ENGINEERING CHANGE NOTICE

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

3. Originator's Name, Organization, MSIN, and Telephone No.
   T. Nuxall, CVDF, R3-86, 372-3739

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

5. Date
   6/19/00

6. Project Title/No./Work Order No.
   SNF/W-441, Spent Nuclear Fuel Cold Vacuum Drying

7. Bldg./Sys./Fac. No.
   CVDF 142-K

8. Approval Designator
   S^NQ

9. Document Numbers Changed by this ECN (includes sheet no. and rev.)
   SNF-3921, Rev. 3, SNF-3927, Rev. 2
   SNF-3928, Rev. 1, SNF-3932, Rev. 2,
   SNF-4627, Rev. 1, SNF-3926, Rev. 2

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

11. Related PO No.
    N/A

12a. Modification Work

12b. Work Package No.
   N/A

12c. Modification Work Complete
   N/A

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

13a. Description of Change

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

SCHe

SNF-3921, Rev. 3, SNF-3927, Rev. 2, SNF-3928, Rev. 1, SNF-3932, Rev. 2, SNF-4627, Rev. 1,
Revised to match previous modifications to SNF-5304.

SNF-3926;
This document has been cancelled it was previously merged with SNF-3929.

USQ Approval: CVD 00-1135 6/24/06

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

14b. Justification Details
   Revisited to match previous modifications to SNF-5304.

The design verification method for SS/SC components is by independent review in accordance with EN-6-027-01. Documentation of this review is accomplished by the independent review approval signature provided on page 2 of this ECN.

15. Distribution (include name, MSIN, and no. of copies)
   See Distribution
### 16. Design Verification Required
- **[X] Yes**
- **[ ] No**

### 17. Cost Impact

<table>
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<td>Savings</td>
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### 18. Schedule Impact (days)
- **Improvement**
- **Delay**

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

<table>
<thead>
<tr>
<th>Document Number/Revision</th>
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### 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.*
- Document Number/Revision
- Document Number/Revision
- Document Number/Revision

**NA**

### 21. Approvals
- **Design Authority:** C. Miska
- **Design Agent:**
- **Cog. Eng. C. VanKatwijk:**
- **PE:**
- **Cog. Mgr. T. Chubha:**
- **QA:**
- **Safety:**
- **J. Beehm:**
- **Environ.:**
- **Independent Reviewer:**
- **Other:**

*Approval authorized parallel preparation of USQ screen with implementation of ECN per 10-990001 03-4-001*
Ashcroft Pressure Switch - Monitor for Flow SCHe Supply Bottle Pressure

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Fluor Hanford
P.O. Box 1000
Richland, Washington

Approved for public release; further dissemination unlimited
Ashcroft Pressure Switch - Monitor for Flow SCHe Supply Bottle Pressure

Project No: W-441
C Van Katwijk

Document Type: RPT

Division: SNF

Date Published
June 2000

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

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P.O. Box 1000
Richland, Washington

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Printed in the United States of America

Total Pages: 15

SNF-3927, rev8
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<th>(4) Description of Change - Replace, Add, and Delete Pages</th>
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<td>C. Miska T. Choho</td>
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<td>ECN 653776, REVISION TO MEET SEL REV. 6</td>
<td>C. Miska T. Choho</td>
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<td>2</td>
<td>ECN 647508, REVISION TO MEET SEL REV. 6a</td>
<td>C. Miska T. Choho</td>
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<td>RS</td>
<td>ECN 661400, REVISION TO MEET PREVIOUS ECN TO SPEC</td>
<td>C. Miska T. Choho</td>
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</table>
## Section 1 Part Information

<table>
<thead>
<tr>
<th>Item No.</th>
<th>NA</th>
<th>Manufacturer:</th>
<th>Supplier:</th>
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<tr>
<td>Mfg. Part/Model No.:</td>
<td></td>
<td>Supplier's P/N:</td>
<td></td>
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</table>

Part Description: 

End Use Description:

## Section 2a Component Information

<table>
<thead>
<tr>
<th>Equipment No.: SCHe-PSL-5<em>03, 5</em>22, 5<em>42, 5</em>62</th>
<th>Specification No.: SNF-5304, Rev. 0 (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>
<td></td>
</tr>
</tbody>
</table>

Component Description: 

These 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

<table>
<thead>
<tr>
<th>company name and type</th>
<th>contact name</th>
<th>phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

3. 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)?

[ ] NO (the Item is not commercial grade)
[ ] YES (continue)

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

Section 2d Reason for Dedication

[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

[ ] 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.
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.

<table>
<thead>
<tr>
<th>Section 4 Environmental &amp; Natural Phenomena Hazard Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Qualification Required:</td>
</tr>
<tr>
<td>Yes [ ]</td>
</tr>
<tr>
<td>No [ x ]</td>
</tr>
<tr>
<td>Environmental Condition B</td>
</tr>
<tr>
<td>Required Safety Functions:</td>
</tr>
<tr>
<td>Qualification Period:</td>
</tr>
<tr>
<td>Natural Phenomena Hazard (NPH) Design Required:</td>
</tr>
<tr>
<td>Yes [ x ]</td>
</tr>
<tr>
<td>No [ ]</td>
</tr>
<tr>
<td>HNF-PRO-97, Rev. 0</td>
</tr>
<tr>
<td>W-441-P5, Rev. 2</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Section 5 Component Functional Classification</th>
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</thead>
<tbody>
<tr>
<td>Safety Class (SC)</td>
</tr>
<tr>
<td>General Service (GS)</td>
</tr>
<tr>
<td>Safety Significant (SS)</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Section 6 [reserved]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 7 [reserved]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 8 References for Functional Classification</th>
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</thead>
<tbody>
<tr>
<td>National Codes/Standards: IEEE-344, ISA-S5.1, -S5.4, -S18.1, -S20</td>
</tr>
<tr>
<td>Safety Analysis Report (SAR): HNF-3553, Rev. 0a, Annex B</td>
</tr>
<tr>
<td>Drawings: H-1-82165, Rev. 2, HNF-SD-SNF-SEL-002, Rev. 6a CVDF-SSD-003</td>
</tr>
</tbody>
</table>

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

Other:
## Commercial Grade Item Upgrade Dedication Form

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

### Section 9: Critical Characteristics

<table>
<thead>
<tr>
<th>Component Number-Procurement and/or Model Number</th>
<th>Acceptance Criteria/Tolerances</th>
<th>Acceptance Method</th>
<th>ID</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verification Document: Vendor Specifications, HNF-SD-SNF-SEL-002, Rev. 6a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **Item Identification Critical Characteristics** (necessary for reasonable assurance that the Item received is the Item specified)

<table>
<thead>
<tr>
<th>Component Number-Procurement and/or Model Number</th>
<th>Acceptance Criteria/Tolerances</th>
<th>Acceptance Method</th>
<th>ID</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPS-N4-K-T-25-3000 PSI, (Per Procurement Package W-441-P5, Rev. 2, Section G, Design Data Sheet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Nameplate - Manufacturer | Ashcroft Instruments | | | |
| Pressure Connection | 1/4 Inch FNPT | | | |
| Pressure Range | 0-3000 psig | | | |
| Enclosure | NEMA 4 | | | |

2. **Physical Critical Characteristics** (necessary for reasonable assurance that the Item delivered is the Item specified)

| Material, Body | Stainless Steel (Note 4) | 1, IN 1,T | X |
| Material, Process Connection | Stainless Steel (Note 4) | 1, IN 1,T | X |

3. **Performance Critical Characteristics** (necessary & sufficient for reasonable assurance that the Item will perform its intended safety function(s))

| Pressure Boundary Integrity | No Leakage at Test Pressure of 4400 psig (No Bubbles) Note 3 | 1,T | X |
| Setpoint/Repeatability | Nominal 2200 psig / +/- 1% of Range | 1,T | X |
| Environmental | Note 1 | | |

| Seismic Condition B | Note 2 | 1,T | X |

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 design pressure.

4. Material verification acceptance method may be by either inspection or test.

---

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

**06/19/00**

**SNF-3927, Rev. 3**
Commercial Grade Item Upgrade Dedication Form

ECN No. NA  
CGI No. CGI-SNF-D-13-P5-030

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

| Approvals: |  
| Designated Engineer: |  
| Design Authority: |  
| QA Engineer: |  

SNF-3927, Rev. 3
Page 5 of 12
## WORKSHEET 1
### DETERMINATION OF FAILURE MECHANISMS/MODES

#### SECTION 1

<table>
<thead>
<tr>
<th>Typical Failure Mechanisms</th>
<th>Definition</th>
<th>Applicable to Component under Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fracture</td>
<td>Separation of a solid accompanied by little or no macroscopic plastic deformation.</td>
<td>Yes [x] if Yes, indicate failure Mode.</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 [x] if Yes, indicate failure Mode.</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 [x] if Yes, indicate failure Mode.</td>
</tr>
<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 [x] if Yes, indicate failure Mode.</td>
</tr>
<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 [x] if Yes, indicate failure Mode.</td>
</tr>
<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 [x] if Yes, indicate failure Mode.</td>
</tr>
<tr>
<td>Seizure</td>
<td>Binding of a normally moving item through excessive pressure, temperature, friction, jamming.</td>
<td>Yes [x] if Yes, indicate failure Mode.</td>
</tr>
<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 [x] if Yes, indicate failure Mode.</td>
</tr>
<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 [x] if Yes, indicate failure Mode.</td>
</tr>
<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 [x] if Yes, indicate failure Mode.</td>
</tr>
<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 [x] if Yes, indicate failure Mode.</td>
</tr>
<tr>
<td>Ductile Fracture</td>
<td>Fracture characterized by tearing of metal accompanied by appreciable gross plastic deformation.</td>
<td>Yes [x] if Yes, indicate failure Mode.</td>
</tr>
</tbody>
</table>

#### 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 SCHe Supply Bottle Pressure

System #: 13

Manufacturer (Address/Phone): Ashcroft Instrument Division

Supplier (Address/Phone):

P.O. #

SECTION 2 CRITICAL CHARACTERISTICS TO BE VERIFIED BY METHOD 1.

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 SCHe SUPPLY BOTTLE PRESSURE

### Characteristic: Nameplate - Manufacturer
- **Sample Size:** All Items
- **Acceptance Criteria:** Ashcroft Instruments
- **Receipt Inspection Plan / Report #:**
- **References (see Section 7):**

### Characteristic: Process Connection
- **Sample Size:** All Items
- **Acceptance Criteria:** 1/4 Inch FNPT
- **Receipt Inspection Plan / Report #:**
- **References (see Section 7):**

### Characteristic: Pressure Range
- **Sample Size:** All Items
- **Acceptance Criteria:** 0-3000 psig
- **Receipt Inspection Plan / Report #:**
- **References (see Section 7):**

### Characteristic: Enclosure
- **Sample Size:** All Items
- **Acceptance Criteria:** NEMA 4
- **Receipt Inspection Plan / Report #:**
- **References (see Section 7):**

### Characteristic: Material, Body
- **Sample Size:** Normal Sampling Size
- **Acceptance Criteria:** Stainless Steel
- **Receipt Inspection Plan / Report #:**
- **References (see Section 7):**

### Characteristic: Material, Process Connection
- **Sample Size:** Normal Sampling Size
- **Acceptance Criteria:** Stainless Steel
- **Receipt Inspection Plan / Report #:**
- **References (see Section 7):**
## SECTION 4 BY SPECIAL TEST

* See Attachment G of Desk Instruction Sampling Size

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<th>Test To Be Performed by:</th>
<th>Number of Items to be Tested:</th>
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<tbody>
<tr>
<td>[ ] Purchaser</td>
<td></td>
</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 4400 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 I-2, provides a seismic testing plan for these components at a seismic spectra TBD.

**Sample Size:** W-441-P5, Rev. 2, Appendix I, page I-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**

---

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

06/19/00
# Section 5 Test / Inspection Summary (Acceptance Method 1)

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

### ITEM DESCRIPTION:

<table>
<thead>
<tr>
<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>
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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>
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<td></td>
</tr>
<tr>
<td>Nameplate - Manufacturer</td>
<td>Ashcroft Instruments</td>
<td>X</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Connection</td>
<td>1/4 Inch FNPT</td>
<td>X</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>Instrument Range</td>
<td>0-3000 psig</td>
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<td></td>
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<tr>
<td>Enclosure</td>
<td>NEMA 4</td>
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<tr>
<td>Material, Body</td>
<td>Stainless Steel</td>
<td>X</td>
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<tr>
<td>Material, Process Connection</td>
<td>Stainless Steel</td>
<td>X</td>
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<tr>
<td>Pressure Boundary Integrity</td>
<td>No Leakage at Test Pressure of 4400 psig (No Bubbles)</td>
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<tr>
<td>Set Point / Repeatability</td>
<td>Nominal 2200 psig / +/-1% of Range</td>
<td>X</td>
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<tr>
<td>Seismic Condition B</td>
<td>Maintain Pressure Boundary Before and After Seismic Event.</td>
<td>X</td>
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</table>
2. DISPOSITION OF UNVERIFIED OR FAILED CRITICAL CHARACTERISTICS

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

3. SIGNATURE INDICATES ALL CRITICAL CHARACTERISTICS VERIFIED SATISFACTORY OR ACCEPTABLY DISPOSITIONED AND COMMERCIAL GRADE DEDICATION IS SATISFACTORY AND COMPLETE.

<table>
<thead>
<tr>
<th>Buyer Verification</th>
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</thead>
<tbody>
<tr>
<td>Testing Agency Approval:</td>
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<tr>
<td>Testing Agency QA Engineer:</td>
</tr>
</tbody>
</table>

| Design Authority: | Date |
| QA Engineer: | Date |
### Commercial Grade Item Upgrade Dedication Form

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

<table>
<thead>
<tr>
<th>Section 6 Contacts/Phone Numbers</th>
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<tbody>
<tr>
<td><strong>Name</strong></td>
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<tr>
<td>Design Authority</td>
</tr>
<tr>
<td>QA</td>
</tr>
<tr>
<td>QC</td>
</tr>
<tr>
<td>Cog - Engineer</td>
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<tr>
<td>CGI Engineer</td>
</tr>
<tr>
<td>Procurement Engineer</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 7 Supporting Documentation for this Checklist</th>
</tr>
</thead>
</table>

**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  
06/19/00