



Pullman Power Products

XVII-6

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PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

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SEABROOK
PROJECT PROCEDURE

TO BE USED
ONLY ON JOB # 7035

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LATEST REV. DATE
08/07/85

QA RECORDS REVIEW

PULLMAN POWER PRODUCTS

HEADQUARTERS AT

WILLIAMSPORT, PENNSYLVANIA

UE&C
CODE

03

REVISION	PREPARED BY	APPROVED BY	INITIALS	DESCRIPTION
03 08/07/85	W. Stiger	H. Hinkley	<i>7/2</i>	Inc. IPR's; R2-1, 2A & 3; Extensively Revised and Reissued

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1.0 SCOPE

- 1.1 This procedure describes the review of ASME and AWS (for pipe whip restraint only) Process Sheets with supporting documentation for personnel performing quality activities prescribed by the contract, codes and standards. Specific attributes for assuring that records contained herein are technically correct, complete in content and legible.

2.0 PURPOSE

- 2.1 The purpose of this procedure is to establish the controls for the review of completed Quality Documents to assure technical adequacy, completeness and legibility.

3.0 RESPONSIBILITY

- 3.1 The QA Manager, through the Assistant Manager-Records, shall be responsible for supervising the implementation of this Procedure.
- 3.2 The QA Manager, through the QA Training Officer, shall be responsible for training and certifying of personnel in accordance with Project Procedure II-5.

4.0 DEFINITIONS AND ACRONYMS

- 4.1 Quality Assurance Record-completed documents providing objective evidence of the quality of items or of performed activities affecting quality as established by the contract codes and standards.
- 4.2 QA Review - An assessment to a known set of acceptance attributes to assure technical content, completeness and legibility of QA Records.
- 4.3 Legible - Applicable to QA Records with the characteristics of being clearly readable and reproducible by electronic means or filming processes. Reference Paragraph 3.5 of Project Procedure VI-10.
- 4.4 Complete - The complete record shall have the following characteristics:
- 4.4.1 All spaces provided on Forms are either completed or marked N/A if not applicable.
- 4.4.2 The record should reference an approved procedure or document for performing a quality activity.
- A. The acceptance of the performed activity shall be indicated by signature or initial and dated by the authorized individual performing the activity.



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4.4.3 The record shall have notations of any unacceptable conditions and shall reference other documents which implement corrective action and subsequent acceptance of such conditions.

4.5 Valid - QA Records which have been stamped, initialed, signed or otherwise authenticated by an authorized person(s).

4.6 AS-CONSTRUCTED - As-Built Verified Field Drawings and Change Documents which have been marked-up to reflect the As-Built condition of component or system.

4.7 WRSR - Weld Rod Stores Requisition

4.8 WMDC - Welding Material Distribution Centers

4.9 DCN - Document Correction Notice

4.10 RO - Repair Order

4.11 NCR - Nonconformance Report

4.12 ECA - Engineering Change Authorization

4.13 BIP - Boundary Identification Package

4.14 SBYDCC - Seabrook YAECC Document Control Center

4.15 PPP - IMS - Pullman Power Products - Information Management Systems.

4.16 SRO - Support Rework Order

5.0 GENERAL

5.1 This procedure defines the necessary controls for the review of completed quality documents submitted to QA Records. The following processed documents are reviewed:

5.1.1 Completed Process Sheets with associated supporting documents for piping, hangers and pipe whip restraints, including flanged or mechanical attachments.

5.1.2 Completed NCR

5.1.3 Integrity Test Packages that include the QA review for pre-test and post-test phases.

5.1.4 Mechanical Equipment documentation.

5.1.5 As-Constructed documents.



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- 5.2 Records requiring enhancement/regeneration shall be administered and performed in accordance with Project Procedure VI-10 during QA Records Review.
- 5.3 Process Sheets, that are currently in the review cycle and that do not indicate a limited access evaluation, shall be evaluated by the responsible individual as follows:
- 5.3.1 If the weld is determined to be not a limited access weld and examined and found Code acceptable, it shall be so documented on the Process Sheet and no further action is required.
- 5.3.2 If the weld is determined to be a limited access weld, but no special tools were required to make the weld and the weld was Code acceptable, it shall be so documented on the Process Sheet and no further action is required.
- 5.3.3 If the weld is determined to be a limited access weld and special tools were required to make the weld and the weld was Code examined by either MT or PT and VT and found acceptable, it shall be so documented on the Process Sheet and no further action is required.
- 5.3.4 If the weld is determined to be a limited access weld and special tools were utilized but no surface examination (MT or PT) performed, it shall be so documented on an NCR and referred to UE&C QA Welding for further evaluation and dispositioning.
- 5.4 Process sheets which reference Procedure PH001 and/or Field Memo 8291 as instructions to craft shall be handled as follows:
- 5.4.1 PH-001 entries shall be deleted by line through, initial and date. Then add the appropriate procedure (IX-3 for ASME pipe, JS-IX-6 for supports and IX-65 or FI-156 for pipe whip restraints) and appropriate revision levels.
- 5.4.2 Field Memo 8291 entries need not be changed. This Field Memo was issued by the Construction Manager and the instructions were incorporated into the appropriate procedure.
- 5.5 Pipe whip restraint process sheets which refer to FI-156 or ASME procedures for work other than visual inspection of final weld surfaces and NDE (e.g., IX-3, JS-IX-14, etc.) need not be changed. Work done to the ASME procedure is acceptable provided the ASME requirements do not violate the requirements of procedure IX-65. Process sheet reference to work performed to FI-156 after the voiding of FI-156 shall be lined through, initialled, dated and changed to the appropriate revision level of IX-65.

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6.0 PROCESS SHEETS - PIPING

- 6.1 Completed Process Sheets shall be transmitted from DVC in accordance with Procedure VI-9. Those requiring NDE shall be transmitted to the NDE Department and those not requiring NDE shall be transmitted to QA Records.
- 6.2 Process Sheets, submitted to QA Records via transmittal, are received by QA Records by signing and dating the transmittal. A copy of each transmittal will be maintained by QA Records for a period of 90 days.
- 6.3 The Process Sheet and its supporting Documentation shall be reviewed for accuracy, completeness and legibility. If the Weld Rod Heat and Lot Numbers, and Welder Identification are not on the Process Sheet, the Weld Rod Stores Requisition shall be used to obtain this information by QA Records.
- 6.4 Process Sheets shall be reviewed by QA Records utilizing the "QA Records Piping Review Checklist" (Appendix A) as a guide and shall document the acceptance of the piping package on the "QA Records Piping Review Checklist". The QA Records in-process reviewer shall sign or initial and date individual Process Sheets signifying approval and acceptance of the Process Sheet and supporting documentation. Following review, the process sheet shall be filed in the Field Drawing QA Records package.
- 6.5 Upon receipt of the signed Form 10B Part II and the Field Verification Package (refer to Procedure X-4, para. 5.3), the QA Engineer-Records shall perform a final package review and if acceptable initiate a Form 10B Part I as follows:
 - 6.5.1 Initiate a Verification Package Review Checklist (Appendix D).
 - 6.5.2 Obtain a copy of the Drawing/Design Control Card (DDCC) or establish currentness of the package copy by last change date.
 - 6.5.3 Verify that the Verification Package contains, and that the Form 10A (or 10B Part II) lists, the current issue of all documents required per the DDCC. Discrepancies shall be evaluated for impact and resolved. The discrepancy may be referred to the Chief Field Engineer's designee for impact evaluation.
 - 6.5.4 List all company issued unincorporated affecting change documents on the Form 10B Part I.
 - 6.5.5 Verify that all repair orders and surveillance reports that affect the drawing are identified, completed and properly documented.



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- 6.5.6 Verify that Process Sheets are available for all required operations and that each Process Sheet is reviewer approved to the current issue of the documents.
- 6.5.7 Verify that all NCR's issued against the package have been dispositioned and closed.
- 6.5.8 Review, evaluate and resolve all exceptions listed on Forms 10A and 10B Part II.
- A. Material and welder identification exceptions shall be researched to establish such identification. Any identification thus established need not be rescribed on the installation. Material identification thus established shall be added to the Field Verification document, with notation of source, dated and initialled.
 - B. Unresolved exceptions shall be listed on Form 10B Part I.
- 6.6 Upon tentative completion of final records review, and after any final process induced rework is accomplished or noted as an exception, the DVC document package shall be recalled and the records review shall be completed.
- 6.6.1 If any documents have been issued or reissued to the package since currentness was established (para. 6.5.3), they shall be evaluated for impact and resolved.
 - 6.6.2 All unincorporated change documents shall be listed on the Form 10B Part-I.
 - 6.6.3 A Form 10C (Procedure X-4) shall be prepared, or updated if previously initiated, to list all exceptions and/or incomplete items associated with the package.
 - A. If a Form 10C has been previously initiated it shall be reviewed to identify any items which may be closed in conjunction with the current package review.
 - B. "The Partial" format utilized for Forms 10A and 10B Parts I and II is not used for Form 10C. Exceptions noted on subsequent "Partial" Forms 10B Part I shall be added to the original Form 10C initiated with the first partial Form 10B Part I for the package.
 - C. A Form 10C shall be initiated for all field drawings including those for which no exceptions are noted on the Form 10B Part I.



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Note: For Field Verification of Unit 2 construction, additional field work will not be performed by Pullman. The use of the Form 10C as described in this procedure will not be required.

6.6.4 The Form 10B Part I shall then be completed and signed.

6.6.5 The DVC document package, the Form 10C and a copy of the Form 10B Part I shall be forwarded to the Chief Field Engineer's designee in the control complex for currentness/completeness review per Procedure III-4.

A. The field verified documents, Forms 10A, 10B Parts I and II, Process Sheets and checklists shall be filed in the appropriate QA records documentation package and send to PPP-IMS for record indexing and review by YAEC.

6.6.6 Upon receipt of a copy of the Engineering released Form 10C, the QA Records Documentation Package shall be forwarded to SBYDCC in accordance with Procedure XVII-3.

7.0 PROCESS SHEETS - HANGER

7.1 Completed Hanger/Pipe Whip Restraint Process sheets shall be handled per paragraphs 6.1 through 6.4. The QA Records Hanger Review Checklist (Appendix B) or Pipe Whip Restraint Review Checklist (Appendix H) shall be used as a guide and document acceptance.

7.2 Upon receipt of the signed form 10B Part II and the Field Verification Package (Refer to procedures JS-IX-6, para. 14.0 for hangers and IX-65, para. 13.4 for pipe whips), the QA Engineer-Records shall perform a final package review per paragraphs 6.5 and 6.6 and, if acceptable, initiate a Form 10B Part I.

7.2.1 The 'DVC Document Package' as referenced in paragraph 6.6 shall be the 'Hanger Erection Package' for pipe supports.

7.3 The requirement for Hanger field bulk stock traceability to heat number applies only to ASME Class 1 Material. ASME Class 2 and 3 bulk stock material need only be identified by material specification and grade or "suitable code" up to the point of installation and need not be verified during documentation review.

7.4 For Pipe Whip Restraints field bulk stock traceability to heat numbers is not required.



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8.0 MECHANICAL EQUIPMENT

8.1 Equipment which has been identified, per Project Procedure IX-39, IX-75, IX-76, and IX-55, as requiring installation, handling and testing instructions shall be submitted to QA-Records upon completion of work and inspection activities. QA Records shall perform a final review of the assembled documentation and indicate acceptance by signing and dating the Process Sheet documents.

8.2 Prior to the turnover to PPP IMS, a review shall be performed and documented for status and acceptance on a QA Equipment Records Review IMS Index, (Appendix C), for each piece of equipment. The Mechanical Equipment Package shall then be forwarded to PPP IMS for record indexing in accordance with Project Procedure XVII-3, for turnover to the owner.

9.0 INTEGRITY TESTING

9.1 Prepared Test Packages per Project Procedure XI-1 are submitted to QA Records for performance of a Package Pretest Review. The results of this review are documented on Form F09 Documentation Review, in accordance with Project Procedure XI-1. Using "QA Records Hydro Review Checklist" (Appendix E) as a guide, QA Records reviews the pretest package and indicates acceptance by signing and dating section "A" of the "QA Records Hydro Review Checklist", (Appendix E).

9.2 QA Records shall utilize Form F07, Exceptions List in accordance with Project Procedure XI-1, to identify pretest items which could affect the validity of the test.

9.3 At completion of testing activities, QA Records shall review the Final Test Package documentation attributes and complete section "B" of the "QA Records Hydro Review Checklist", (Appendix E).

9.3.1 After review of test package, sign appropriate space on F01 form (reference XI-1). This attests that the test was conducted in accordance with procedure XI-1, the test package and deficiencies noted as exceptions have been addressed, dispositioned and cleared.

9.3.2 Exceptions to the test package are considered cleared when items are complete or an Incomplete Item Number is issued to resolve the exception. The Incomplete Item Number shall be listed on the 10C form for outstanding activities.

9.4 When completed, the reviewed test package shall be transmitted to Start-up and Test Department (STD) for concurrence and necessary approvals. The original copy of the test package shall be forwarded to PPP - IMS for Record Indexing in accordance with Project Procedure XVII-3 for turnover to the owner.



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IPR/R3-2 10.0 N-5 Data Reports

IPR/R3-2 10.1 Upon completion of a final N-5 data report or preliminary N-5 data report by Pullman Power Products engineering group (reference procedure X-21), the QA records reviewer shall present to the ANI for his review & signature the N-5. A signed copy of Forms 10A, 10B part I, 10B part II and the original 10C, along with any supporting documentation, if requested, shall accompany the N-5. In the event a partial drawing is included in the scope of a data report, a copy of Form 10C shall be provided if work is not complete.

IPR/R3-2 10.2 After the ANI has signed the N-5 data report, the completed 10C's shall be forwarded to IMS and processed in accordance with Section 11.0 of this procedure.

IPR/R3-2 10.3 A final copy of the completed 10C Form shall be transmitted to UE&C's Engineering Reconciliation Data Collection Group (RDCG) for review before "N" stamping of a piping system.

IPR/R3-2 11.0 PPP - IMS

IPR/R3-2 11.1 QA Records shall transmit to PPP - IMS record packages which have been reviewed for technical content, completeness and legibility.

IPR/R3-2 11.2 PPP-IMS shall acknowledge the transmitted document packages and perform Record Indexing per Project Procedure XVII-3.

IPR/R3-2 11.3 PPP - IMS shall present the Records Package to the ANI for their final acceptance, and to the owner prior to the Record Package turnover to SBYDCC.

IPR/R3-2 11.4 SBYDCC shall perform the microfilming function of PPP's turnover documents and shall return a copy of the film to PPP for their records in preparation for accomplishing the N-5 Data Report. Alternatively, the returned original documents may be used for this effort.

IPR/R3-2 12.0 NONCONFORMANCE REPORTS (NCRs)

IPR/R3-2 12.1 QA Records shall review completed Nonconformance Reports for technical adequacy in accordance with the given instructions of Project Procedure XV-2 and for completeness and legibility requirements in accordance with Project Procedure VI-10.

7/R3-2 12.2 Upon acceptance of the data documented on the NCR, the reviewed NCR shall be forwarded to PPP - IMS for Record Indexing in accordance with Project Procedure XVII-3, for turnover to the Owner.



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13.0 DOCUMENT CORRECTION NOTICE (DCN)

IPR/R3-2

13.1 QA Records has the responsibility to initiate Nonconformance Reports per the given instructions of Project Procedure XV-2. Documentation deficiencies, such as missing technical data, NDE report(s), signatures or dates, shall be documented on a DCN at QA Records. DCNs are forwarded to the responsible PPP department or area of responsibility for action on the noted affected document deficiency. The involved person or supervisor shall interface with QA Records for correction or clarification of the DCN problem. The department or area supervisors will assure that responses to DCN's are made in a timely manner to avoid unnecessary delays in documentation turnover. The QA Records DCN monitor shall expedite and coordinate the closure of all priority DCN's based on the turnover schedule.

IPR/R3-2

13.2 DCNs are numbered with a sequential number for accountability with notations indicating which BIP they impact; Reference Appendix "F" herein.

IPR/R3-2

14.0 RECORDS

IPR/R3-2

14.1 Completed QA Records Review Checklists shall be maintained with the respective document package(s). It is also to be included as part of the transmittal to PPP-IMS. QA Review Checklists are internal working documents which are utilized as a review guide and will not be turned over to the owner.

IPR/R3-2

14.2 Records are to be prepared for turnover per Project Procedure XVII-3.

IPR/R3-2

14.3 Records may be loosely filed in folders in accordance with ANSI N45.2.9; however, each file will contain an Index of Document Package (Appendix G) attached to the file folder that lists each record included in the package. Each document withdrawn from the controlled record files shall be signed out and shall be the responsibility of the individual withdrawing it. Records personnel are responsible for checking the returned file to ascertain all documents are included as indexed. The original or a copy of the index shall be retained in the record files to ensure the return of all documents.

IPR/R3-2

14.4 Records are considered "complete" after they are reviewed to the Verified As-Built Drawing. Three phases of review are conducted. They are the Initial Review, the Technical Review, and the Final Review. When packages are completed, they are closed and placed in a separate file. No records will be signed out between the time of Final Document Review and IMS turnover with the exception of the Field Verified Package which may be checked out to Engineering only.



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Q.A. RECORDS PIPING REVIEW CHECKLIST

P-M ISSUE LEVEL

REVIEW SECTIONS: 1. ISO
11. FIFLD WELD PROCESS
SHEETS, CUT/GRIND
SHEETS, END PREP
SHEETS

III. NOE REPORTS
IV. PRIORITY
V. TJ'S AND JTR'S
VI. ISI PROGRAM

ISO NO. & REV. _____

OIP. _____

F.N.'s _____

1. ISO'

- A. Unincorporated change documents included in the package
- B. Field welds identified on drawing
- C. Verify NDE, PWHT, ISI requirements noted
- D. Coat and Wrap (evidence of documentation)
- E. Cement Lining Requirements (evidence of documentation)

A	R	N/A	COMMENTS

Sign./Level

DATE _____

II. Field Weld Process Sheets, Cut/Grind Sheets, End Prep Sheets

- A. Verify ASME Code and class to dwg.
- B. Verify material type, size, thickness to dwg.
- C. Verify if insert/backing ring required, to dwg.
- D. Verify weld procedure to dwg., and revision levels
- E. Verify weld wire, electrode type to dwg.
- F. Verify required preheats and interpass to dwg.
- G. Purge Gas, checked Yes, or N/A
- H. Limited access weld checked Yes with disposition sign off, or No.
- I. All required signatures/approvals
- J. Welder's Stencils assigned to appropriate process operation.
- K. Weld material heat/lot nos. entered and traceable
- L. Verify location and zone to dwg.
- M. NCR, WRO control numbers, ECA numbers are referenced on Process Sheet
- N. Pc. mark or heat no. entered and traceable
- O. All Hold Points Dispositioned
- P. Back of Process Sheet signed and dated
- Q. All corrections are one line cross outs, initialed and dated, no "write overs", no "white out" or correction tape, black ink only, legible. All blanks N/A or completed.
- R. Repair cycles in numerical sequence
- S. WRO closed form completed and sent to QA Welding Engineer.

[illegible]

Sign./Level

Date

III. NDE Reports

- A. Correlates with process sheet
- B. Verify completeness
- C. Calibration due date
- D. Signature level and date
- E. All corrections one line cross outs, initialed and dated
no technical "write overs", black ink only, no "white
out", no correction tape, legible.

[illegible]

Sign./Love:

Date _____



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P.I.A. RECORDS PIPING REVIEW CHECKLIST

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P-H ISSUE LEVEL _____

ISO NO. & REV. _____

IV. PWHT

- A. All steps on temperature record are complete.
- B. Verify all required signatures/approvals, including Q.A. Welding Engineer
- C. Verify calibration of equipment is recorded.
- D. Verify thermocouple location sketch provided.
- E. All corrections are one line cross outs, initialed and dated, no technical "write overs", no "white out" and no correction tape, black ink only, legible, All blanks N/A or completed.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

V. Threaded Joints & Joint Torque Records

- A. Correlates with ISO.
- B. All required signatures/approvals
- C. Torque Wrench serial number, calibration due date
- D. All hold points addressed.
- E. All corrections one line cross outs, initialed and dated, no technical "write overs", no "white out" and no correction tape black ink only legible, All blanks N/A completed.
- F. Verify code and class
- G. QA Final signed and dated.
- H. Bolt and nut material has been verified traceable at point of installation.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

VI. ISI Program

- A. Weld numbers, noted with "ISI Required" on the Isometric and, requiring surface NDE (PT or MT), shall be examined again after ISI grinding operations.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

VII.

- A. QA Final signed and dated.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

FORMS DISK 6

CPI-131.2 (09/18/8

SF 1.01A (07-81)



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Q.A. RECORDS HANGER REVIEW CHECKLIST

- REVIEW SECTIONS:
- I. ISO
 - II. FIELD WELD PROCESS SHEETS, CUT/GRIND, SHEETS, END PREP SHEETS
 - III. NDE REPORTS, INSPECTION REPORTS
 - IV. PWHT
 - V. MILTI INSTALLATION RECORDS

P-H ISSUE LEVEL _____

ISO. NO. and REV. _____

B.T.P. _____

F.W.'s _____

I. ISO

- A. Material identified on B.O.M.
- B. Field welds identified on drawing.
- C. Verify NDE & PWHT.
- D. Bulk Stock - Traceable to Heat No. (Class 1).
Identifiable by Mat'l Spec & Grade (Class 2 & 3)
- E. Bolt and nut material has been verified traceable

A	R	N/A	COMMENTS

Sign/Level _____

Date _____

II. Field Weld Process Sheets, Cut/Grind Sheets,

- A. Verify ASME Code and class to dwg. & Line No.
- B. Verify weld procedure to dwg., and revision levels.
- C. Verify weld wire, electrode type to dwg.
- D. Verify required preheats and interpass to dwg.
- E. NCR, SRO control numbers, ECA numbers are referenced on Process Sheet.
- F. All required signatures/approvals.
- G. Weld material heat/lot nos. entered and traceable.
- H. All Mold Paints Dispositioned.
- I. Welder's Stencils assigned to appropriate process operation.
- J. Limited access verified and special process if applicable.
- K. Repairs listed in numerical sequence.
- L. Process Sheets comply with enhancement procedure.
- M. SRO closed with Engineering concurrence.

A	R	N/A	COMMENTS

Sign/Level _____

Date _____



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SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE APPENDIX B
NO. 2 of 2**Q.A. RECORDS HANGER REVIEW CHECKLIST**

P-H ISSUE LEVEL _____ Page 2 of 2

ISO. NO. & REV. _____

III. ME Reports

- A. Correlates with process sheet.
- B. Verify completeness.
- C. Calibration due date.
- D. Signature level and date.
- E. All corrections one line cross outs, initialed and dated, no technical "write overs", black ink only, no "white out" and no correction tape, legible.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

IV. PWHT

- A. All steps on temperature record are complete.
- B. Verify all required signatures/approvals, including Q.A. Welding Engineer.
- C. Verify calibration of equipment is recorded.
- D. Verify field weld number and weld procedure correlates with Process Sheet.
- E. Verify thermocouple location sketch provided.
- F. All corrections are one line cross outs, initialed and dated, no technical "write overs", no "white out" and no correction tape, black ink only, legible, all blanks N/A or completed.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

V. MULTI/BOLTING Installation Records

- A. Correlates with Erection Drawing.
- B. Verify No. and size of bolts.
- C. All required signatures/approvals.
- D. Craft checklist complete.
- E. Check any unsatisfactory conditions.
- F. All hold points addressed.
- G. Check for previous work done on Dif. Process Sheet.
- H. Torque Wrench serial number, calibration due date.
- I. All corrections one line cross outs, initialed & dated no technical "write overs", no "white out" and no correction tape, black ink only, legible, all blanks N/A or completed.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

VI.

- A. QA Final signed and dated.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

FORMS DISK6

CPT-130.2 (09/19/84)

SF 1.01A (07-81)



Pullman Power Products

XVII-6

DOCUMENT NO.

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

ISSUE DATE: 08/07/85

SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE APPENDIX C
NO. 1 of 1ASME III
QA EQUIPMENT RECORDS REVIEW
DIS INDEXORIGINATOR CODE: PX-52
RECORD TYPE: 41-P-12-019
DIS INDEX NUMBER: G05.01.

EQUIPMENT # _____

The following documents have been checked to
ensure complete and correct installation.

DATE _____ By _____

BIP # _____

NCR # _____ REV. ____ / _____ REV. ____

_____ REV. ____ / _____ REV. ____

_____ REV. ____ / _____ REV. ____

ITEM	ACCEPT	REJECT	N/A	REMARKS	PAGES
1) Engineering Release Letter					
2) Handling & Installation Package					
3) Leveling & Alignment Package (pumps only)					
4) Anchor Bolt Tensioning Package					
5) Final Alignment & Lubrication Package (Pumps Only)					
6) All identified NCR's Resolved & Process Sheets Complete.					
7) ECA Process Sheets Complete					
8) All Field Instruction Complete and As-Built					
9) All Data Reports Complete (ie: H2, C OF C)					
10) Verify Currency of Foreign Print per IEAC OCC					
11) Verify Completeness and Currentness of Change Documents per CDI					

COMMENT: _____

Documentation Reviews
Complete and Acceptable:

QAE Records Level

Date: _____

FORMS DISK6

CPT-125 (09/11/84)

SF 1.01A (07-81)



Pullman Power Products

XVII-6

DOCUMENT NO.

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

2/2

ISSUE
DATE: 08/07/85SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE APPENDIX D
NO. 1 of 2

BIP _____

Field Drawing _____

Rev/P-H Issue _____

PARTIAL

VERIFICATION PACKAGE REVIEW CHECKLIST

Current DDC Last Change Date _____

		ACC		REJ		1/2	COMMENTS
		YES	NO	YES	NO		
1.	FVP DDC Current (if not, list changes)						
2.	Superseded Documents evaluated & resolved						
3.	Form 10A signed & valid for current document issue						
4.	Form 10B 1: signed & valid for current document issue						
5.	All 10A exceptions evaluated & resolved						
6.	All 10B 1: exceptions evaluated & resolved						
7.	All 10C's, 10SK/10SR's, etc. identified, completed & documented						
8.	All 10C's identified, dispositioned & closed						
9.	All Process Sheets approved						
10.	DVC package recalled (date)						
11.	Currency reverified						
11a	Discrepancies resolved						
12.	Change Docs. listed 10B 1						
13.	Form 10C in DVC package						

CPT-100 (05/07/85)



Pullman Power Products

XVII-6

DOCUMENT NO.

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

ISSUE
DATE: 08/07/85SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE
NO. APPENDIX D
2 of 213a. 10C items reviewed and
closed if appropriate

14. Form 10C updated or initiated

15. Form 10B completed with
any exceptions noted and
referenced to Form 10C16. JVC package, Form 10C and
copy 10B to engineering

17. Package to LMS

Signed _____ Date _____

OPT-131 (08/07/85)



Pullman Power Products

XVII-6

DOCUMENT NO.

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

ISSUE
DATE: 08/07/85SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE APPENDIX E
NO. 1 of 1QA RECORDS HYDRO REVIEW CHECKLIST

HYDRO # _____

A. PRIOR TO HYDRO

1. Verify IOAs & IOBs are Complete & Encompass Hydro Boundary.
2. MCR's
3. IIL's
4. SWO
5. Verify IOCs are complete
6. Verify current Rev. of ISO
7. Check test parameters & description (Form F03)
8. Verify valve line-up (Form F05)
9. Verify integrity test boundary description (Form F08)
10. Check exceptions list (Form F07)

A	R	N/A	COMMENTS

Sign/Level _____

Date _____

B. AFTER HYDRO

1. Verify all required Field Signoffs are complete
2. Check for Gauge Calibration
3. Verify exception list items are addressed, dispositioned and cleared
4. Verify Field Data (F03) complies with test parameters
5. Assure Field Changes were utilized for changes during test
6. All Corrections are one lined, initialed, and dated, no technical "write overs", No "white out", and no correction tape, black ink only, legible, all blanks N/A or completed.

A	R	N/A	COMMENTS

Sign/Level _____

Date _____

FORMS DISK 6

CPT-133 (08/07/85)

SF 1.01A (07-81)



Pullman Power Products

XVII-6

DOCUMENT NO.

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

ISSUE
DATE: 08/07/85SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE
NO. APPENDIX C
1 of 2ORIGINATOR CODE: PE-57
RECORD TYPE: 41-P-12-004
HQS INNER NUMBER:

FIELD WELD PACKING

HQS IDENTIFICATION NUMBER

(HQS NUMBERS INDICATE PAGES)

HQS IDENTIFICATION

DATE BY

OTHER

POST WELD HEAT
TREATMENT
RECORDMATERIAL
THICKNESS
INSPECTION
REPORTRADIOGRAPHIC
INSPECTION
REPORTMAGNETIC
PARTICLE
EXAMINATION
RECORDSLIQUID PENETRANT
INSPECTION
REPORT/RECORDFIELD WELD
PROCESS SHEETFIELD WELD
END
PREPARATIONFIELD PROCESS
SHEET

REPAIR ORDER

ON/OFF FINAL
INSPECTIONINSTALLATION
VERIFICATIONHQS
IDENTIFICATION

PAGE

HQS NO. 7: CPT-1M.1 CPT-1M.2 (08/07/85)

Pullman Power





XVII-6

DOCUMENT NO

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

15808
DATE: 08/07/85

SEABROOK
PROJECT PROCEDURE

TO BE USED
ONLY ON JOB # 7035

PAGE APPENDIX G
NO. 2 of 2

REGISTRATION CODE: 91-52
REGISTRATION DATE: 01-01-12-000
REGISTRATION NUMBER:

FILED IN 1987

DECLASSIFICATION AUTHORITY:

NUMBERS INDICATE PAGES)

11

211

Human Power



0 110000 0 500000

OTHER
SUAY STRUT
SWEDGER
HIGH STRENGTH BOLT TENSIONING
TURN-OF-THE-NUT TENSIONING
EXPANSION ANCHOR
N.D.E.
RELOC/REATTACH CODE PLATE
WELD-METAL BASE METAL BUILD UP
ASME BASE METAL REPAIR
BASE METAL DEFECT REMOVAL SHEET
ASME BASE METAL ARC STRIKE REMOVAL
REMOVAL
DEFACING CODE DATA PLATE
DSR
SBO
BUTTERING
RANGER FIELD WELD PROCESS SHEET
QA/QC FINAL INSPECTION
INSTALLATION VERIFICATION
ITEM IDENTIFICATION

100/20/100 2/1/100 100/20/100



Pullman Power Products

XVII-6

DOCUMENT NO.

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

ISSUE DATE: 08/07/85

SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE APPENDIX H
NO. 1 of 2

Q.A. RECORDS PIPE WHIP REVIEW CHECKLIST

- REVIEW SECTIONS: I. ISO
II. FIELD WELD PROCESS SHEETS, CUT/GRIND,
SHEETS, END PREP SHEETS
III. NDE REPORTS, INSPECTION REPORTS
IV. PWHT
V. MILTI INSTALLATION RECORDS

P-H ISSUE LEVEL _____

ISO. NO. and REV. _____

B.I.P. _____

F.W.'s _____

I. ISO

- A. Field welds identified on drawing.
B. Preheat & post soak.

A	B	N/A	COMMENTS

Sign/Level _____

Date _____

II. Field Weld Process Sheets, Cut/Grind Sheets, and buttering.

- A. Verify procedure revision levels.
B. Verify weld wire, electrode type.
C. Verify required preheats, interpass & post weld soaking.
D. MCR, SRO control numbers, WRO control numbers, ECA numbers are referenced on Process Sheet.
E. All required signatures/approvals.
F. Weld material heat/lot nos. entered and traceable.
G. All Hold Points Dispositioned.
H. Welder's Stencils assigned to appropriate process operation.
I. Limited access verified and special process if applicable.
J. Repairs listed in numerical sequence.
K. Process Sheets comply with enhancement procedure.
L. SRO closed with Engineering concurrence.

A	B	N/A	COMMENTS

Sign/Level _____

Date _____

59-364.1 (08/07/85)

SF 1.01A (07-81)



Pullman Power Products

XVII-6

DOCUMENT NO.

PREPARED BY: W. STIGER

APPROVED BY: H. HINKLEY

ISSUE DATE: 08/07/85

SEABROOK
PROJECT PROCEDURETO BE USED
ONLY ON JOB # 7035PAGE NO. APPENDIX H
2 of 2

Q.A. RECORDS HANGER REVIEW CHECKLIST

P-H ISSUE LEVEL _____ Page 2 of 2

ISS. NO. & REV. _____

III. NDE Reports

- A. Identifiable to support.
- B. Verify completeness.
- C. Calibration due date is correct and work performed prior to due date.
- D. Signature level and date.
- E. NDE reports comply with Enhancement procedure.
- F. Correct NDE procedure used.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

IV. HIGH STRENGTH/BOLTING Installation Records

- A. Correlates with Drawing.
- B. Verify amount and size of bolts.
- C. All required signatures/approvals.
- D. All applicable hold points addressed.
- E. Check for previous torque sheets as required.
- F. Torque Wrench serial number is acceptable and calibration due date is correct and work performed prior to due date if applicable.
- G. High strength bolt tensioning sheets comply with Enhancement procedure.
- H. Verify proper turn of the nut.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

V.

- A. QA Final signed and dated.

A	R	N/A	COMMENTS

Sign./Level _____

Date _____

SSP-364.2 (08/07/85)

SF 1.01A (07-81)

PULLMAN POWER PRODUCTS
INTERNAL PROCEDURE REVISION

XVII-6/R3-3
IPR No.

Procedure No. XVII-6 Rev. No. 3 Rev. Date 08/07/85 IPR Date 03/06/86

Basis for Revision: Procedure VI-6

Existing Requirement: Paragraph 6.6.3 C

(See Attached)

(Attach continuation sheet when required)

Revise Paragraph to read:

(See Attached)

FOR INFORMATION ONLY

(Attach continuation sheet when required)

PULLMAN-HIGGINS APPROVAL/CONCURRENCE

Originator concurrence	<u>Daniel B Kelley</u>	Date: <u>3/6/86</u>
Construction Supt. concurrence	<u>Jim Owens</u>	Date: <u>3/6/86</u>
Chief Field Engineer concurrence:	<u>Robert D Briggs</u>	Date: <u>3/6/86</u>
QA Manager concurrence	<u>Donald</u>	Date: <u>3/6/86</u>
Site Level III approval	<u>Donald</u>	Date: <u>3/6/86</u>

UT&C APPROVAL

Site Quality Assurance approval..	<u>D. B. Kelley V&C QA 3/6/86</u>	Date: <u>3-10-86</u>
Site Engineering approval.....	<u>Jim Owens</u>	Date: <u>3-10-86</u>
Site RCN approval.....	<u>Robert D Briggs</u>	Date: <u>3/10/86</u>
ANT concurrence.....	<u>Donald</u>	Date: <u>3-10-86</u>

PULLMAN POWER PRODUCTS APPROVAL

Home Office Level III.....	<u>CC Ech</u>	Date: <u>3-11-86</u>
----------------------------	---------------	----------------------

Procedure No. XVII-6 Rev. No. 3 Date 08/07/85 Page 2 of 2Existing Requirement:

- C. A Form 10C shall be initiated for all field drawings including those for which no exceptions are noted on the Form 10B Part 1.

Revise Paragraphs to Read:

- C. A Form 10C shall be initiated for all field drawings including those for which no exceptions are noted on the Form 10B Part 1.

Note: For Field Verification of Unit 2 construction, additional field work will not be performed by Pullman. The use of the Form 10C as described in this procedure will not be required.

Procedure No. XVII-6 Rev. No. 03 Rev. Date 08/07/85 IPR Date 11/14/85Basis for Revision: Procedure VI-6, Paragraph 1.1.2.Existing Requirement: Paragraph _____
(See Attached)

(Attach continuation sheet when required)

Revise Paragraph to read:

(See Attached)

(Attach continuation sheet when required)

PULLMAN-HIGGINS APPROVAL/CONCURRENCE

Originator concurrence J. H. Stuy Date: 11-14-85
 Construction Supr. concurrence . . . James N. Butten Date: NOV 14 '85 JB
 Chief Field Engineer concurrence: . . Robert N. Briggs for Date: 11-18-85
 QA Manager concurrence Donald Date: 11-18-85
 Site Level III approval Donald Date: 11-18-85

UTSC APPROVAL

11/18/85 Site Quality Assurance approval.. T. P. Vassallo Jr. Date: 11/19/85
 Site Engineering approval..... R. K. La. for M. P. McNamee Date: 11/19/85
 Site RCN approval..... Don W. D. Date: 11/19/85
 ANI concurrence..... clb/ef Date: 11-20-85

PULLMAN POWER PRODUCTS APPROVALHome Office Level III..... Howard O. Linkley Date: 11/20/85

Add Paragraphs:

10.0 N-5 Data Reports

- 10.1 Upon completion of a final N-5 data report or preliminary N-5 data report by Pullman Power Products engineering group (reference procedure X-21), the QA records reviewer shall present to the ANI for his review & signature the N-5. A signed copy of Forms 10A, 10B part I, 10B part II and the original 10C, along with any supporting documentation, if requested, shall accompany the N-5. In the event a partial drawing is included in the scope of a data report, a copy of Form 10C shall be provided if work is not complete.
- 10.2 After the ANI has signed the N-5 data report, the completed 10C's shall be forwarded to IMS and processed in accordance with section 11 of this procedure.
- 10.3 A final copy of the completed 10C Form shall be transmitted to UE&C's Engineering Reconciliation Data Collection Group (RDCG) for review before "N" stamping of a piping system.

Renumber Paragraphs:

10.0 to 11.0
10.1 to 11.1
10.2 to 11.2
10.3 to 11.3
10.4 to 11.4
11.0 to 12.0
11.1 to 12.1
11.2 to 12.2
12.0 to 13.0
12.1 to 13.1
12.2 to 13.2
13.0 to 14.0
13.1 to 14.1
13.2 to 14.2
13.3 to 14.3
13.4 to 14.4

Remove & Replace

Index (page 2 of 11)

Procedure No. XVII-6 Rev. No. 03 Rev. Date 08/07/85 IPR Date 10/17/85Basis for Revision: Procedure VI-6, Paragraph 1.1.2.

Existing Requirement: Paragraph _____

(See Attached)

(ATTACH CONTINUATION SHEET WHEN REQUIRED.)

Revise Paragraph to read:

(See Attached)

CONTROLLED
DO NOT

(ATTACH continuation sheet when required)

PULLMAN-HIGGINS APPROVAL/CONCURRENCE

Originator concurrence	<u>J. P. Maloney</u>	Date: <u>10-17-85</u>
Construction Supt. concurrence	<u>James T. Butler</u>	Date: <u>OCT 17 '85 JNB</u>
Chief Field Engineer concurrence:	<u>[Signature]</u>	Date: <u>10/17/85</u>
QA Manager concurrence	<u>[Signature]</u>	Date: <u>10/18/85</u>
Site Level III approval.	<u>[Signature]</u>	Date: <u>10/18/85</u>

WESC APPROVAL

Site Quality Assurance approval.	<u>T. P. [Signature]</u>	Date: <u>10/18/85</u>
Site Engineering approval.	<u>[Signature]</u>	Date: <u>10/18/85</u>
Site RCM approval.	<u>[Signature]</u>	Date: <u>10/18/85</u>
ANI concurrence.	<u>[Signature]</u>	Date: <u>10-21-85</u>

PULLMAN POWER PRODUCTS APPROVALHome Office Level III. Howard Finley Date: 10/21/85

Procedure No. XVII-6Rev. No. 03Date 08/07/85

Page 2 of 2

Existing Requirements:

- 5.5 Pipe whip restraint process sheets which refer to FI-156 or ASME procedures for work other than visual inspection and NDE (e.g., IX-3, JS-IX-14, etc.) need not be changed. Work done to the ASME procedure is acceptable provided the ASME requirements do not violate the requirements of procedure IX-65. Process sheet reference to work performed to FI-156 after the voiding of FI-156 shall be lined through, initialled, dated and changed to the appropriate revision level of IX-65.

Revise Paragraph to Read:

- 5.5 Pipe whip restraint process sheets which refer to FI-156 or ASME procedures for work other than visual inspection of final weld surfaces and NDE (e.g., IX-3, JS-IX-14, etc.) need not be changed. Work done to the ASME procedure is acceptable provided the ASME requirements do not violate the requirements of procedure IX-65. Process sheet reference to work performed to FI-156 after the voiding of FI-156 shall be lined through, initialled, dated and changed to the appropriate revision level of IX-65.

