monitor for Low SCHe Supply Bottle Pressure

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Approved for Public Release

A-6400-073 (01/97) GEF321
# RECORD OF REVISION

**Title:**
Ashcroft Pressure Switch-Monitor for Low SCHe Supply Bottle Pressure

## Change Control Record

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<th>(3) Revision</th>
<th>(4) Description of Change - Replace, Add, and Delete Pages</th>
<th>Authorized for Release</th>
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<td><strong>2 RS</strong></td>
<td>ECN 647508, Revision to meet SEL Rev. 6a</td>
<td>(5) Cog. Engr.</td>
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<td>(6) Cog. Mgr.</td>
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<td></td>
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<td><strong>CS</strong></td>
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**Document Number:**
SNF-3927

**Page:**
1
## Section 1 Part Information

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<th>Item No.:</th>
<th>NA</th>
<th>Manufacturer:</th>
<th>Supplier:</th>
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<td>Mfg. Part/Model No.:</td>
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<td>Supplier's P/N:</td>
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<td>Part Description:</td>
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<td>End Use Description:</td>
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### Section 2a Component Information

<table>
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<tr>
<th>Equipment No.: SCHe-PSL-5<em>03, 5</em>22, 5<em>42, 5</em>62</th>
<th>Specification No.: W-441-P5, Rev. 2</th>
<th>Manufacturer: Ashcroft Instrument Division</th>
<th>Past P.O. No.: NA</th>
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</thead>
<tbody>
<tr>
<td>Procurement and/or Model No.: LPS-N4-K-T-25-3000 PSI</td>
<td>Equipment Supplier (if different from manufacturer): TBD</td>
<td>Equip. Supplier's Part No.: NA</td>
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</table>

Component Description: These 0-3000 psig pressure switches are located in the SCHe helium supply lines at the pressure bottles and upstream of the PRV. The switches monitor the SCHe supply bottle pressure and are set to alarm at 2200 psig. There is one switch for each SCHe supply (4). Electronic output signal is NON-SAFETY (GS).

### Section 2b Qualified Vendor/Supplier Survey

1. Is the Item available from a catalogue of a qualified NQA1 supplier? (coordinate with project CGI interface Engineer or BTR)
   - [ ] YES (go to #2 below)
   - [X] NO (go to procedure step 5.3.2, proceed to dedicate Item.)

   If not available from a qualified NQA1 supplier, is it available from an ISO 9000 supplier? (coordinate with project CGI interface Engineer or BTR)
   - [ ] YES (go to #2 below, then go to procedure step 5.3.2, proceed to dedicate Item)
   - [X] NO (go to procedure step 5.3.2, proceed to dedicate Item.)

2. List of Candidate qualified suppliers or ISO 9000 suppliers
   - company name and type
   - contact name
   - phone
   - NA

3. Recommended Procurement Strategy (coordinate with project CGI interface Engineer or BTR):
   - NA

### Section 2c CGI Determination

1. Question #1: Is the Item subject to design or specification requirements that are unique to nuclear facilities or activities?
   - [ ] YES (the Item is not commercial grade)
   - [X] NO (continue)

2. Question #2: Is the Item used in applications other than nuclear facilities or activities?
   - [ ] NO (the item is not commercial grade)
   - [X] YES (continue)
### Commercial Grade Item Upgrade Dedication Form

**ECN No.** NA  \hspace{1cm} **CGI No.** CGI-SNF-D-13-P5-030

**Title:** ASHCROFT PRESSURE SWITCH – MONITOR FOR LOW SCHe SUPPLY BOTTLE PRESSURE

<table>
<thead>
<tr>
<th>Question #3: Is the Item ordered from manufacturer/supplier on the basis or specifications set forth in the Published product information (e.g., manufacturer’s catalog)?</th>
</tr>
</thead>
</table>
| [ ] NO (the Item is not commercial grade)  
[X] YES (continue) |

[X] All three criteria have been satisfied. The Item meets the definition of commercial grade.

**Section 2d Reason for Dedication**

The above described Item is being Dedicated for use in the application cited for the following reason(s):

[X] Item is being purchased from a non ESL manufacturer supplier as commercial grade to be used in a Safety Class application.

[ ] Item is being purchased from a non ESL manufacturer supplier as commercial grade to be used in a Safety Significant application.

[ ] Item was purchased from a non ESL manufacturer supplier as commercial grade to be used in a Safety Class application.

[ ] Item was purchased from a non ESL manufacturer supplier as commercial grade to be used in a Safety Significant application.

[ ] Other (like-for-like', similar, substitution, replacement evaluation)

**Section 3 Failure Effects Evaluation**

A. Part/Component Safety Function:

1. SCHe Pressure Boundary Integrity – Prevents helium leakage from the SCHe System.

2. Maintain pressure boundary before and after Seismic event.

B. Part/Component Functional Mode

Safety Function #1:

[ ] Active – Mechanical or Electrical change of state is required to occur for the component to perform its safety function

[X] Passive – Change of state is not required for the component to perform its safety function

Safety Function #2:

[ ] Active – Mechanical or Electrical change of state is required to occur for the component to perform its safety function.

[X] Passive – Change of state is not required for the component to perform its safety function

Safety Function #3:

[ ] Active – Mechanical or Electrical change of state is required to occur for the component to perform its safety function.

[ ] Passive – Change of state is not required for the component to perform its safety function

C. Host Component Safety Function (if applicable): NA

1. 

---

PSL-5*03, 5*22, 5*42, 5*62  \hspace{1cm} 06/22/99
D. Failure Mechanisms(s) and the effects on component or system safety function (see worksheet 1):

1. Fracture of the switch body or of the piping connection resulting in loss of helium from the SCHe supply.

Section 4 Environmental & Natural Phenomena Hazard Design

Environmental Qualification Required: Yes [ ] No [ X ]

If yes: Environmental Qualification Requirements

Limiting Environmental Conditions:

Required Safety Functions:

Environmental Condition B

Natural Phenomena Hazard (NPH) Design Required: Yes [ X ] No [ ]

If yes: NPH Design Requirements

Performance Category: PC-3

NPH Design Req'ts.: Seismic Condition B

HNF-PRO-97, Rev. 0

W-441-P5, Rev. 2

Required Safety Functions: Pressure Boundary Integrity

Section 5 Component Functional Classification

[ X ] Safety Class (SC) [ ] General Service [ ] Safety Significant (SS)

If part/component classification is different from host component/system, document basis.

Pressure switch is pressure boundary Safety Class (SC).

Switch electronic output signal is General Service (GS).

Section 6 [reserved]

Section 7 [reserved]

Section 8 References (for Functional Classification)

National Codes/Standards: IEEE-344, ISA-S5.1, -S5.4, -S18.1, -S20

Safety Analysis Report (SAR): HNF-SD-SNF-SAR-002, Rev. 4A

Drawings: H-1-82165, Rev. 2

HNF-SD-SNF-SEL-002, Rev. 6a

CVDF-SSD-003

Vendor Manuals/Manufacturer/Supplier Information: Ashcroft Instrument Division, L Series Switches, Bulletin Se-12

Other:

PSL-5*03, 5*22, 5*42, 5*62 06/22/99
## Section 9. Critical Characteristics

<table>
<thead>
<tr>
<th>Critical Characteristics</th>
<th>Acceptance Criteria/Tolerances</th>
<th>Acceptance Method</th>
<th>ID</th>
<th>Function</th>
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</thead>
<tbody>
<tr>
<td>Component Number-Procurement and/or Model Number</td>
<td>LPS-N4-K-T-25-3000 PSI, (Per Procurement Package W-441-P5, Rev. 2, Section G, Design Data Sheet)</td>
<td>1,IN</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nameplate - Manufacturer</td>
<td>Ashcroft Instruments</td>
<td>1,IN</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Process Connection</td>
<td>1/4 Inch FNPT</td>
<td>1,IN</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pressure Range</td>
<td>0-3000 psig</td>
<td>1,IN</td>
<td>X</td>
<td></td>
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<tr>
<td>Enclosure</td>
<td>NEMA 4</td>
<td>1,IN</td>
<td>X</td>
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</tbody>
</table>

### 1. Item Identification Critical Characteristics

- **ECNNo. NA**
- **CGI No. CGI-SNF-D-13-P5-030**
- **Title:** ASHCROFT PRESSURE SWITCH - MONITOR FOR LOW SCHe SUPPLY BOTTLE PRESSURE

### 2. Physical Critical Characteristics

- **Material, Body:** Stainless Steel (Note 4)
- **Material, Process Connection:** Stainless Steel (Note 4)

### 3. Performance Critical Characteristics

- **Pressure Boundary Integrity:** No Leakage at Test Pressure of 3300 psig (No Bubbles) Note 3
- **Setpoint/Repeatability:** Nominal 2200 psig / +/- 1% of Range
- **Environmental:** Note 1
- **Seismic Condition B:** Note 2

### 4. Notes and Legend:

1. The pressure switch and Teflon seals are not subject to degradation at ambient conditions of 40°F and 60% RH or 115°F and 22% RH and are suitable for Environmental Condition B application.

2. Maintain pressure boundary before and after Seismic event. W-441-P5, Rev. 2, Appendix I, page I-2, provides a seismic testing plan for these components at a seismic spectra TBD. Equipment that has been shaker-table tested should not be installed in a plant (Ref. IEEE Standard 344-1984, Section 7). Consequently, the seismic test constitutes a destructive test.

3. Pressure test at 110% of component internal pressure of 3000 psig.

4. Material verification acceptance method may be by either inspection or test.
<table>
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<th>Section 10 Initial Reviews and Approvals</th>
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<tbody>
<tr>
<td>Approvals:</td>
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<tr>
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<td>Design Authority:</td>
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<td>QA Engineer:</td>
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ECN No. NA  
CGI No. CGI-SNF-D-13-P5-030  
Title: ASHCROFT PRESSURE SWITCH – MONITOR FOR LOW SCHe SUPPLY BOTTLE PRESSURE  
SNF-3927, Rev. 2  
Page 5 of 12  
PSL-5*03, 5*22, 5*42, 5*62  
06/22/99
<table>
<thead>
<tr>
<th>Typical Failure Mechanisms</th>
<th>Definition</th>
<th>Applicable to Component under Evaluation</th>
<th>Failure Mode</th>
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<tbody>
<tr>
<td>Fracture</td>
<td>Separation of a solid accompanied by little or no macroscopic plastic deformation.</td>
<td>Yes [X ]; No [ ]; If Yes, indicate failure Mode.</td>
<td>Body of the Process Connection</td>
</tr>
<tr>
<td>Corrosion</td>
<td>The gradual deterioration of a material due to chemical or electrochemical reactions, such as oxidation, between the material and its environment.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
<td></td>
</tr>
<tr>
<td>Erosion</td>
<td>Destruction of materials by the abrasive action of moving fluids, usually accelerated by the presence of solid particles carried with the fluid.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
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<tr>
<td>Open Circuit</td>
<td>An electrical circuit that is unintentionally broken so that there is no complete path for current flow.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
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<tr>
<td>Short Circuit</td>
<td>An abnormal connection by which an electrical current is connected to ground, or to some conducting body, resulting in excessive current flow.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
<td></td>
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<tr>
<td>Blockage</td>
<td>Clogging of a filtering medium resulting in the inability to perform its purification function or blockage of flow.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
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<td>Seizure</td>
<td>Binding of a normally moving item through excessive pressure, temperature, friction, jamming.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
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<tr>
<td>Unacceptable Vibration</td>
<td>Mechanical oscillations produced are beyond the defined permissible limits due to unbalancing, poor support, or rotation at critical speeds.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
<td></td>
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<tr>
<td>Loss of Properties</td>
<td>A loss of mechanical and physical properties of a material due to exposure to high temperatures, radiation exposure.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
<td></td>
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<tr>
<td>Excess Strain</td>
<td>Under the action of excessive external forces the material of the part has been deformed or distorted.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
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<tr>
<td>Mechanical Creep</td>
<td>From prolonged exposure to high temperature and stress, the object will show a slow change in its physical (shape and dimension) and mechanical characteristics.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
<td></td>
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<tr>
<td>Ductile Fracture</td>
<td>Fracture characterized by tearing of metal accompanied by appreciable gross plastic deformation.</td>
<td>Yes [ ]; No [X]; If Yes, indicate failure Mode.</td>
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**SECTION 2** Additional Failure Modes Applicable to the Component Under Evaluation

**Process Connection/Body Break**
CHECKLIST 1
ACCEPTANCE METHOD 1
SPECIAL TEST/INSPECTION VERIFICATION

SECTION 1

Item Description: Ashcroft Pressure Switch - Monitor for Low SHe Supply Bottle Pressure
System #: 13

Manufacturer (Address/Phone):
Ashcroft Instrument Division

Supplier (Address/Phone):


SECTION 2 CRITICAL CHARACTERISTICS TO BE VERIFIED BY METHOD 1

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1. Component Number-Procurement and/or Model Number
2. Nameplate - Manufacturer
3. Process Connection
4. Pressure Range
5. Enclosure
6. Material, Body (Verification may be by either inspection or test)
7. Material, Process Connection (Verification may be by either inspection or test)
8. Pressure Boundary Integrity
9. Setpoint/Repeatability
10. Seismic Condition B

SECTION 3 BY INSPECTION

* See Attachment G of Desk Instruction Sampling Size

Characteristic: Component Number-Procurement and/or Model Number
Sample Size*: All Items

Acceptance Criteria: LPS-N4-K-T-25-3000 PSI. (Per Procurement Package W-441-P5, Rev. 2, Section G, Design Data Sheet)

Receipt Inspection Plan / Report #:

References (see Section 7): Ashcroft Instrument Division, L Series Switches, Bulletin SE-12
Commercial Grade Item Upgrade Dedication Form

Title: **ASHCROFT PRESSURE SWITCH - MONITOR FOR LOW SUPPLY BOTTLE PRESSURE**

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<th>Sample Size*</th>
<th>Acceptance Criteria</th>
<th>Receipt Inspection Plan / Report #</th>
<th>References (see Section 7)</th>
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<tr>
<td>Pressure Range</td>
<td>All Items</td>
<td>0-3000 psig</td>
<td></td>
<td></td>
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<tr>
<td>Enclosure</td>
<td>All Items</td>
<td>NEMA 4</td>
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P.S.L. 5*03, 5*22, 5*42, 5*62
SECTION 4 BY SPECIAL TEST

* See Attachment G of Desk Instruction Sampling Size

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<th>Number of Items to be Tested:</th>
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</tr>
<tr>
<td>[ ] Supplier/Manufacturer**</td>
<td></td>
</tr>
<tr>
<td>[ ] Other</td>
<td></td>
</tr>
</tbody>
</table>

Test/Inspection Location:

Characteristic for Test: Pressure Boundary Integrity
Acceptance Criteria: No Leakage at Test Pressure of 3300 psig (No Bubbles)
Sample Size*: Normal Sampling Size
Actual Test Value:

Test Plan and Report #: References (see Section 7):

Characteristic for Test: Setpoint/Repeatability
Acceptance Criteria: Nominal 2200 psig / + /- 1% of Range
Sample Size*: Normal Sampling Size
Actual Test Value:

Test Plan and Report #: References (see Section 7):

Characteristic for Test: Seismic Condition B
Acceptance Criteria: Maintain Pressure Boundary Before And After Seismic Event. W-441-P5, Rev. 2, Appendix I, page 1-2, provides a seismic testing plan for these components at a seismic spectra TBD.
Sample Size*: W-441-P5, Rev. 2, Appendix I, page 1-2, provides the seismic testing plan for these components. The seismic testing is conducted for one complete panel with the components assembled on the panel and tested as a complete assembly. The test seismically qualifies the entire assembly, including mountings, piping, and components. The number of components tested is dictated by the panel assembly design.
Actual Test Value:

Test Plan and Report #: References (see Section 7):

**If Supplier/Manufacturer or Other, Refer to CGI Checklist-2 for Support Information
## Section 5 Test / Inspection Summary (Acceptance Method 1)

### 1. SUMMARY OF VERIFIED CRITICAL CHARACTERISTICS, THEIR VERIFICATION METHODS, AND RESULTS

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Critical Characteristics</th>
<th>Acceptance Criteria/Tolerances</th>
<th>ID</th>
<th>Function</th>
<th>Method T/N</th>
<th>Procedure or RR#</th>
<th>Check-list ID</th>
<th>Number Tested</th>
<th>Number Failed</th>
<th>Verifying Organization</th>
<th>Printed Name Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Number-Procurement and/or Model Number</td>
<td>LPS-N4-K-T-25-3000 PSI, (Per Procurement Package W-441-P5, Rev. 2, Section G, Design Data Sheet)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Nameplate - Manufacturer</td>
<td>Ashcroft Instruments</td>
<td>X</td>
<td></td>
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<tr>
<td>Process Connection</td>
<td>1/4 Inch FNPT</td>
<td>X</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Instrument Range</td>
<td>0-3000 psig</td>
<td>X</td>
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<td></td>
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<tr>
<td>Enclosure</td>
<td>NEMA 4</td>
<td>X</td>
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<tr>
<td>Material, Body</td>
<td>Stainless Steel</td>
<td>X</td>
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<td></td>
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</tr>
<tr>
<td>Material, Process Connection</td>
<td>Stainless Steel</td>
<td>X</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Pressure Boundary Integrity</td>
<td>No Leakage at Test Pressure of 3300 psig (No Bubbles)</td>
<td>X</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Set Point / Repeatability</td>
<td>Nominal 2200 psig / +/- 1% of Range</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Seismic Condition B</td>
<td>Maintain Pressure Boundary Before and After Seismic Event.</td>
<td>X</td>
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</tbody>
</table>
## 2. Disposition of Unverified or Failed Critical Characteristics

<table>
<thead>
<tr>
<th>Critical Characteristic</th>
<th>Disposition</th>
</tr>
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<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

## 3. Signature Indicates All Critical Characteristics Verified Satisfactory or Acceptably Dispositioned and Commercial Grade Dedication is Satisfactory and Complete.

<table>
<thead>
<tr>
<th>Testing Agency Approval:</th>
<th>Date</th>
<th>Design Authority:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing Agency QA Engineer:</td>
<td>Date</td>
<td>QA Engineer:</td>
<td>Date</td>
</tr>
</tbody>
</table>

**BUYER VERIFICATION**

Design Authority: Date

QA Engineer: Date
### Commercial Grade Item Upgrade Dedication Form

**Title:** ASHCROFT PRESSURE SWITCH – MONITOR FOR LOW SUPPLY BOTTLE PRESSURE

#### Section 6 Contacts/Phone Numbers

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Authority</td>
<td></td>
</tr>
<tr>
<td>QA</td>
<td></td>
</tr>
<tr>
<td>QC</td>
<td></td>
</tr>
<tr>
<td>Cog - Engineer</td>
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</tr>
<tr>
<td>CGI Engineer</td>
<td></td>
</tr>
<tr>
<td>Procurement Engineer</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

#### Section 7 Supporting Documentation for this Checklist

**Initial Procurement Documents**

- [ ] Drawings:
- [ ] Manuals (specify type & number):
- [ ] Design Calculations
- [ ] Installation Instructions
- [ ] Operation Instructions
- [ ] Calibration Instructions
- [ ] Manufacturer's Recommended Spare Parts List
- [ ] Other:

**Procurement Documents**

- [ ] Certificate of Conformance/Compliance
- [ ] Seismic Qualification Certificate
- [ ] Environmental Qualification Certificate
- [ ] Test Report(s):
- [ ] Inspection Report(s):
- [ ] CMTRs for ASME Pressure Retaining Materials
- [ ] Valve Seat Leakage Report
- [ ] Weld Records
- [ ] Material Traceability Record
- [ ] Other:

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PSL-5*03, 5*22, 5*42, 5*62

06/22/99