Setup Valve HV-CA1-10 for Calibration

Tank Farm Plant Operating Procedure

242A Evaporator

USQ # Routine Maintenance

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1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure provides instructions for bypassing the interlocks for Valve HV-CA1-10 to be repositioned for calibration.

1.2 Scope

This procedure involves using the MCS to bypass interlocks for Valve HV-CA1-10 when the P-C106 seal water/de-entrainer spray system is not already in operation.

2.0 INFORMATION

NONE

3.0 PRECAUTIONS AND LIMITATIONS

3.1 Personnel Safety

Hazards associated with performance of this procedure are addressed by the General Hazards Analysis (GHA).

3.2 Radiation and Contamination Control

3.2.1 When performed without a work package, this procedure is limited to radiological areas and work activities permitted by a general Radiological Work Permit (RWP).

3.2.2 When work is performed in or when work will result in a high contamination, high radiation, or an airborne radioactivity area, an approved work package must be developed which is reviewed by Radiological Control per ALARA work planning procedure TFC-ESHQ-RP_RWP-C-03.

4.0 PREREQUISITES

4.1 Field Preparation

4.1.1 ENSURE 100 psi Process Air is available to re-position HV-CA1-10.

4.1.2 ENSURE Instrument Air is available for dip tube operation in order to obtain an accurate C-100 Tank Level percentage.
5.0 PROCEDURE

5.1 Use MCS and Install False Signal on WFIC-C100

NOTE - Calibration of Valve HV-CA1-10 requires the valve to be re-positioned. Certain interlocks need to be satisfied in order to re-position Valve HV-CA1-10.

5.1.1 OBTAIN permission to bypass specified interlocks through MCS.

5.1.2 SELECT Graphic 65.

5.1.3 CONFIRM interlocks for operation of pump P-C106 are clear.

5.1.3.1 IF status of interlocks in Step 5.1.3 are correct (clear), GO TO Section 5.2.

5.1.3.2 IF any of the following interlocks are active, NOTIFY Shift Manager.
   • RXA-RC3-1/RI-RC3-1
   • PDI-FC4/5.

NOTE - Each of the following tasks will bypass one interlock.

5.1.3.3 IF interlock WFIC-C100 is active, and Instrument Air is in service, BYPASS WFIC-C100 per Steps 5.1.3.4 through 5.1.3.15.

5.1.3.4 SET WFIC-C100 (F23/1) TK-C100 WT FACTOR to LOOP MAINTENANCE.

5.1.3.5 ENSURE SB block "0" is backlit.

5.1.3.6 INSERT AND TURN Password Override Key clockwise until red "PASSWORD OVERRIDE" light illuminates.

5.1.3.7 PRESS "SELECT", "1", "3".

5.1.3.8 CONFIRM "13" is backlit.

5.1.3.9 PRESS "MODIFY" once.
5.1 Use MCS and Install False Signal on WFIC-C100 (Cont.)

5.1.3.10 CONFIRM "13" reads "LOCAL".

5.1.3.11 PRESS "SELECT", "1", "4".

5.1.3.12 CONFIRM "14" is backlit.

5.1.3.13 PRESS "MODIFY", "3", "0", "Enter".

5.1.3.14 CONFIRM "14" reads "30".

5.1.3.15 CONFIRM on Graphic 065, WFIC-C100 interlock has changed to clear.
5.2 Use MCS and Install False Signal on PI-CA1-20

NOTE - Calibration of Valve HV-CA1-10 requires the valve to be re-positioned. Certain interlocks need to be satisfied in order to re-position Valve HV-CA1-10.

5.2.1 OBTAIN permission to bypass specified interlocks through MCS.

5.2.2 SET PI-CA1-20 (F6) CONDENSATE RECYCLE OUTLET PRESSURE to LOOP MAINTENANCE.

5.2.3 INSERT AND TURN Password Override Key clockwise until red "PASSWORD OVERRIDE" light illuminates.

5.2.4 PRESS "SELECT", "1", "3".

5.2.5 CONFIRM "13" for "REMOTE" is backlit.

5.2.6 PRESS "MODIFY" once.

5.2.7 CONFIRM "13" reads "LOCAL".

5.2.8 PRESS "SELECT", "1", "4".

5.2.9 CONFIRM "14" is backlit.

5.2.10 PRESS "MODIFY", "8", "5", "Enter".

5.2.11 CONFIRM "14" reads "85".
5.3 Use MCS and Install False "CF-ON" for P-C-106

NOTE - Interlocks associated with stopping/preventing P-C106 from running are listed on Graphic 065. They also need to be clear to run Pump P-C106.

- Pump P-C-106 will revert to a backlit "Shutdown" condition when startup is attempted even in "Manual Over-ride" unless an accepted backlit "CF-ON" false indication is applied.

5.3.1 OBTAIN permission to bypass specified interlocks through MCS.

5.3.2 ENSURE switchgear for Pump P-C-106 located on MCC-1 is OPEN/OFF.

5.3.3 SELECT P-C106 (G18/10, F27) CONDENSATE RECYCLE PUMP.

5.3.4 IF "SHUTDOWN" is backlit, PRESS "CMD 2" twice to reset.

5.3.5 SET P-C106 (G18/10, F27) CONDENSATE RECYCLE PUMP to MANUAL OVERRIDE.

5.3.6 SET P-C106 (G18/10, F27) CONDENSATE RECYCLE PUMP to CF-ON.

5.3.7 CONFIRM interlocks for HV-CA1-10 SEAL WATER VALVE on Graphic 065, are clear (no longer backlit).

5.3.7.1 IF interlocks for HV-CA1-10 SEAL WATER VALVE on Graphic 065, are not clear, NOTIFY Shift Manager.

5.3.8 SELECT HV-CA1-10 (G12/15, F6) SEAL WATER VALVE.

5.3.9 IF "CHGSTATE" is backlit, PRESS "CMD 2" twice to reset.

5.3.10 SET HV-CA1-10 (G12/15, F6) SEAL WATER VALVE to "CF-PC".

5.3.11 SET HV-CA1-10 (G12/15, F6) SEAL WATER VALVE to "CF-FRW".

5.3.12 REPEAT Steps 5.3.10 through 5.3.11 as necessary to complete calibration.
5.4 Use MCS and Remove False "CF-ON" for P-C106

5.4.1 SET P-C106 (G18/10, F27) CONDENSATE RECYCLE PUMP to "CF-OFF" status.

5.4.2 PRESS "OVER-RIDE" twice to clear override.

5.4.3 CONFIRM P-C106 (G18/10, F27) CONDENSATE RECYCLE PUMP reads only "MANUAL".

5.4.4 CONFIRM "P-C106 RUNNING" interlock is active on Graphic 065.
5.5 Use MCS and Remove False Signal on WFIC-C100

5.5.1 IF a False Signal was not installed on WFIC-C100 per Section 5.1, GO TO Section 5.6.

5.5.2 IF a False Signal was installed on WFIC-C100 per Section 5.1, PERFORM the following:

5.5.2.1 SET WFIC-C100 (F23) TK-C100 WT FACTOR to LOOP MAINTENANCE.

5.5.2.2 ENSURE SB block "0" is backlit.

5.5.2.3 INSERT AND TURN Password Override Key in slot on right-hand side of MCS keyboard until red "PASSWORD OVERRIDE" light illuminates.

5.5.2.4 PRESS "SELECT", "1", "3".

5.5.2.5 CONFIRM "13" is backlit.

5.5.2.6 PRESS "MODIFY" once.

5.5.2.7 CONFIRM "13" reads "REMOTE".

5.5.2.8 CONFIRM "14" has returned to a normal value.
5.6 Use MCS and Remove False Signal on PI-CA1-20

5.6.1 SET PI-CA1-20 (F6) CONDENSATE RECYCLE OUTLET PRESSURE to LOOP MAINTENANCE.

5.6.2 INSERT AND TURN Password Override Key into slot on right-hand side of MCS keyboard until red "PASSWORD OVERRIDE" light illuminates.

5.6.3 PRESS "SELECT", "1", "3".

5.6.4 CONFIRM "13" for "LOCAL" is backlit.

5.6.5 PRESS "MODIFY" once.

5.6.6 CONFIRM "13" reads "REMOTE".

5.6.7 CONFIRM "14" has returned to a normal value.

5.6.8 CONFIRM PI-CA1-20 interlock is active on Graphic 065.

5.6.9 TURN Password Override Key counter clockwise AND REMOVE from MCS keyboard.

5.6.10 NOTIFY Shift Manager calibration is complete.

5.7 Records

No records are generated during the performance of this procedure.