

WO WORK PLAN

Removal/Replacement of breakers 1Y-06-05

WO9612056

UNIT 1

February 27, 1997

1.0 PURPOSE

This WO work plan provides direction for the removal of breaker 1Y-06-05 and replacement with Westinghouse EHD 1015 15 amp breaker.

2.0 INITIAL CONDITIONS

1. Reactor is offline.
2. Verify loads listed in Return to service step 16 can be taken OOS.
3. Permission has been granted to remove/replace breakers 1Y-06-05.
4. Preseparator alarms may come in if not in alarm.

3.0 ATTACHMENTS

- 3.1 Maintenance Electrical Safety Checklist, PBF-9044 form
- 3.2 Wire Removal Form, PBF-0036

4.0 REFERENCE DRAWINGS

Westinghouse Elementary drawings 844, and 845

5.0 MATERIALS

Westinghouse EHD 1015 breaker (Quantity 1)

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| Hold Point | Step No. | Work Plan Description | Worker | Date | | | | | | | | |
|-----------------------|--|--|-----------|---------|-------|--------|-----------------------|----|----|----|-----|---------|
| NOTE | | Breaker 1Y-06-05 provide power to Unit 1 Preseparator System. | | | | | | | | | | |
| | 1 | Verify initial conditions have been met. | OPS | 2/28/97 | | | | | | | | |
| *CAUTION* | ALL COMPONENTS AND TERMINALS LOCATED IN THE PANEL ARE ASSUMED TO BE ENERGIZED, TAKE NECESSARY PRECAUTIONS. | | | | | | | | | | | |
| FME: | General FME Statement: Tools and equipment shall be checked for loose parts and debris and temporary covers should be installed for foreign material exclusion (FME) of system/components, per Exclusion of Foreign Material from Plant Components and systems, NP 8.4.10. | | | | | | | | | | | |
| | 2 | Responsible Engineer to perform a pre-job briefing with all workers to include scope of project, personnel safety, electrical safety checklist, and installation. | RE | 2-28-97 | | | | | | | | |
| | 3 | <p>Prior to installing the replacement breakers, cycle breakers five times per the following directions:</p> <ol style="list-style-type: none"> 1. Close breaker 2. Trip breaker using the trip to test button (red) on breaker. 3. Open breaker. 4. Use continuity checks to verify proper positioning of breaker contact on final cycle (closed, trip free, and open). <p>Acceptance Criteria: Closed \leq 1 ohm / Open $>$ 1 Mohm</p> <p>MTE <u>MCMMS</u> Calibration Due Date <u>2-98</u></p> | MTN | 2-28-97 | | | | | | | | |
| | 4 | Verify that breaker 1Y-06-05 is in the "OFF" position OR coordinate with OPS to place breaker 1Y-06-05 in "OFF" | MTN | 2-28-97 | | | | | | | | |
| | 5 | Remove (if required) 1Y-06 panel cover. Post panel with appropriate "Danger alive" placards and/or barricades as required. | MTN | 2-28-97 | | | | | | | | |
| | 6 | Record wires removed on PB-0036 Wire Removal Form, then disconnect wiring from breakers 1Y-06-05. | MTN | 2-28-97 | | | | | | | | |
| | 7 | Remove breaker 1Y-06-05 from panel. | MTN | 2-28-97 | | | | | | | | |
| | 8 | <p>Install the replacement Westinghouse EHD 1015 breakers in 1Y-06-05.</p> <table border="0"> <tr> <td>Bolt Size</td> <td>#8 ✓</td> <td>#10 ✓</td> <td>1/4" ✓</td> </tr> <tr> <td>Torque Value (in/lbs)</td> <td>20</td> <td>20</td> <td>65</td> </tr> </table> <p>MTE <u>MCTS-5</u> Calibration Due Date <u>2-97</u></p> | Bolt Size | #8 ✓ | #10 ✓ | 1/4" ✓ | Torque Value (in/lbs) | 20 | 20 | 65 | MTN | 2-28-97 |
| Bolt Size | #8 ✓ | #10 ✓ | 1/4" ✓ | | | | | | | | | |
| Torque Value (in/lbs) | 20 | 20 | 65 | | | | | | | | | |
| | 9 | Reconnect leads using attached PBF-0036 Wire Removal Form. | MTN | 2-28-97 | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-----------------------|--|---|-----------|---------------------|----|----------|---------------------|-----------------------|----|----|----|--|-----|---------|
| | 10 | <p>Torque the load side leads per the following step.</p> <p>For breakers with capture wire connections, determine the wire size of the leads connected to the breaker and torque per the following table:</p> <table border="0"> <tr> <td>Wire Size</td> <td>#14 to #10</td> <td>#8</td> <td>#6 to #4</td> <td>10 to #2</td> </tr> <tr> <td>Torque Value (in/lbs)</td> <td>20</td> <td>20</td> <td>20</td> <td></td> </tr> </table> <p>Record torque wrench MTE number and calibration date on the WO and work plan.</p> <p>MTE <u>11C75-5</u> Calibration Due Date <u>2-97</u></p> | Wire Size | #14 to #10 | #8 | #6 to #4 | 10 to #2 | Torque Value (in/lbs) | 20 | 20 | 20 | | MTN | 2-28-97 |
| Wire Size | #14 to #10 | #8 | #6 to #4 | 10 to #2 | | | | | | | | | | |
| Torque Value (in/lbs) | 20 | 20 | 20 | | | | | | | | | | | |
| NOTE | Use calibrated digital voltmeter for the following step. | | | | | | | | | | | | | |
| PMT: | 11 | <p>POST MAINTENANCE TEST</p> <p>A. Verify that each breaker reads 0 VAC on the load side of the breaker with the breaker open.</p> <p>B. Verify that each breaker reads a nominal 120 VAC on the load side of the breaker with the breaker closed.</p> <p>MTE <u>11C75-5</u> Calibration Due Date <u>2-98</u></p> | MTN | 2-28-97 | | | | | | | | | | |
| FME: | 12 | Perform a Foreign Materials Exclusion inspection of panel to verify all tools and foreign materials are removed | MTN | 2-28-97 | | | | | | | | | | |
| | 13 | Reinstall panel cover. | MTN | 2-28-97 | | | | | | | | | | |
| | 14 | Record all QA's, MTE and Lot numbers on WO. | MTN | 2-28-97 | | | | | | | | | | |
| 1Y-06-05 | 16 | <p>RETURN TO SERVICE TESTING</p> <p>Verify power to the following loads;</p> <p>1. Unit 1 Preseparator System</p> | OPS | 4/28/97 | | | | | | | | | | |

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Comments:

UNIT: PB1 >>> ADD/REVISE EQUIPMENT - DATA SCREEN 1 <<< System: Y
-----CH5101M 11/03/95

EQUIP ID: Y-06-05 Physical Lctn: 44/CB/CR WEST
EQUIP NAME: PWR TO U1 MOISTURE PRESEPARATOR SYSTEM
PARENT/EQUIPMENT ID:
TRACKING ID: PB1 Y-06-05-AA Text ID: PSI Text ID:
Tracking Desc: PWR TO U1 MOISTURE PRESEPARATOR SYST Tech Manual Ctl:
Equip Group: CKTBKR Equip Type: Resp Group: MTN WO No: 9612056
Mfg Code: WEST WESTINGHOUSE ELECTRIC CO.
Vendor Code: -----
Model No: EHD1030 Serial No: 6629C92G07
QA: N FP: N OPERABILITY CR REF: - SDR: SDF-S-Y
SR: N A/P: P Pre-Test: N SE-RPT: Appendix R: N
EQ: N SSA: Y Post-Test: N EQ-RPT: Unit Shared: N
CIV: N QA Codes: CMP: Safegrd Train:
SEIS: 3 DSS Notification: Y Special Notification: LCO: N M-RULE: Y
NPRDS: NPRDS (Y/N): Unit: Component ID:
Utility ID:
System ID: Utility System ID:
PF2 - REPAIR COST PF6 - NEXT RECORD PF10 - PWR SUP PF20 - MODEL
PF3 - EQ MENU PF11 - OPEN WO PF22 - PSI TEXT
PF4 - RESET PF8 - NEXT PAGE PF12 - DETAIL PF23 - TEXT
PF5 - PREV RECORD PF9 - PREV SCREEN PF19 - BRWS TRK ID PF24 - HISTORY

WO
9612056

DANGER TAG REQUEST

Work Control Document # 9612056

| | |
|--|--|
| Time/Date of application: <u>2-26-97 1630</u> | Time/Date Tags Required: <u>0700 2-28-96</u> |
| Requesting Individual: _____ | Requesting Work Group: <u>Maintenance</u> |
| Responsible Supervisor: <u>Electrical Supervisor</u> | Estimated Job Completion (Time/Date): _____ |

NOTE: If TS required equipment is to be disabled, the initiating work group shall initiate form PBF-9133.

Equipment ID: Y-06-05 Unit: 1

Scope of Work: Replace Breaker

Additional Work Control Documents _____

| | | | |
|---|--|---|--|
| Recommended Danger Tagging/Explanation: | No Tags Req'd: <input checked="" type="checkbox"/> | Double Isolation: <input type="checkbox"/> | |
| | Positive Control: <input type="checkbox"/> | Grounding Req'd: <input type="checkbox"/> | |
| | | Partial Removal Req'd: <input type="checkbox"/> | |

NOTE: The RMP/TWP/SMP/Work Order/Work Plan may be referenced above for the recommended danger tagging.

References: (NOTE: Must include Rev. number for controlled documents used to verify adequacy.)

Information: _____

| | | |
|--|---|-----------------|
| Appendix R: <input type="checkbox"/> Yes <input type="checkbox"/> No | If yes, attach Fire Round Sheet | Preparer: _____ |
| LCO Req'd: <input type="checkbox"/> Yes <input type="checkbox"/> No | If yes, attach LCO Tracking Form PBF-9133 | Date: _____ |

| | | | | |
|----------------|------------|----------------------|------------|--|
| Reviewer _____ | Date _____ | Approver (SRO) _____ | Date _____ | |
|----------------|------------|----------------------|------------|--|

NOTE: Additional reviews and approvals req'd for changes or additions to original tagout. Describe changes in information section.

| | | | | |
|----------------|------------|----------------------|------------|--|
| Reviewer _____ | Date _____ | Approver (SRO) _____ | Date _____ | |
| Reviewer _____ | Date _____ | Approver (SRO) _____ | Date _____ | |

| | |
|--|---------------------|
| Danger Tags No Longer Required and Protected Worker Log Sign-Offs Complete | Tag Series No _____ |
| Responsible Supervisor _____ | Date _____ |

SRO Procedure and Non-Operations Work Plan Review

All ITs, TSs, and Non-Operations work plans on Maintenance Rule or Safety Related or DSS Notification required work orders, to ensure they adequately establish initial conditions, equipment recovery actions (e.g. valve line-ups), and independent verification of recovery actions. Problems identified are to be corrected before use. This form documents the required review has been completed.

Procedure or Non-Operations work plan reviewed:

WC # 96120.54

SRO (Reviewer)

2/28/97

Date _____

Work Order/Document No. 9612056

Return to Service Testing Reviews

INITIALS

Pre-Release / Pre or Post-RTS

Work Group Post-Maintenance Testing

VERIFY '0' VAC ON LOAD SIDE OF BKR W/ BRR OPEN
VERIFY '120' VAC ON LOAD SIDE OF BKR W/ BRR CLOSED

SAT
STEP 11
7/1/97

Section XI Equipment Y ☒

Operability Testing

See Step # 16

Insert ☒ 18

None

ENGINEERING REVIEW

SECTION XI ENGINEERING REVIEW

WCC TRACKING

ORIGINAL ***** PWR TO 1MOB-71 AND 1MOB-90
WO Priority: 4 * UNIT 1 * MWO * UNIT 1 *
Resp Group: MTN ***** HEADER PAGE *****
Equipment: Y-06-03 System: Y
Equipment Name: PWR TO 1MOB-71 AND 1MOB-90
Physical Location: 44/CB/CR WEST
WO No: 9612057
Step Print: 02/26/97
HF Zone:
Discovery Date: 02/23/96

Problem Description:
REPLACE BREAKER WITH PROPER SIZE BREAKER TO PROVIDE CORRECT CIRCUIT PROTECTION.

Originator: 6516 Outage ID: UIR24 Activity: 8888
Tag/Sticker Placed: T No: 99060 Tag/Sticker Lctn:
Job Type: CORRECTIVE MAINTENANCE Project ID: Condition Report: Y
Work Function: WORK ORDER
Mod Req #: 96 - 069

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| | | | |
|---------------|---------|--------------------------|---------------|
| QA: N | SEIS: 3 | Operability Pre-Test: N | Procedures: |
| SR: N | LCO: N | | |
| EQ: N | PMT: Y | Operability Post-Test: N | Procedures: |
| SSA: Y | CIV: N | MRULE: Y | |
| A/P: R | CACC: | | |
| RRN: | | | Tech Spec Ref |
| QA Codes: | | Sect XI Class: | |
| Tools Needed: | | | |

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Work Plan/Instructions reviewed. Planner: HANBLIN RICH CON
LINE SUPERVISOR: 12131012131 NAME: DATE: 2/28/97

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Plant Conditions: COLD SHUTDOWN Ignition Control Permit: N
Other Conditions: Transient Combustible Permit: N
Fire Barrier Penetration Permit: N RWP: N
Equipment Isolation Required: 2-26-97 FME: Y
Isolation Tag Series #:

Operability Pre-Test Complete: Equipment Isolation as requested:
Permission granted to perform Work:
Ops DSS Notification Req: Y Ops DSS Signature: Date: 2/28/97
=====

Special Notification:

Number of Steps: 001
Acct #: 00 - 00000 - 1200141 - 00000
MFG Code: WEST Tech Manual Cntl #:

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* WORK ORDER CLOSEOUT *

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Group Head Signature: Date: 3/8/96

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ORIGINAL ***** PBNF ***** WD No: 9612057001
WO Priority: 4 * UNIT 1 * MWO * UNIT 1 *
Resp Group: MTN ***** STEP DETAIL ***** Step Print: 02/26/97
Equipment: Y-06-03 System: Y HP Zone:
Equipment Name: PWR TO IMOB-71 AND IMOB-90
Physical Location: 44/CB/CR WEST
Sequence No: 01
Short Desc: REPLACE BREAKER
Need Date
Sched Start Date:

PLANNED:

WORK PROCEDURES:

Crew: ME
Shift: D
Class: 420

Work Plan Description:
REPLACE BREAKER USING ATTACHED WORK PLAN
ALL QC, FME, AND PMT ADDRESSED IN ATTACHED WORK PLAN.

QC REVIEW REQUIRED: N

DATE: 2/28/97

WORK PERFORMED: Replaced Brkr IAW Work PLAN

TESTED FINE

MTE: NCMM-8 QAR: 13056R(BKR)
MCTS-5

ACTUAL USED: CREW: 2.0
SHIFT: 2.0
WORKER CLASS: 2.0
NUMBER OF WORKERS: 2.0
TOTAL HOURS: 2.0
TTL EXPOSURE/STEP (HREM):

PARTS USED LIST ATTACHED: Y / ☒

WO TAGS REMOVED: ☒ / ☒ / NA

WORK COMPLETE DATE: 2/28/97

EMPLOYEE NUMBER: 1112201

EMPLOYEE NAME: ---

* WORK COMPLETED *

Cause Failure Code: PM / SVC / NRM / Des

As Found-Out of Spec: Y / ☒ / NA Machine History Review Required: Y / N

Failed Component:

Corrective Action: NA/RE/

Downtime: --- hrs

LINE SUPERVISOR: 12181013131

NAME: ---

DATE: 3/1/97

* EQUIPMENT RETURN TO SERVICE *

Operability Post Testing: Operational

EQUIP. TAKEN OOS - DATE: --- TIME: --- RETURN DATE: --- TIME: ---

Operability Procs Performed: None

NON OPS SUPV: 1111111

NAME: ---

DATE: ---

DSS: 12181013131

NAME: ---

DATE: 3/7/97