S

ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN 660497

Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	4. USQ Required?	5. Date
Supplemental [] Direct Revision [x] Change ECN [] Temporary [] Standby [] Supersedure [] Cancel/Void []	T. Nuxall, CVDF, R3-86, 372-3739	[X] Yes [] No	5/20/00
	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 $S^{N}Q$
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) SNF-4887, Rev. 0	10. Related ECN No(s). N/A	11. Related PO No. N/A

12a. Modification Work	12b. Work Package No.	12c. Modification Work Complete	12d. Restored to Original Condition (Temp. or Standby ECN only)
[] Yes (fill out Blk. 12b) [X] No (NA Blks. 12b, 12c, 12d)	N/A	N/A Design Authority/Cog. Engineer Signature & Date	N/A Design Authority/Cog. Engineer Signature & Date

13a. Description of Change

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

SC

SCHe

Bottle Manufacturer changed from Matheson to Taylor Wharton, the valve manufacturer has been changed to Sherwood.

USQ Approval: CVD-00-1135 JOB 6/20/00

14a. Justification (mark one)

Criteria Change[]	Design Improvement[X]	Environmental[]	Facility Deactivation[]
As-Found[]	Facilitate Const[]	Const. Error/Omission[]	Design Error/Omission[]

14b. Justification Details

A different supplier has been chosen for the SCHe Bottles and Valves.

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 sheet.

RELEASE STAMP

DATE: JUN 21 2000 HANFORD RELEASE ID: 2

STA: 4

A-7900-013-1

ENGINEERING CHANGE NOTICE

1. ECN (use no. from pg. 1): 660497

16. Design Verification Required	17. Cost Impact NA				18. Schedule Impact (days)	
	ENGINEERING		CONSTRUCTION		NA	
[X] Yes	Additional	[] $	Additional	[] $	Improvement	[]
[] No	Savings	[] $	Savings	[] $	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.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]		[]
Environmental Permit	[]	Inventory Adjustment Request	[]		[]

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

Signature	Date		Signature	Date
Design Authority C. Miska	6/19/00		Design Agent	
Cog. Eng. C Van Katwijk	6/19/00		PE	
Cog. Mgr. T. Choho	6-20-00		QA	
QA ~~H. Chafin~~ R. RAMACHANDRAN	6/20/00		Safety	
Safety J. Brehm	6/20/00		Design	
Environ. N/A			Environ.	
Other: • C. Haller			Other	
• Approval authorized parallel preparation of USQ screen with implementation of ECN per ~~NSDI-02~~ NS-4-001. Incl. Review B PARKER	6/20/00		DEPARTMENT OF ENERGY	
			Signature or a Control Number that tracks the Approval Signature	
			ADDITIONAL	

SNF-4887
Revision 1

SCHe Helium Bottles and Associated Isolation Valves

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

SNF-4887
Revision 1

ECN 660497

SCHe Helium Bottles and Associated Isolation Valves

Project No: W-441 Document Type: RPT Division: SNF

C Van Katwijk
FH

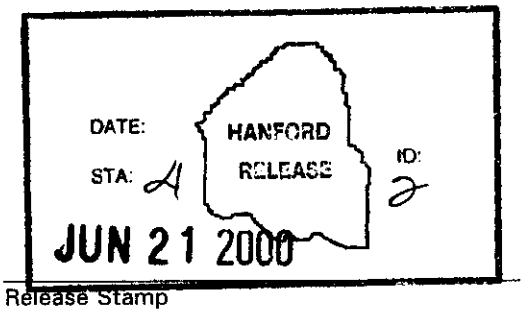
Date Published
June 2000

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

Release Approval 6/21/00 Date



Release Stamp

Total Pages: 13

SNF-4687, rev 1

RECORD OF REVISION

(1) Document Number: SNF-4887

(2) Title: SCHe Helium Supply Bottles and Associated Isolation Valves

Change Control Record

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
0	(7) EDT 626322, INITIALLY RELEASED	C. Miska	T. Choho
1 RS	ECN 660497, CHANGE OF MANUFACTURER'S	C. Miska 6/14/00	6-26-00

Section 1 Part Information

Item No.: **N/A**	Manufacturer: **N/A**	Supplier: **N/A**
Mfg. Part/Model No.: **N/A**	Supplier's P/N: **N/A**	
Part Description: **N/A**		
End Use Description: **N/A**		

Section 2a Component Information

Equipment No.: **SCHe-TK-5*01 with SCHe-V-*114; SChe-TK-5*02 with SCHe-V-*115; SCHe-TK-5*03 with SCHe-V-*116; SCHe-TK-5*04 with SCHE-V-*117**	Specification No.: **SNF-5304, Rev. 0**	Manufacturer: **Taylor-Wharton, Sherwood**	Past P.O. No.: **N/A**
Manufacturer's Part/Model No.: **Taylor-Wharton: HPS NPP51; Sherwood: TV68061-55**	Equipment Supplier (if different from manufacturer): **Norco and others to be determined**		Equip. Supplier's Part No.: **N/A**

Component Description:
These gas bottles and associated valves provide the safety grade helium source for emergency MCO purge.

Section 2b Commercial Availability of the Item

1. Is the Item available from a catalogue from a qualified NQA1 supplier or ISO 9000 supplier (coordinate with project CGI interface Engineer or BTR)? [ ] YES (go to #2 below) [X] NO (go to procedure step 6.3.2, proceed to dedicate Item)
   If not available from a qualified NQA1 supplier, is it available from an ISO 9000 supplier? (coordinate w/ project CGI Interface Engineer or BTR) [ ] YES (go to #2 below, procedure step 6.3.2, dedicate Item) [X] NO (procedure step 6.3.2, dedicate Item)
2. List of Candidate qualified suppliers or ISO 9000 suppliers **N/A**
3. Recommended Procurement Strategy (coordinate with project CGI interface Engineer or BTR): **The bottles and associated valves will be procured as commercial grade. A CGI Upgrade Dedication Form will be prepared. Bottle is steel and is size "1A". Bottles will be fabricated to requirements of DOT standards (49 CFR 178.37). Valves are furnished as part of the helium bottles. The Documentation supplied by the fabricator will include serial number identification for the bottles. The bottles are not individually seismically tested. The facility equipment rack/restraints holding them require seismic design and certification. Seismic testing of the assembled panel will be done with a "1A" bottle and connecting flex hose installed. The DOT fabrication report provided by the fabricator will include, but not limited to documentation for: date of fabrication, liquid penetrant certification report, verification of leak test (stem, seat, and rupture disc) of the isolation valves, and hydrotest report.**

Section 2c CGI Determination

CGI Determination Questions:

#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: Is the Item used in applications other than nuclear facilities or activities?

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

#3: Is the Item ordered from manufacturer/supplier on the basis of specifications set forth in the manufacturer's catalog?

[ ] 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 Commercial Grade (CG) 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 CG to be used in a Safety Class application.
	Item is being purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Significant application.
	Item was purchased from a non-ESL manufacturer supplier as CG to be used in a Safety Class application.
	Item was purchased from a non-ESL manufacturer supplier as CG 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 critical function before and after Seismic event.**
3. **Supply Helium for MCO emergency helium purge.**

B. Part/Component Functional Mode:

Safety Function #1: [ ] Active [X] Passive
Safety Function #2: [ ] Active [X] Passive
Safety Function #3: [ ] Active [X] Passive

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): **N/A**

D. Failure Mode(s) and the effects on component or system safety function (see Worksheet 1):
1. **Fracture of the pressure boundary or of the piping connection resulting in loss of helium from the SCHe supply.**
2. **Foreign matter introduced during bottle shipment and change out could block flow in the hose or in the regulator.**

Section 4 Environmental & Natural Phenomena Hazard Design

Environmental Qualification Required:
Yes [ ]
No [X] **Environmental Condition B**

If yes: Environmental Qualification Requirements
Limiting Environmental Conditions:
Required Safety Functions:
Qualification Period:

Natural Phenomena Hazard (NPH) Design Required:
Yes [X] **HNF-PRO-97, Rev. 0; SNF-5304, Rev. 0**
No [ ]

If yes: NPH Design Requirements
Performance Category: **PC-3**
NPH Design Req'ts.: **Seismic Condition A**
Required Safety Functions: **Pressure Boundary Integrity; Maintain critical function before and after Seismic Event.**

Section 5 Component Functional Classification

X	Safety Class (SC)		General Service (GS)		Safety Significant (SS)

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

Sections 6 and 7 (Reserved)

Section 8 References (for Functional Classification)

National Codes/Standards: **DOT 49 CFR 178.37**
Safety Analysis Report (SAR): **HNF-3553, Rev. 0A, Annex B**
Drawings: **H-1-82165, Rev.2; HNF-SD-SNF-SEL-002, Rev.7**
Vendor Manual/Manufacturer/Supplier Information: **Norco Technical Information.**

Section 9 Critical Characteristics				
Critical Characteristics	Acceptance Criteria/Tolerances	Acc Meth	ID	Function
Bottle				
1. Item Identification Critical Characteristics (necessary for reasonable assurance that the Item delivered is the Item specified)				
Construction Documentation for: DOT 49 CFR 178.37 DOT-3AA3600 & TC-3AAM154BAR	**Fabrication Report information including: serial numbers, date of fabrication, liquid penetrant certification report, verification of leak test (stem, seat, and rupture disc) of the isolation valves, and hydrotest report. All items acceptable.**	**1, IN**	**X**	
Nameplate – Manufacturer	**Taylor-Wharton**	**1, IN**	**X**	
Bottle Size	**Nominal 9" Diameter X 51" Height**	**1, IN**	**X**	
Procurement and/or Model No.	**Bottle: Taylor-Wharton**	**1, IN**	**X**	
2. Physical Critical Characteristics (for reasonable assurance that the Item delivered is the Item specified)				
Material, Bottle	**Steel (Note 3)**	**1, IN; 1, T**	**X**	
Valve				
1. Item Identification Critical Characteristics (necessary for reasonable assurance that the Item delivered is the Item specified)				
Nameplate – Manufacturer	**Sherwood**	**1, IN**	**X**	
Procurement and/or Model No.	**TV 68061-55**	**1, IN**	**X**	
2. Physical Critical Characteristics (for reasonable assurance that the Item delivered is the Item specified)				
Material, Valve Body	**Brass**	**1, IN**	**X**	
Size	**Inlet: 3/4"-14 NGT - Tapered; Outlet: CGA 680**	**1, IN**	**X**	
3 Performance Critical Characteristics (for reasonable assurance that the Item will perform its intended safety function(s))				
Valve Seat Leakage	**ASME Section V, Article10 - Sensitive Leak Test - Pressure Test to 3000 psig (No Leakage-No Bubbles)**	**1, T**		**X**
Bottle & Valve:				
3 Performance Critical Characteristics (for reasonable assurance that the Item will perform its intended safety function(s))				
Environmental	**Note 1**			
Seismic Condition A Event	**Note 2**	**1, T**		**X**

4. Notes and Legend:

Rev. 1: Revised bottle manufacturer to Taylor-Wharton, Isolation Valve to Sherwood.
Rev. 2: Revised Pressure test to be done at 3000.

1. **The helium bottle and valve are not subject to degradation at ambient conditions of 40°F and 60% RH or 115°F and 22% RH and is suitable for Environmental Condition B application.**
2. **Maintain critical function 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 344-1987, Section 7). Consequently, the seismic test constitutes a destructive test.**
3. **Material verification acceptance method may be by either inspection or test.**

Acceptance Method (Acc Meth):
1. Special Test and Inspection:
   1, IN for Inspection
   1,T for Test
2. Commercial Grade Survey
3. Source Verification
4. Vendor/Item History

Section 10 Initial Review and Approval

Approvals:

Designated Engineer: for Carl VanLatrijk 6/19/00

Design Authority: 6/19/00

QA Engineer: 6/20/00

WORKSHEET 1

DETERMINATION OF FAILURE MECHANISMS

Section 1

Typical Failure Mechanisms	Definition	X = Applicable to Component under Evaluation X?	Indicate Failure Mode
Fracture	Separation of a solid accompanied by little or no macroscopic plastic deformation.	X	Fracture of the bottle or the connection would fail the pressure boundary and stop the supply of emergency helium to that purge path.
Corrosion	The gradual deterioration of a material due to chemical or electrochemical reactions, such as oxidation, between the material and its environment.		
Erosion	Destruction of materials by the abrasive action of moving fluids, usually accelerated by the presence of solid particles carried with the fluid.		
Open Circuit	An electrical circuit that is unintentionally broken so that there is no complete path for current flow.		
Short Circuit	An abnormal connection by which an electrical current is connected to ground, or to some conducting body, resulting in excessive current flow.		
Blockage	Clogging of a filtering medium resulting in the inability to perform its purification function or blockage of flow.	X	Foreign matter introduced during bottle changeout could block flow in the valve.
Seizure	Binding of a normally moving item through excessive pressure, temperature, friction, jamming.		
Unacceptable Vibration	Mechanical oscillations produced are beyond the defined permissible limits due to unbalancing, poor support, or rotation at critical speeds.		
Loss of Properties	A loss of mechanical and physical properties of a material due to exposure to high temperatures, radiation exposure.		
Excess Strain	Under the action of excessive external forces the material of the part has been deformed or distorted.		
Mechanical Creep	From prolonged exposure to high temperature and stress, the object will show a slow change in its physical (shape and dimension) and mechanical characteristics.		
Ductile Fracture	Fracture characterized by tearing of metal accompanied by appreciable gross plastic deformation.		

Section 2 Additional Failure Modes Applicable to the Component Under Evaluation

1. Foreign matter introduced inside the hose during bottle change out could block flow in the hose or in the regulator.

Checklist 1 - Acceptance Method 1 - Special Test/Inspection Verification

SECTION 1			
Item Description: **SCHe Helium Supply Bottles and Associated Valves** System #: **13-2** Model #: **Taylor-Wharton: HPS NPP51**		Equip #: **SCHe-TK-5*01 with SCHe-V-*114** **SChe-TK-5*02 with SCHe-V-*115** **SCHe-TK-5*03 with SCHe-V-*116** **SCHe-TK-5*04 with SCHE-V-*117**	
Manufacturer (Address/Phone): **Taylor – Wharton 521 Green Cove Rd Huntsville, AL 35803 (256)650-9100; P.O.: 11638-3**	**Sherwood 2111 Liberty Drive, Niagara Falls, NY 14304**	Supplier (Address/Phone):	**NorLab 1121 W. Amity, Boise, ID 83705 (208)336-1643**

SECTION 2 CRITICAL CHARACTERISTICS TO BE VERIFIED BY METHOD 1.			
Insp	Test	Post-Test	
X			**Construction Documentation**
X			**Nameplate - Manufacturer**
X			**Bottle Size**
X			**Procurement and/or Model No. (Bottle and Valve)**
X	X		**Material, Bottle (Verification may be by either inspection or test)**
X	X		**Material, Valve (Verification may be by either inspection or test)**
X			**Size, Valve**
X			**Pressure Boundary Integrity (See Documentation)**
	X		**Seismic Condition A**
	X		**Valve Leakage**

SECTION 3 BY INSPECTION * See Attachment H, Table H-1 of Desk Instruction for Sampling Size, References (See Section 7)

Bottle

Characteristic: **Construction Documentation** Sample Size*: **100%**
Acceptance Criteria: **Fabrication report including: serial numbers, date of fabrication, liquid penetrant certification, verification of leak test (stem, seat, and rupture disc) of the isolation valves, and hydrotest certification. All items acceptable.**
Receipt Inspection Plan / Report #:

Characteristic: **Nameplate - Manufacturer** Sample Size*: **100%**
Acceptance Criteria: **Taylor-Wharton**
Receipt Inspection Plan / Report #:

Characteristic: **Bottle Size** Sample Size*: **100%**
Acceptance Criteria: **Nominal 9" Diameter X 51" Height**
Receipt Inspection Plan / Report #:

Characteristic: **Procurement and/or Model No.** Sample Size*: **100%**
Acceptance Criteria: **Bottle: Taylor-Wharton**
Receipt Inspection Plan / Report #:

Characteristic: **Material, Bottle**	Sample Size*: **100%**
Acceptance Criteria: **Steel**	
Receipt Inspection Plan / Report #:	

Valve

Characteristic: **Nameplate - Manufacturer**	Sample Size*: **100%**
Acceptance Criteria: **Sherwood**	
Receipt Inspection Plan / Report #:	
Characteristic: **Model No.**	Sample Size*: **100%**
Acceptance Criteria: **TV 68061-55**	
Receipt Inspection Plan / Report #:	
Characteristic: **Material, Valve Body**	Sample Size*: **100%**
Acceptance Criteria: **Brass**	
Receipt Inspection Plan / Report #:	
Characteristic: **Size**	Sample Size*: **100%**
Acceptance Criteria: **Inlet: 3/4"-14 NGT - Tapered; Outlet: CGA 680**	
Receipt Inspection Plan / Report #:	

Section 4 By Special Test * See Attachment H, Table H-1 of Desk Instruction for Sampling Size; References (See Section 7)

Characteristic for Test: **Seismic Condition A** Samp Size*: [ ]Normal[ ]Reduced[ ]Tightened

Acceptance Criteria: **Maintain Critical Function Before and After Seismic Event. W-441-P5, Rev. 2, Appendix, page I-2, provides a seismic testing plan for these components at a seismic spectra TBD.**

Sample Size: **W[441-P5, Rev. 2, App I, pg 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 #:

Characteristic for Test: **Valve Leakage (stem, seat, and rupture disc)** Samp Size*: [X]Normal[ ]Reduced[ ]Tightened

Acceptance Criteria: **ASME Section V, Article10 - Sensitive Leak Test - Pressure Test to 3000 psig (No Leakage-No Bubbles)**

Actual Test Value: Test Plan and Report #:

SECTION 5 TEST / INSPECTION SUMMARY (Acceptance Method 1)

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

ITEM DESCRIPTION: Supply Bottle

Critical Characteristics				Verification Results							
Critical Characteristics	Acceptance Criteria/Tolerances	ID	Function	Method T/IN	Procedure or RR#	Check-list ID	Number Tested	Number Failed	Verifying Organization	Printed Name Signature	Date
Construction Documentation	**Fabrication Report information including: serial numbers, date of fabrication, liquid penetrant certification report, verification of leak test (stem, seat, and rupture disc) of the isolation valves, and hydrotest report. All items acceptable.**	X		1, IN							
Nameplate - Manufacturer	**Taylor-Wharton**	X		1, IN							
Bottle Size	**Nominal 9" Diameter X 51" Height**	X		1, IN							
Procurement and/or Model No.	**Bottle: Taylor-Wharton**	X		1, IN							
Material, Bottle	**Steel**	X		1, IN							
Seismic Condition A	**Maintain critical function before and after Seismic Event**	X	1, T								

2. DISPOSITION OF UNVERIFIED OR FAILED CRITICAL CHARACTERISTICS

Critical Characteristic	Disposition

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

Testing Agency Approval:_____ Date_____

Testing Agency QA Engineer:_____ Date_____

BUYER VERIFICATION

Design Authority:_____ Date_____

QA Engineer:_____ Date_____

SECTION 5 TEST / INSPECTION SUMMARY (Acceptance Method 1)

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

ITEM DESCRIPTION: Valve

Critical Characteristics				Verification Results							
Critical Characteristics	Acceptance Criteria/Tolerances	ID	Function	Method T/IN	Procedure or RR#	Check-list ID	Number Tested	Number Failed	Verifying Organization	Printed Name Signature	Date
Nameplate - Manufacturer	**Sherwood**	**X**		**1, IN**							
Procurement and/or Model No.	**TV68061-55**	**X**		**1, IN**							
Material, Valve Body	**Brass**	**X**		**1, IN**							
Size	**Inlet: 3/4"-14 NGT - Tapered; Outlet: CGA 680**	**X**		**1, IN**							
Seismic Condition A	**Maintain critical function before and after Seismic Event**	**X**	**1, T**								
Valve Seat Leakage	**ASME Section V, Article10 - Sensitive Leak Test - Pressure Test to 3000 psig (No Leakage-No Bubbles)**	**X**	**1, T**								

2. DISPOSITION OF UNVERIFIED OR FAILED CRITICAL CHARACTERISTICS

Critical Characteristic	Disposition

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

Testing Agency Approval:_____ Date_____

Testing Agency QA Engineer:_____ Date_____

BUYER VERIFICATION

Design Authority:_____ Date_____

QA Engineer:_____ Date_____

Section 6 Contacts / Phone Numbers		
Title	Name	Phone
Design Authority		
QA		
QC		
Cog - Engineer		
CGI Engineer	**Larry Price**	**372-8770**
Procurement Engineer		
Other		

Section 7 Supporting Documentation for This Checklist		
Initial Procurement Documents		**For Critical Characteristics**
	Drawings:	
	Manuals (specify type & number):	
	Design Calculations	
	Installation Instructions	
	Operation Instructions	
	Calibration Instructions	
	Manufacturer's Recommended Spare Parts List	
X	Other: **Norco Technical Information**	
Procurement Documents		
	Certificate of Conformance/Compliance	
	Seismic Qualification Certificate	
	Environmental Qualification Certificate	
X	Test Report (s): **PSI-425-00001**	**Cylinders**
	Inspection Report (s):	
	CMTRs for ASME Pressure Retaining Materials	
	Valve Seat Leakage Report	
	Weld Records	
	Material Traceability Record	
	Other:	

DISTRIBUTION SHEET

To	From	Page 1 of 1
Distribution	SNF-CVD	Date 6/19/00
Project Title/Work Order		EDT No. NA
W-441, CGI Package P5-050		ECN No. 660497

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
D. Whitehurst	X3-74	x			
G. Singh	X3-74	x			
A. Artzer (CVD Library)	R3-86	x			
R. Ramsgate	X3-74	x			
J. Brehm	R3-26	x			
P. Beaudet	S8-07	x			
P. Morrell (AVS)	G1-50	x			
M. Evarts (AI)	N1-29	x			
L. Price	R3-26	x			
SNF Startup	B2-64	x			
SNF Project Files	R3-11	x			
SNF Satelite Library	X3-25	x			
C. Van Katwijk	R3-47	x			
D. Whitworth	R3-11	x			
T. Nuxall	X3-74	x			
C. Miska	X3-74	x			