TVA

August 30, 2010

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Watts Bar Nuclear Plant, Unit 2
NRC Docket No. 50-391

Subject: **Watts Bar Nuclear Plant (WBN) Unit 2 – Submittal of Pre-op Test Instruction**

The following approved Watts Bar Unit 2 Pre-op Test Instruction is enclosed:

PTI NUMBER	Rev.	TITLE
2-PTI-030A-01	0	Unit 2 Auxiliary Building ESF Coolers

If you have any questions, please contact Pete Olson at (423) 365-3294.

Sincerely,

Masoud Bajestani
Watts Bar Unit 2 Vice President

U.S. Nuclear Regulatory Commission
Page 2
August 30, 2010

cc (Enclosures):

U. S. Nuclear Regulatory Commission
Region II
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, Georgia 30303-1257

NRC Resident Inspector Unit 2
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

WATTS BAR NUCLEAR PLANT
UNIT 2 STARTUP

TITLE: __Unit 2 Auxiliary Building ESF Coolers__

Instruction No: __2-PTI-030A-01__

Revision No: __0000__

PREPARED BY: __Keith Jones__ _Kirk Jones_ DATE __7-29-10__
PRINT NAME/ SIGNATURE

REVIEWED BY: __Bethany Merriman__ _[signature]_ DATE __7-29-10__
PRINT NAME/ SIGNATURE

INSTRUCTION APPROVAL

JTG MEETING NO: _2-10-008_

JTG CHAIRMAN: _[signature]_ DATE _8/20/10_

APPROVED BY: _[signature]_ DATE _8/20/10_
PREOPERATIONAL STARTUP MANAGER

TEST RESULTS APPROVAL

JTG MEETING NO: _____

JTG CHAIRMAN: _____ DATE _____

APPROVED BY: _____ DATE _____
PREOPERATIONAL STARTUP MANAGER

SMP-8.0, R3, Administration of Preoperational Test Instructions, Appendix B

Revision Log

Revision or Change Number	Effective Date	Affected Page Numbers	Description of Revision/Change
0000	8/20/10	ALL	This procedure is written using the Unit 1 PTI-030C-01 Rev 0 as a guide. Turbine Driven Auxiliary Feedwater Pump Room Exhaust Fan tests moved to new instruction 2-PTI-030D-01.

Table of Contents

Table of Contents (continued)

Table of Contents (continued)

Data Package: Page ____ of ____   **Date _____**

1.0   INTRODUCTION

1.1   Test Objectives

A.   Demonstrate the proper operation of the Unit 2 Auxiliary Building Engineered Safety Features (ESF) Room/Area Coolers.

B.   Demonstrate the proper operation of the Essential Raw Cooling Water (ERCW) Flow Control Valves associated with their respective ESF Room/Area Coolers.

C.   Demonstrate the proper operation of the High Energy Line Break (HELB) detection equipment and alarms.

1.2   Scope

A.   This test demonstrates the operability of the Unit 2 Auxiliary Building ESF Room/Area Coolers and Fans to ensure the following:

1.   The required ESF coolers start upon receipt of their associated room/area Hi-Temperature signal.

2.   The required Unit 2 ESF coolers start upon receipt of a simulated Auxiliary Building Isolation (ABI) signal and stop upon reset of ABI signal. (See also 1.2D)

3.   The ESF coolers can be controlled manually by local handswitch.

4.   The ESF room/area coolers maintain desired air flows.

5.   The required Unit 2 Auxiliary Building ESF cooler ERCW supply valves open in a maximum of 10 seconds upon start of their associated cooler.

NOTE
ERCW flowrates are verified during performance of 2-PTI-067-02, ERCW System Flow Balance.

B.   The required HELB indications and annunciations respond appropriately upon reciept of their associated room/area Hi-Temperature signal.

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1.2   Scope (continued)

C.   ESF pump room cooler start upon associated Pump Start signal logic is verified when each associated ESF pump is tested as shown below:

Pump Room Cooler	Instruction Testing Cooler Auto Start upon Pump Start
RHR Pump 2A-A Room Cooler RHR Pump 2B-B Room Cooler	2-PTI-074-01 RESIDUAL HEAT REMOVAL SYSTEM
SIS Pump 2A-A Room Cooler	2-PTI-063-5A SAFETY INJECTION SYSTEM PUMP/VALVE LOGIC TEST
SIS Pump 2B-B Room Cooler	2-PTI-063-5B SAFETY INJECTION SYSTEM PUMP/VALVE LOGIC TEST
CCP 2A-A Room Cooler CCP 2B-B Room Cooler	2-PTI-062-01 CHARGING AND LETDOWN LOGIC TEST
CS Pump 2A-A Room Cooler CS Pump 2B-B Room Cooler	2-PTI-072-01 CONTAINMENT SPRAY PUMP/VALVE LOGIC TEST

D.   To ensure sufficient test overlap, ESF cooler start upon Auxiliary Building Isolation signal is performed in the Integrated Safeguards Tests as shown below:

Room Cooler	Instruction Testing Cooler Auto Start upon ABI
692 Penetration Room Cooler 2A-A 713 Penetration Room Cooler 2A-A Pipe Chase Cooler 2A-A	2-PTI-262-01 INTEGRATED SAFEGUARDS TEST
692 Penetration Room Cooler 2B-B 713 Penetration Room Cooler 2B-B Pipe Chase Cooler 2B-B	2-PTI-262-02 INTEGRATED SAFEGUARDS TEST

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2.0   REFERENCES

2.1   Performance References

A.   SMP-9.0, Rev 0, Conduct of Test

B.   GTM-05, HVAC Air Balance (Draft)

C.   0-SOI-67.01, Essential Raw Cooling Water System (Draft)

2.2   Developmental References

A.   Final Safety Analysis Report, Amendment 99

  1.   FSAR Section 9.2.1, Essential Raw Cooling Water (ERCW)

  2.   FSAR Section 9.4.5.3, Auxiliary Building Safety Features (ESF) Equipment Coolers

  3.   FSAR Table 14.2-1, Sheets 4 & 5, Essential Raw Cooling Water System Test Summary

  4.   FSAR Table 14.2-1, Sheets 36 & 37, Auxiliary Building Ventilation System

B.   Drawings

  1.   Flow Diagrams

    a.   2-47W866-8, Rev 0, HEATING, COOLING & VENTILATING AIR FLOW
DRA 54923-070, Rev 0
DRA 54923-071, Rev 0

    b.   1-47W845-7, Rev 14, FLOW DIAGRAM - ESSENTIAL RAW COOLING WATER SYSTEM

    c.   2-47W845-7, Rev 0, FLOW DIAGRAM - ESSENTIAL RAW COOLING WATER SYSTEM

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2.2   Developmental References (continued)

2.   Electrical

a.   1-45W600-30-4, Rev 26, VENTILATING SYSTEM
      SCHEMATIC DIAGRAM

b.   2-45W600-57-37, SEPERATION & MISC AUX RELAYS SCHEMATIC
      DIAGRAM, [Later]
      DRA 54172-177, Rev 0
      DRA 54172-178, Rev 0
      DRA 54172-179, Rev 0
      DRA 54172-464, Rev 0
      DRA 54172-465, Rev 0
      DRA 54172-466, Rev 0
      FCR 55967-A, Rev 0

c.   2-45W756-1, Rev 0, 480V CONT & AUX BLDG VT BD 2A1-A SINGLE
      LINE

d.   2-45W756-5, Rev 0, 480V CONT & AUX BLDG VT BD 2B1-A SINGLE
      LINE

e.   2-45W760-30-17, Rev 0, VENTILATION SYSTEM
      SCHEMATIC DIAGRAM

f.   2-45W760-30-18, Rev 0, VENTILATION SYSTEM
      SCHEMATIC DIAGRAM
      DRA 53290-049, Rev 0
      DRA 53290-066, Rev 0

g.   2-45W760-30-19, Rev 0, VENTILATION SYSTEM
      SCHEMATIC DIAGRAM

h.   2-45W760-30-20, Rev 0, VENTILATION SYSTEM
      SCHEMATIC DIAGRAM
      DRA 53290-051, Rev 0
      DRA 53290-067, Rev 0

i.   45N1688-1 (AC), Rev MM, SEPERATION AUX RELAY PNL 1-R-73
      CONNECTION DIAGRAM

j.   45N1688-4 (AC), Rev AAD, SEPERATION AUX RELAY PNL 1-R-73
      CONNECTION DIAGRAM

k.   45N1693-1 (AC), Rev SS, SEPERATION AUX RELAY PNL 1-R-78
      CONNECITON DIAGRAM

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2.2   Developmental References (continued)

        l.   45N1693-4 (AC), Rev, AAB, SEPERATION AUX RELAY PNL 1-R-78 CONNECTION DIAGRAM

        m.   45W2770-1, Rev 18, 480V CONT. & AUX BLDG VENT BD 2A1-A CONNECTION DIAGRAM

        n.   45W2770-2, Rev 6, 480V CONT. & AUX BLDG VENT BD 2A1-A CONNECTION DIAGRAM

        o.   45W2772-2, Rev 13, 480V CONT. & AUX BLDG VENT BD 2B1-B CONNECTION DIAGRAM

        p.   45W2772-3, Rev 14, 480V CONT. & AUX BLDG VENT BD 2B1-B CONNECTION DIAGRAM

    3.   Mechanical

        a.   2-47W600-188, Rev 0, INSTRUMENTS AND CONTROLS
            DRA 53788-041, Rev 0
            DRA 53788-042, Rev 0
            DRA 53788-043, Rev 0
            DRA 53788-044, Rev 0
            DRA 53788-045, Rev 0
            DRA 53788-046, Rev 0
            DRA 53788-047, Rev 0

        b.   47W920-1 (AC), Rev Y, HEATING, VENTILATING AND AIR CONDITIONING

        c.   47W920-2 (AC), Rev R, HEATING, VENTILATING AND AIR CONDITIONING

        d.   47W920-4 (AC), Rev S, HEATING VENTILATING AND AIR CONDITIONING

    4.   Logic/Control

        a.   2-47W611-65-1, Rev 2, ELECTRICAL LOGIG DIAGRAM EMERGENCY GAS TREATMENT SYSTEM

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2.2   Developmental References (continued)

5.   Other

a.   47B601-55-25 (AC), Rev D, ELECTRICAL INSTRUMENT TABULATION

b.   2-45B655-6A, Rev 0, MAIN CONTROL ROOM ANNUNCIATOR INPUTS WINDOW BOX XA-55-6A

c.   2-45B655-E6A, Rev 0, ANNUNCIATOR WINDOW BOX XA-55-6A ENGRAVING

C.   Documents

a.   SMP-4.0, Rev 2, System Completion and Turnover

b.   SMP-8.0, Rev 3, Administration of Preoperational Test Procedures

c.   GTM-03, HVAC Gravity Dampers, Fire Dampers, and Fire Doors, (Draft)

d.   WBN2-30AB-4001, Rev 1, Auxiliary Building Heating, Ventilation, Air Conditioning System (30, 31, 44)

e.   WBN2-67-4002, Rev 1, Essential Raw Cooling Water System, System 67

f.   G-37, Rev 4, Testing and Balancing of HVAC Systems During Installation, Modification, and Maintenance

g.   2-TSD-030A-01, Rev 1, Select Auxiliary Building ESF Coolers and HELB Detection

h.   0-PI-OPS-1.1, Rev 3, Jumper Control Process

i.   2-PTI-067-02, ERCW System Flow Balance (Draft)

j.   2-PTI-074-01, Residual Heat Removal System (Draft)

k.   2-PTI-063-5A, Safety Injection System Pump/Valve Logic Test (Draft)

l.   2-PTI-063-5B, Safety Injection System Pump/Valve Logic Test (Draft)

m.   2-PTI-062-01, Charging and Letdown Logic Test (Draft)

n.   2-PTI-072-01, Containment Spray Pump/Valve Logic Test (Draft)

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2.2   Developmental References (continued)

      o.   2-PTI-262-01, Integrated Safeguards Test (Draft)

      p.   2-PTI-262-02, Integrated Safeguards Test (Draft)

      q.   Scaling and Setpoint Documents

          (1) SSD-2-TS-30-175, RHR Pump Room Cooler Fan A-A, [Later]

          (2) SSD-2-TS-30-176, RHR Pump Room Cooler Fan B-B, [Later]

          (3) SSD-2-TS-30-177, CS Pump Room Cooler Fan A-A, [Later]

          (4) SSD-2-TS-30-178, CS Pump Room Cooler Fan B-B, [Later]

          (5) SSD-2-TS-30-179, SIS Pump Room Cooler Fan B-B, [Later]

          (6) SSD-2-TS-30-180, SIS Pump Room Cooler Fan A-A, [Later]

          (7) SSD-2-TS-30-182, Charging Pump Room Cooler Fan B-B, [Later]

          (8) SSD-2-TS-30-183, Charging Pump Room Cooler Fan A-A, [Later]

          (9) SSD-2-TS-30-186A, Penetration Room Cooler, El 692, Fan A-A, [Later]

          (10) SSD-2-TS-30-186B, Penetration Room Cooler, El 692, Fan A-A, [Later]

          (11) SSD-2-TS-30-187A, Penetration Room Cooler, El 692, Fan B-B, [Later]

          (12) SSD-2-TS-30-187B, Penetration Room Cooler, El 692, Fan B-B, [Later]

          (13) SSD-2-TS-30-196A, Penetration Room Cooler, El 713, Fan A-A, [Later]

          (14) SSD-2-TS-30-196B, Penetration Room Cooler, El 713, Fan A-A, [Later]

          (15) SSD-2-TS-30-197A, Penetration Room Cooler, El 713, Fan B-B, [Later]

          (16) SSD-2-TS-30-197B, Penetration Room Cooler, El 713, Fan B-B, [Later]

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2.2   Developmental References (continued)

(17) SSD-2-TS-30-201A, Pipe Chase Coolers Fan 2A-A, [Later]

(18) SSD-2-TS-30-201B, Pipe Chase Coolers Fan 2A-A, [Later]

(19) SSD-2-TS-30-202A, Pipe Chase Coolers Fan 2B-B, [Later]

(20) SSD-2-TS-30-202B, Pipe Chase Coolers Fan 2B-B, [Later]

(21) SSD-2-TS-30-5235A, CVCS Letdown Heat Exchanger Room Hi Temperature, [Later]

(22) SSD-2-TS-30-5235B, CVCS Letdown Heat Exchanger Room Hi Temperature, [Later]

(23) SSD-2-TS-30-5236A, RHR Pump Room A Hi Temperature, [Later]

(24) SSD-2-TS-30-5236B, RHR Pump Room A Hi Temperature, [Later]

(25) SSD-2-TS-30-5237A, RHR Pump Room B Hi Temperature, [Later]

(26) SSD-2-TS-30-5237B, RHR Pump Room B Hi Temperature, [Later]

(27) SSD-2-TS-30-5238A, RHR Heat Exchanger Room A Hi Temperature, [Later]

(28) SSD-2-TS-30-5238B, RHR Heat Exchanger Room A Hi Temperature, [Later]

(29) SSD-2-TS-30-5239A, RHR Heat Exchanger Room B Hi Temperature, [Later]

(30) SSD-2-TS-30-5239B, RHR Heat Exchanger Room B Hi Temperature, [Later]

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3.0   **PRECAUTIONS AND LIMITATIONS**

A.   Standard precautions shall be followed for working around energized electrical equipment in accordance with TVA Safety Manual Procedure 1021.

B.   Steps may be repeated if all components cannot be tested in a step. However, if the test has been exited, prerequisite steps must be re-verified and a Chronological Test Log (CTL) entry made.

C.   Component tags and labels may differ slightly (abbreviations, punctuation, letter case, etc.) from the description given in this test. If this situation occurs, it shall NOT be considered a test deficiency or procedure deviation. It shall be documented in the CTL and reconciled by way of a plant labeling request or drawing discrepancy or single-line date typo change in the procedure as appropriate.

D.   All wires removed/lifted from a terminal shall be identified and taped or covered with an insulator to prevent personnel or equipment hazard and possible spurious initiations. The wires should be grouped together and labeled with the work implementing document number that required them to be lifted if left unattended.

E.   All open problems are to be tracked by a corrective action document and entered on the appropriate system punchlist.

F.   Problems identified during the test shall be annotated on the Chronological Test Log (CTL) from SMP-9.0 including a description of the problem, the procedure step when/where the problem was identified, corrective action steps taken to resolve the problem, and the number of the corrective action document, if one was required.

G.   Observe all Radiation Protection (RP) requirements when working in or near contaminated areas.

H.   All terminal points and connections are to be considered energized. Instrumentation must be used to determine if the circuits are de-energized.

I.   Retermination of lifted leads requires that their restored bend radius is equal to or greater than the as found condition.

J.   Vibration testing will be performed during performance of GTM-05, HVAC Air Balance.

K.   Backdraft damper testing will be performed during performance of GTM-03, HVAC Gravity Dampers, Fire Dampers, and Fire Doors.

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3.0   PRECAUTIONS AND LIMITATIONS (continued)

L.   During the performance of this procedure visual observation of air handlers and ductwork is required. This includes steady-state and transient operations with visual confirmation that vibration and motor temperatures are not excessive.

M.   Transients include fan starts and stops, water hammers or other fluid transients. Verification that transient conditions are not causing excessive vibration may be accomplished by observation during the transient or verification subsequent to the transient that resultant damage has not occurred.

N.   If the vibration is determined to be excessive the Test Engineer shall initiate a Test Deficiency Notice (TDN) and notify Nuclear Engineering (NE).

O.   Portions of this test will simulate a high ambient room temperature using an electric heatgun. This activity shall be performed slowly to prevent damage to the temperature switch sensing bulb.

P.   Test personnel should exercise caution to prevent damage to the cooling coil fins.

Q.   Portions of this test will require valve stroke timing locally at the valve. Local stroke valve timing begins with the initiating signal and is concluded with the completion of valve stem movement.

Data Package: Page ____ of ____   Date _____

4.0 PREREQUISITE ACTIONS

4.1 Preliminary Actions

NOTE
Prerequisite action steps may be performed in any order with Test Director approval.

[1] **VERIFY** the test/performance copy of this Preoperational Test Instruction (PTI) is the current revision and as needed, each test person assisting in this test has the current revision.   _____

[2] **OBTAIN** copies of the applicable forms from the latest revision of SMP-9.0, **AND**

    ATTACH to this PTI for use during the performance of this PTI.   _____

[3] **ENSURE** changes to the references listed on "Test Procedures/Instructions Reference Review," Appendix A, have been reviewed and determined NOT to adversely affect the test performance.   _____

[4] **VERIFY** current revisions and change paper for referenced drawings have been reviewed and determined NOT to adversely affect the test performance, **AND**

    ATTACH documentation of current drawing revision numbers and change paper that were reviewed to the data package.   _____

Data Package: Page ____ of ____   Date _____

4.1   Preliminary Actions (continued)

[5]   **EVALUATE** open punch list items on Watts Bar Integrated Task Equipment List (WITEL), **AND**

ENSURE that they will NOT adversely affect the test performance.

SubSection   6.1

SubSection   6.2   _____

SubSection   6.3   _____

SubSection   6.4   _____

SubSection   6.5   _____

SubSection   6.6   _____

SubSection   6.7   _____

SubSection   6.8   _____

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

SubSection   6.15   _____

SubSection   6.16   _____

SubSection   6.17   _____

SubSection   6.18   _____

SubSection   6.19   _____

SubSection   6.20   _____

SubSection   6.21   _____

SubSection   6.22   _____

SubSection   6.23   _____

SubSection   6.24   _____

SubSection   6.25   _____

SubSection   6.26   _____

SubSection   6.27   _____

SubSection   6.28   _____

SubSection   6.29   _____

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4.1   Preliminary Actions (continued)

[6]   **ENSURE** required Component Testing has been completed prior to start of test.

SubSection   6.1   _____

SubSection   6.2   _____

SubSection   6.3   _____

SubSection   6.4   _____

SubSection   6.5   _____

SubSection   6.6   _____

SubSection   6.7   _____

SubSection   6.8   _____

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

SubSection   6.15   _____

SubSection   6.16   _____

SubSection   6.17   _____

SubSection   6.18   _____

SubSection   6.19   _____

SubSection   6.20   _____

SubSection   6.21   _____

SubSection   6.22   _____

SubSection   6.23   _____

SubSection   6.24   _____

SubSection   6.25   _____

SubSection   6.26   _____

SubSection   6.27   _____

SubSection   6.28   _____

SubSection   6.29   _____

Data Package: Page ____ of ____ **Date _____**

4.1   Preliminary Actions (continued)

[7]   **ENSURE** outstanding Design Change Notices (DCNs),
Engineering Document Construction Releases (EDCRs) or
Temporary Alterations (TAs) do NOT adversely impact testing.

SubSection 6.1

SubSection 6.2   _____

SubSection 6.3   _____

SubSection 6.4   _____

SubSection 6.5   _____

SubSection 6.6   _____

SubSection 6.7   _____

SubSection 6.8   _____

SubSection 6.9   _____

SubSection 6.10   _____

SubSection 6.11   _____

SubSection 6.12   _____

SubSection 6.13   _____

SubSection 6.14   _____

SubSection 6.15   _____

SubSection 6.16   _____

SubSection 6.17   _____

SubSection 6.18   _____

SubSection 6.19   _____

SubSection 6.20   _____

SubSection 6.21   _____

SubSection 6.22   _____

SubSection 6.23   _____

SubSection 6.24   _____

SubSection 6.25   _____

SubSection 6.26   _____

SubSection 6.27   _____

SubSection 6.28   _____

SubSection 6.29   _____

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4.1   Preliminary Actions (continued)

[8]   **ENSURE** a review of outstanding Clearances has been
coordinated with Operations for impact to the test
performance, **AND**

RECORD in Appendix B, Temporary Condition Log, if
required.   _____

[9]   **ENSURE** GTM-05, HVAC Air Balance, has been submitted to
the JTG for concurrence that it adequately satisfies the
requirements of this instruction.

JTG Meeting: _____   _____

[10]   **ATTACH** completed GTM-05 HVAC Air Balance package for
system 30A.   _____

[11]   **ENSURE** plant instruments required for test performance,
listed on Appendix C, Permanent Plant Instrumentation Log,
have been placed in service and are within their calibration
interval.

SubSection	6.1	_____
SubSection	6.2	_____
SubSection	6.3	_____
SubSection	6.4	_____
SubSection	6.5	_____
SubSection	6.6	_____
SubSection	6.7	_____
SubSection	6.8	_____
SubSection	6.9	_____
SubSection	6.10	_____
SubSection	6.11	_____
SubSection	6.12	_____
SubSection	6.13	_____
SubSection	6.14	_____
SubSection	6.29	_____

[12]   **ENSURE** components contained within the boundaries of this
test are under the jurisdictional control of Preoperational
Startup Engineering (PSE) in accordance with SMP-4.0.   _____

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4.1   Preliminary Actions (continued)

[13]   **PERFORM** a pretest walkdown on equipment to be tested to ensure no conditions exist that will impact test performance.

SubSection   6.1

SubSection   6.2   _____

SubSection   6.3   _____

SubSection   6.4   _____

SubSection   6.5   _____

SubSection   6.6   _____

SubSection   6.7   _____

SubSection   6.8   _____

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

SubSection   6.15   _____

SubSection   6.16   _____

SubSection   6.17   _____

SubSection   6.18   _____

SubSection   6.19   _____

SubSection   6.20   _____

SubSection   6.21   _____

SubSection   6.22   _____

SubSection   6.23   _____

SubSection   6.24   _____

SubSection   6.25   _____

SubSection   6.26   _____

SubSection   6.27   _____

SubSection   6.28   _____

SubSection   6.29   _____

[14]   **CONDUCT** a pretest briefing with Test and Operations personnel in accordance with SMP-9.0.   _____

[15]   **ENSURE** that communications are available for areas where testing is to be conducted.   _____

Data Package: Page ____ of ____   **Date _____**

4.2   Special Tools, Measuring and Test Equipment, Parts, and Supplies

[1]   **OBTAIN** the following M&TE or equivalent, **AND**

COMPLETE the following table:

DESCRIPTION	MINIMUM RANGE	ACTUAL RANGE	REQUIRED ACCURACY	M&TE ID NUMBER	CALIBRATION DUE DATE
Digital Thermometer with surface Temperature Probe	0-200°F		±3°F		
Stopwatch	N/A		±0.5 seconds		

_____

[2]   **ENSURE** the following are available:

A.   Handheld Jumper   _____

B.   Clean cloth soaked in cool water (to cool temperature elements)   _____

C.   Electric heat gun (to heat temperature elements)   _____

Data Package: Page _____ of _____   Date _____

4.2   Special Tools, Measuring and Test Equipment, Parts, and Supplies (continued)

[3]   **ENSURE** M&TE calibration due dates will support the completion of this test performance.

SubSection   6.1   _____

SubSection   6.2   _____

SubSection   6.3   _____

SubSection   6.4   _____

SubSection   6.5   _____

SubSection   6.6   _____

SubSection   6.7   _____

SubSection   6.8   _____

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

SubSection   6.15   _____

SubSection   6.16   _____

SubSection   6.17   _____

SubSection   6.18   _____

SubSection   6.19   _____

SubSection   6.20   _____

SubSection   6.21   _____

SubSection   6.22   _____

SubSection   6.23   _____

SubSection   6.24   _____

SubSection   6.25   _____

SubSection   6.26   _____

SubSection   6.27   _____

SubSection   6.28   _____

SubSection   6.29   _____

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4.3   Field Preparations

[1]   **ENSURE** applicable portions of Appendix D, Electrical Lineup, have been performed.

SubSection   6.1

SubSection   6.2   _____

SubSection   6.3   _____

SubSection   6.4   _____

SubSection   6.5   _____

SubSection   6.6   _____

SubSection   6.7   _____

SubSection   6.8   _____

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

SubSection   6.15   _____

SubSection   6.16   _____

SubSection   6.17   _____

SubSection   6.18   _____

SubSection   6.19   _____

SubSection   6.20   _____

SubSection   6.21   _____

SubSection   6.22   _____

SubSection   6.23   _____

SubSection   6.24   _____

SubSection   6.25   _____

SubSection   6.26   _____

SubSection   6.27   _____

SubSection   6.28   _____

SubSection   6.29   _____

Data Package: Page _____ of _____   **Date _____**

4.3   Field Preparations (continued)

[2]   **ENSURE** applicable portions of Appendix E, Switch Lineup, have been performed:

SubSection 6.1	_____
SubSection 6.2	_____
SubSection 6.3	_____
SubSection 6.4	_____
SubSection 6.5	_____
SubSection 6.6	_____
SubSection 6.7	_____
SubSection 6.8	_____
SubSection 6.9	_____
SubSection 6.10	_____
SubSection 6.11	_____
SubSection 6.12	_____
SubSection 6.13	_____
SubSection 6.14	_____

Data Package: Page ____ of ____   **Date _____**

4.3   Field Preparations (continued)

[3]   **VERIFY** there is no Auxiliary Building Isolation (ABI) or High Radiation in Refuel Area Signals present by:

A.   The ABI window **NOT** lit on either the TR-A or TR-B Master Isolation Signal Status Panels (Window 5 on 1-XX-55-6C and 1-XX-55-6D) on 1-M-6.

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

B.   No high rad alarm for 0-RM-90-102 and -103, annunciator window 184B on 0-M-12.

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

Data Package: Page ____ of ____   **Date _____**

4.3   Field Preparations (continued)

NOTES
1)   Any Annunciator points associated with 2-MUX-55-12 and 2-MUX-55-13 ONLY have master switches at the bottom of each terminal strip.
2)   All points associated with 2-TBK-55-25, 2-TBK-55-26, 2-TBK-55-27, and 2-TBK-55-28 will not have individual switches or a master switch.

[4]   **ENSURE** System 55, Annunciator and Sequential Events Recording System, applicable TBK switches are ON, the applicable Master switches are ON, and window software input(s) are ENABLED for the following Annunciator windows:

A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK (SubSection 6.29)   _____

[5]   **VERIFY** the following systems are operational and have been placed in service to the extent necessary to perform this test:

A.   System 214, C & A Bldg Vent Boards (480V AC).   _____

B.   System 032, Control Air   _____

C.   System 235, 120V AC Vital Instrument Power Boards   _____

D.   System 55, Annunciator and Sequential Events Recording System   _____

Data Package: Page ____ of ____   **Date _____**

4.3   Field Preparations (continued)

NOTE
The following ERCW valves are electrically disconnected and locked open: • 2-FCV-67-188, RHRP ROOM COOLER 2A-A ERCW SUP FLOW CNTL • 2-FCV-67-190, RHRP ROOM COOLER 2B-B ERCW SUP FLOW CNTL • 2-FCV-67-168, CCP ROOM COOLER 2A-A ERCW SUP FLOW CNTL • 2-FCV-67-170, CCP ROOM COOLER 2B-B ERCW SUP FLOW CNTL

[6]   **VERIFY** the following system 67 ERCW valves are available to support test activities:

2-FCV-67-188, RHRP ROOM COOLER 2A-A ERCW SUP FLOW CNTL (SubSection 6.1)   _____

2-FCV-67-190, RHRP ROOM COOLER 2B-B ERCW SUP FLOW CNTL (SubSection 6.2)   _____

2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTRL (SubSection 6.3)   _____

2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTRL (SubSection 6.4)   _____

2-FCV-67-176, SIP ROOM COOLER 2A-A ERCW SUP FLOW CNTRL (SubSection 6.5)   _____

2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTRL (SubSection 6.6)   _____

2-FCV-67-168, CCP ROOM COOLER 2A-A ERCW SUP FLOW CNTRL (SubSection 6.7)   _____

2-FCV-67-170, CCP ROOM COOLER 2B-B ERCW SUP FLOW CNTRL (SubSection 6.8)   _____

2-FCV-67-346, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTRL (SubSection 6.9)   _____

2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTRL (SubSection 6.10)   _____

2-FCV-67-350, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTRL (SubSection 6.11)   _____

2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTRL (SubSection 6.12)   _____

2-FCV-67-342, PIPE CHASE COOLER 2A-A ERCW SUP FLOW CNTRL (SubSection 6.13)   _____

2-FCV-67-344, PIPE CHASE COOLER 2B-B ERCW SUP FLOW CNTRL (SubSection 6.14)   _____

Data Package: Page ____ of ____   **Date _____**

4.3   Field Preparations (continued)

[7]   **ENSURE** ERCW system is aligned per 0-SOI-67.01 as
applicable to support test performance.   _____

[8]   **VERIFY** no other work or test activities are in progress on or
near ESF pumps which could cause unexpected pump room
cooler starts.

SubSection   6.1   _____

SubSection   6.2   _____

SubSection   6.3   _____

SubSection   6.4   _____

SubSection   6.5   _____

SubSection   6.6   _____

SubSection   6.7   _____

SubSection   6.8   _____

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

Data Package: Page _____ of _____   Date _____

4.4   Approvals and Notifications

[1]   **OBTAIN** permission of the Preoperational Startup Manager to start the test.

<table>
<tr><td>_____</td><td>_____</td></tr>
<tr><td>Preoperational Startup Manager
Signature</td><td>Date</td></tr>
</table>

[2]   **OBTAIN** the Unit 2 Supervisor's (US/SRO) or Shift Manager's (SM) authorization.

<table>
<tr><td>_____</td><td>_____</td></tr>
<tr><td>U-2 US/SRO/SM Signature</td><td>Date</td></tr>
</table>

[3]   **NOTIFY** Unit 1 Operations that performace of the following sections requres access into the Unit 1 R-panels for placement of handheld jumpers.

SubSection   6.9   _____

SubSection   6.10   _____

SubSection   6.11   _____

SubSection   6.12   _____

SubSection   6.13   _____

SubSection   6.14   _____

Data Package: Page ____ of ____   **Date _____**

5.0   ACCEPTANCE CRITERIA

A.   Auxiliary Building Engineered Safety Features (ESF) Room/Area Coolers function in accordance with design requirements.

[1]   The controls and interlocks for the ESF Coolers function properly.

  [1.1]   Each ESF Cooler STARTS automatically upon receipt of an associated room Hi-Temperature signal.

   2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER (Step 6.1[8])

   2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER (Step 6.2[8])

   2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER (Step 6.3[8])

   2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER (Step 6.4[8])

   2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER (Step 6.5[8])

   2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER (Step 6.6[8])

   2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER (Step 6.7[8])

   2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER (Step 6.8[8])

   2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A (Step 6.9[8], 6.9[14])

   2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B (Step 6.10[8], 6.10[14])

   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A (Step 6.11[8], 6.11[14])

   2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B (Step 6.12[8], 6.12[14])

   2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A (Step 6.13[8], 6.13[14])

   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B (Step 6.14[8], 6.14[14])

Data Package: Page ____ of ____   **Date _____**

5.0   ACCEPTANCE CRITERIA (continued)

[1.2]   The following ESF Coolers START automatically upon receipt of a simulated Auxiliary Building Isolation (ABI) signal AND stop when the ABI signal is reset.

2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A
(Step 6.9[20], 6.9[22])

2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B
(Step 6.10[20], 6.10[22])

2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A
(Step 6.11[20], 6.11[22])

2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B
(Step 6.12[20], 6.12[22])

2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A
(Step 6.13[20], 6.13[22])

2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B
(Step 6.14[20], 6.14[22])

Data Package: Page _____ of _____   Date _____

5.0   ACCEPTANCE CRITERIA (continued)

[1.3]   Each ESF Cooler can be controlled manually by local handswitch.

2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER
(Step 6.1[4]A, 6.1[5]A,V6.1[10.1])

2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER
(Step 6.2[4]A, 6.2[5]A,V6.2[10.1])

2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER
(Step 6.3[4]A, 6.3[5]A, 6.3[10.1])

2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER
(Step 6.4[4]A, 6.4[5]A, 6.4[10.1])

2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER
(Step 6.5[4]A, 6.5[5]A, 6.5[10.1])

2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER
(Step 6.6[4]A 6.6[5]A, 6.6[10.1])

2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER
(Step 6.7[4]A, 6.7[5]A, 6.7[10.1])

2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER
(Step 6.8[4]A, 6.8[5]A, 6.8[10.1])

2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A
(Step 6.9[4]A, 6.9[5]A, 6.9[10.1], 6.9[16.1])

2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B
(Step 6.10[4]A, 6.10[5]A, 6.10[10.1], 6.10[16.1])

2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A
(Step 6.11[4]A, 6.11[5]A, 6.11[10.1], 6.11[16.1])

2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B
(Step 6.12[4]A, 6.12[5]A, 6.12[10.1], 6.12[16.1])

2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A
(Step 6.13[4]A, 6.13[5]A, 6.13[10.1], 6.13[16.1])

2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B
(Step 6.14[4]A, 6.14[5]A, 6.14[10.1], 6.14[16.1])

Data Package: Page _____ of _____   Date _____

5.0   ACCEPTANCE CRITERIA (continued)

NOTE
The Acceptance Criteria in the following steps have been adjusted to account for ±10% of design/rated flow for nontducted, freestanding air coolers as delineated in G-37.

[2]   Each ESF Room Cooler maintains design air flow:

2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER (Step 6.15[5])
6,925 CFM (6,233 - 7,617)

2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER (Step 6.16[5])
6,925 CFM (6,233 - 7,617)

2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER (Step 6.17[7])
12,200 CFM (10,980 - 13,420)

2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER (Step 6.18[7])
12,200 CFM (10,980 - 13,420)

2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER (Step 6.19[7])
7,850 CFM (7,065 - 8,635)

2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER (Step 6.20[7])
7,850 CFM (7,065 - 8,635)

2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER
(Step 6.21[5])
9,200 CFM (8,280 - 10,120)

2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER
(Step 6.22[5])
9,200 CFM (8,280 - 10,120)

2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A (Step 6.23[7])
4,250 CFM (3,825 - 4,675)

2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B (Step 6.24[7])
4,250 CFM (3,825 - 4,675)

2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A (Step 6.25[7])
3,950 CFM (3,555 - 4,345)

2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B (Step 6.26[7])
3,950 CFM (3,555 - 4,345)

2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A (Step 6.27[7])
5,400 CFM (4,860 - 5,940)

2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B (Step 6.28[7])
5,400 CFM (4,860 - 5,940)

Data Package: Page ____ of ____   **Date _____**

5.0   ACCEPTANCE CRITERIA (continued)

[3]   Essential Raw Cooling Water System Valves.

[3.1]   The following ERCW valves OPEN upon start of their associated ESF Cooler:

2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL (Step 6.3[4]C)

2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL (Step 6.4[4]C)

2-FCV-67-176, SIP ROOM COOLER 2A-A ERCW SUP FLOW CNTL (Step 6.5[4]C)

2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL (Step 6.6[4]C)

2-FCV-67-346, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL (Step 6.9[4]C)

2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL (Step 6.10[4]C)

2-FCV-67-350, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL (Step 6.11[4]C)

2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL (Step 6.12[4]C)

2-FCV-67-342, PIPE CHASE COOLER 2A-A ERCW SUP FLOW CNTL (Step 6.13[4]C)

2-FCV-67-344, PIPE CHASE COOLER 2B-B ERCW SUP FLOW CNTL (Step 6.14[4]C)

Data Package: Page ____ of ____   **Date _____**

5.0   ACCEPTANCE CRITERIA (continued)

[3.2]   The following ERCW valves OPEN in $\leq$ 10 seconds:

2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL
(Step 6.17[4])

2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL
(Step 6.18[4])

2-FCV-67-176, SIP ROOM COOLER 2A-A ERCW SUP FLOW CNTL
(Step 6.19[4])

2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL
(Step 6.20[4])

2-FCV-67-346, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL
(Step 6.23[4])

2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL
(Step 6.24[4])

2-FCV-67-350, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL
(Step 6.25[4])

2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL
(Step 6.26[4])

2-FCV-67-342, PIPE CHASE COOLER 2A-A ERCW SUP FLOW CNTL
(Step 6.27[4])

2-FCV-67-344, PIPE CHASE COOLER 2B-B ERCW SUP FLOW CNTL
(Step 6.28[4])

Data Package: Page _____ of _____   **Date _____**

5.0   ACCEPTANCE CRITERIA (continued)

[4]   High Energy Line Break (HELB) Detection

[4.1]   The following HELB Indicator Lights come ON upon receipt of an associated room Hi-Temperature signal.

2-XI-30-5235A, LETDOWN HX PIPE BREAK (Step 6.29.2[3]C)

2-XI-30-5235B, LETDOWN HX PIPE BREAK (Step 6.29.2[7]C)

2-XI-30-5236A, RHR PMP RM A PIPE BREAK (Step 6.29.3[3]C)

2-XI-30-5236B, RHR PMP RM A PIPE BREAK (Step 6.29.3[7]C)

2-XI-30-5237A, RHR PMP RM B PIPE BREAK (Step 6.29.4[3]C)

2-XI-30-5237B, RHR PMP RM B PIPE BREAK (Step 6.29.4[7]C)

2-XI-30-5238A, RHR HX A ROOM PIPE BREAK (Step 6.29.5[3]C)

2-XI-30-5238B, RHR HX A ROOM PIPE BREAK (Step 6.29.5[7]C)

2-XI-30-5239A, RHR HX B ROOM PIPE BREAK (Step 6.29.6[3]C)

2-XI-30-5239B, RHR HX B ROOM PIPE BREAK (Step 6.29.6[7]C)

Data Package: Page _____ of _____   Date _____

5.0   ACCEPTANCE CRITERIA (continued)

[4.2]   Annunciator window 2-XA-55-6A-113B, RHR/CVCS PIPE BREAK, ALARMS upon reciept of any HELB room Hi-Temperature signal.

2-TS-30-5235A, CVCS LETDOWN HT EXCH RM HI TEMP SW (Step 6.29.2[3]A)

2-TS-30-5235B, CVCS LETDOWN HT EXCH RM HI TEMP SW (Step 6.29.2[7]A)

2-TS-30-5236A, RHR PUMP RM A HI TEMP SW (Step 6.29.3[3]A)

2-TS-30-5236B, RHR PUMP RM A HI TEMP SW (Step 6.29.3[7]A)

2-TS-30-5237A, RHR PUMP RM B HI TEMP SW (Step 6.29.4[3]A)

2-TS-30-5237B, RHR PUMP RM B HI TEMP SW (Step 6.29.4[7]A)

2-TS-30-5238A, RHR HT EXCH A ROOM HI TEMP SW (Step 6.29.5[3]A)

2-TS-30-5238B, RHR HT EXCH A ROOM HI TEMP SW (Step 6.29.5[7]A)

2-TS-30-5239A, RHR HT EXCH B ROOM HI TEMP SW (Step 6.29.6[3]A)

2-TS-30-5239B, RHR HT EXCH B ROOM HI TEMP SW (Step 6.29.6[7]A)

[4.3]   Unit 2 Alarm Events Display Screen indicates the correct alarm upon reciept of each HELB room Hi-Temperature signal.

2-TS-30-5235A, CVCS LETDOWN HT EXCH RM HI TEMP SW (Step 6.29.2[3]B)

2-TS-30-5235B, CVCS LETDOWN HT EXCH RM HI TEMP SW (Step 6.29.2[7]B)

2-TS-30-5236A, RHR PUMP RM A HI TEMP SW (Step 6.29.3[3]B)

2-TS-30-5236B, RHR PUMP RM A HI TEMP SW (Step 6.29.3[7]B)

2-TS-30-5237A, RHR PUMP RM B HI TEMP SW (Step 6.29.4[3]B)

2-TS-30-5237B, RHR PUMP RM B HI TEMP SW (Step 6.29.4[7]B)

2-TS-30-5238A, RHR HT EXCH A ROOM HI TEMP SW (Step 6.29.5[3]B)

2-TS-30-5238B, RHR HT EXCH A ROOM HI TEMP SW (Step 6.29.5[7]B)

2-TS-30-5239A, RHR HT EXCH B ROOM HI TEMP SW (Step 6.29.6[3]B)

2-TS-30-5239B, RHR HT EXCH B ROOM HI TEMP SW (Step 6.29.6[7]B)

Data Package: Page _____ of _____   Date _____

6.0   PERFORMANCE

NOTES
1) SubSections 6.1 through 6.29 may be performed in any order or in parallel provided the steps within are performed in the order written unless otherwise noted.
2) All verifications (fan starts, fan stops, valve position, etc) are to be done by local observation unless otherwise noted.
3) IF/THEN steps may be marked N/A if stated condition does not exist.

6.1   2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.1
have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM
COOLER, at 2-JB-292-2506-A, [A11W/676], is in AUTO, **AND**

ENSURE Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM
COOLER, is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-175, 480V C&A BUILDING
VENT BD 2A1-A, Compartment 9A, Red Light is OFF.   _____

B.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 13, FCV-67-188 RHR PMP 2A-A ROOM CLR
OPEN, is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.1   2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER LOGIC (continued)

[4]   **PLACE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM COOLER, to START, **AND**

     VERIFY the following:

     A.   Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

     B.   Breaker 2-BKR-30-175-A, 480V C&A BUILDING VENT BD 2A1-A, Compartment 9A, Red Light is ON.   _____

[5]   **PLACE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM COOLER, to STOP, **AND**

     VERIFY the following:

     A.   Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER 2A-A, STOPS. (**Acc Crit**)   _____

     B.   Breaker 2-BKR-30-175, 480V C&A BUILDING VENT BD 2A1-A, Compartment 9A, Red Light is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM COOLER, to AUTO, **AND**

     VERIFY Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER 2A-A, remains OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.1   2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER LOGIC (continued)

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-175, RHR PUMP 2A-A ROOM COOLER TEMP, [A11W/676], sensing bulb to a temperature greater than 95°F.

[8]   **VERIFY** Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

        STOP applying heat to the sensing bulb.   _____

[10]   **MAINTAIN** Temperature Switch 2-TS-30-175, RHR PUMP 2A-A ROOM COOLER TEMP, sensing bulb at a temperature greater than 95°F.   _____

    [10.1]   **PLACE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM COOLER, to STOP, **AND** '

              VERIFY Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER, STOPS. (**Acc Crit**)   _____

    [10.2]   **PLACE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM COOLER, to AUTO, **AND**

              VERIFY Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-175, RHR PUMP 2A-A ROOM COOLER TEMP, sensing bulb to a temperature less than 90°F.   _____

[12]   **VERIFY** Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER, STOPS.   _____

Data Package: Page ____ of ____   **Date _____**

6.1   2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER LOGIC (continued)

[13]   **IF** no further testing is to be performed on Cooler
         2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER, **THEN**

         SECURE Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM
         COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.2   2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.2 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM COOLER, at 2-JB-292-2505-B, [A11V/676], is in AUTO, **AND**

       ENSURE Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, is OFF.   _____

[3]   **VERIFY** the following:

       A.   Breaker 2-BKR-30-176, 480V C&A BUILDING VENT BD 2B1-B, Compartment 9A, Red Light is OFF.   _____

       B.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 18, FCV-67-190 RHR PMP 2B-B ROOM CLR OPEN, is ON.   _____

[4]   **PLACE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM COOLER, to START, **AND**

       VERIFY the following:

       A.   Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)   _____

       B.   Breaker 2-BKR-30-176, 480V C&A BUILDING VENT BD 2B1-B, Compartment 9A, Red Light is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.2   2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER LOGIC (continued)

[5]   **PLACE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM COOLER, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-176, 480V C&A BUILDING VENT BD 2B1-B, Compartment 9A, Red Light is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM COOLER, to AUTO, **AND**

VERIFY Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-176, RHR PUMP 2B-B ROOM COOLER TEMP [A11V/676], sensing bulb to a temperature greater than 95°F.   _____

[8]   **VERIFY** Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   **Date _____**

6.2   2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-176, RHR PUMP 2B-B ROOM COOLER TEMP, sensing bulb at a temperature greater than 95°F.   _____

   [10.1]   **PLACE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM COOLER, to STOP, **AND**

            VERIFY Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)   _____

   [10.2]   **PLACE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM COOLER, to AUTO, **AND**

            VERIFY Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-176, RHR PUMP 2B-B ROOM COOLER TEMP, sensing bulb to a temperature less than 90°F.   _____

[12]   **VERIFY** Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER STOPS.   _____

[13]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, **THEN**

        SECURE Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.3   2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.3 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, at 2-JB-292-2502-A, [A10U/676], is in AUTO, **AND**

ENSURE Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-177, 480V C&A BUILDING VENT BD 2A1-A, Compartment 3C, Red Light is OFF.   _____

B.   Valve 2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, [A10U/676], is CLOSED.   _____

C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 12, FCV-67-184 CS PMP 2A-A ROOM CLR OPEN, is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, to START, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-177, 480V C&A BUIILDING VENT BD 2A1-A, Compartment 3C, Red Light is ON.   _____

C.   Valve 2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 12, FCV-67-184 CS PMP 2A-A ROOM CLR OPEN, is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.3   2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER LOGIC (continued)

[5]   **PLACE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-177, 480V C&A BUILDING VENT BD 2A1-A, Compartment 3C, Red Light is OFF.   _____

C.   Valve 2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 12, FCV-67-184 CS PMP 2A-A ROOM CLR OPEN, is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, to AUTO, **AND**

VERIFY Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-177, CS PUMP 2A-A ROOM COOLER TEMP, [A11U/676], sensing bulb to a temperature greater than 95°F.   _____

[8]   **VERIFY** Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   Date _____

6.3   2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-177, CS PUMP 2A-A ROOM COOLER TEMP, sensing bulb at a temperature greater than 95°F.   _____

    [10.1]   **PLACE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, to STOP, **AND**

            VERIFY Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, STOPS. (**Acc Crit**)   _____

    [10.2]   **PLACE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, to AUTO, **AND**

            VERIFY Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-177, CS PUMP 2A-A ROOM COOLER TEMP, sensing bulb to a temperature less than 90°F.   _____

[12]   **VERIFY** Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, STOPS.

[13]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, **THEN**

        SECURE Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.4   2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.4 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER, at 2-JB-292-2501-B, [A11U/676], is in AUTO, **AND**

      ENSURE Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, is OFF.   _____

[3]   **VERIFY** the following:

      A.   Breaker 2-BKR-30-178, 480V C&A BUILDING VENT BD 2B1-B, Compartment 3C, Red Light is OFF.   _____

      B.   Valve 2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A10U/676], is CLOSED.   _____

      C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 19, FCV-67-186 CS PMP 2B-B ROOM CLR OPEN, is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER, to START, **AND**

      VERIFY the following:

      A.   Cooler 2-PMCL-30-17B, CS PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)   _____

      B.   Breaker 2-BKR-30-178, 480V C&A BUILDING VENT BD 2B1-B, Compartment 3C, Red Light is ON.   _____

      C.   Valve 2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

      D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 19, FCV-67-186 CS PMP 2B-B ROOM CLR OPEN, is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.4   2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER LOGIC (continued)

[5]   **PLACE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-178, 480V C&A BUILDING VENT BD 2B1-B, Compartment 3C, Red Light is OFF.   _____

C.   Valve 2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is CLOSED.   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 19, FCV-67-186 CS PMP 2B-B ROOM CLR OPEN, is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER to AUTO, **AND**

VERIFY Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-178, CS PUMP 2B-B ROOM COOLER TEMP, [A11T/676], to a temperature greater than 95°F.   _____

[8]   **VERIFY** Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page _____ of _____   Date _____

6.4   2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-178, CS PUMP 2B-B ROOM COOLER TEMP, sensing bulb at a temperature greater than 95°F.   _____

    [10.1]   **PLACE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER, to STOP, **AND**

           VERIFY Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)   _____

    [10.2]   **PLACE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER, to AUTO, **AND**

           VERIFY Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-178, CS PUMP 2B-B ROOM COOLER TEMP, sensing bulb to a temperature less than 90°F.   _____

[12]   **VERIFY** Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, STOPS.   _____

[13]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, **THEN**

         SECURE Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.5   2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.5 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-180, SIS PUMP 2A-A ROOM COOLER, at 2-JB-292-1197-A, [A10V/692], is in AUTO, **AND**

    ENSURE Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, is OFF.   _____

[3]   **VERIFY** the following:

    A.   Breaker 2-BKR-30-180, 480V C&A BUILDING VENT BD 2A1-A, Compartment 8A, Red Light is OFF.   _____

    B.   Valve 2-FCV-67-176, SIP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, [A9V/692], is CLOSED.   _____

    C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 1, FCV-67-176 SIP 2A-A ROOM CLR OPEN, is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-180, SIS PUMP 2A-A ROOM COOLER, to START, **AND**

    VERIFY the following:

    A.   Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

    B.   Breaker 2-BKR-30-180, 480V C&A BUILDING VENT BD 2A1-A, Compartment 8A, Red Light is ON.   _____

    C.   Valve 2-FCV-67-176, SIP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

    D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 1, FCV-67-176 SIP 2A-A ROOM CLR OPEN, is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.5   2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER LOGIC (continued)

    [5]   **PLACE** Handswitch 2-HS-30-180, SIS PUMP 2A-A ROOM COOLER, to STOP, **AND**

           VERIFY the following:

        A.   Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, STOPS. (**Acc Crit**)   _____

        B.   Breaker 2-BKR-30-180, 480V C&A BUILDING VENT BD 2A1-A, Compartment 8A, Red Light is OFF.   _____

        C.   Valve 2-FCV-67-176, SIP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.   _____

        D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 1, FCV-67-176 SIP 2A-A ROOM CLR OPEN, is OFF.   _____

    [6]   **PLACE** Handswitch 2-HS-30-180, SIS PUMP 2A-A ROOM COOLER, to AUTO, **AND**

           VERIFY Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

    [7]   **HEAT** Temperature Switch 2-TS-30-180, SIS PUMP 2A-A ROOM COOLER TEMP, [A10V/692], sensing bulb to a temperature greater than 95°F.   _____

    [8]   **VERIFY** Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

    [9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

           STOP applying heat to the sensing bulb.   _____

Data Package: Page _____ of _____   Date _____

**6.5   2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER LOGIC
(continued)**

[10]   **MAINTAIN** Temperature Switch 2-TS-30-180, SIS PUMP 2A-A
ROOM COOLER TEMP, sensing bulb at a temperature greater
than 95°F.   _____

[10.1]   **PLACE** Handswitch 2-HS-30-180, SIS PUMP 2A-A
ROOM COOLER, to STOP, **AND**

VERIFY Cooler 2-PMCL-30-180, SIS PUMP 2A-A
ROOM COOLER, STOPS. (**Acc Crit**)   _____

[10.2]   **PLACE** Handswitch 2-HS-30-180, SIS PUMP 2A-A
ROOM COOLER, to AUTO, **AND**

VERIFY Cooler 2-PMCL-30-180, SIS PUMP 2A-A
ROOM COOLER, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-180, SIS PUMP 2A-A
ROOM COOLER TEMP, sensing bulb to a temperature less
than 90°F.   _____

[12]   **VERIFY** Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM
COOLER, STOPS.   _____

[13]   **IF** no further testing is to be performed on Cooler
2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM
COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.6   2-PMCL-30-179-B, SIS PUMP 2B-B ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.6 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, at 2-JB-292-1198-B, [A10U/692], is in AUTO, **AND**

ENSURE Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-179, 480V C&A BUILDING VENT BD 2B1-B, Compartment 8A, Red Light is OFF.   _____

B.   Valve 2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A9V/692], is CLOSED.   _____

C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 10, FCV-67-182 SIP 2B-B ROOM CLR OPEN, is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, to START, **AND**

VERIFY the following: _____

A.   Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-179, 480V C&A BUILDING VENT BD 2B1-B, Compartment 8A, Red Light is ON.   _____

C.   Valve 2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 10, FCV-67-182 SIP 2B-B ROOM CLR OPEN, is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.6   2-PMCL-30-179-B, SIS PUMP 2B-B ROOM COOLER LOGIC (continued)

[5]   **PLACE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, to STOP, **AND**

   VERIFY the following:

   A.   Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)   _____

   B.   Breaker 2-BKR-30-179, 480V C&A BUILDING VENT BD 2B1-B, Compartment 8A, Red Light is OFF.   _____

   C.   Valve 2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTRL, is CLOSED.   _____

   D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 10, FCV-67-182 SIP 2B-B ROOM CLR OPEN, is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, to AUTO, **AND**

   VERIFY Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-179, SIS PUMP 2B-B ROOM COOLER TEMP, [A9U/692], sensing bulb to a temperature greater than 95°F.   _____

[8]   **VERIFY** Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

   STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   **Date _____**

6.6   2-PMCL-30-179-B, SIS PUMP 2B-B ROOM COOLER LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-179, SIS PUMP 2B-B ROOM COOLER TEMP, sensing bulb at a temperature greater than 95°F.

　　[10.1]   **PLACE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, to STOP, **AND**

　　　　　　VERIFY Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)　　　　_____

　　[10.2]   **PLACE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, to AUTO, **AND**

　　　　　　VERIFY Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, STARTS.　　　　_____

[11]   **COOL** Temperature Switch 2-TS-30-179, SIS PUMP 2B-B ROOM COOLER TEMP, sensing bulb to a temperature less than 90°F.　　　　_____

[12]   **VERIFY** Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, STOPS.

[13]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, **THEN**

　　　　SECURE Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER.　　　　_____

Data Package: Page ____ of ____   **Date _____**

6.7   2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.7 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, at 2-JB-292-1191-A, [A12T/692], is in AUTO, **AND**

ENSURE Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, is OFF.   _____

[3]   **VERIFY** the following: _____

A.   Breaker 2-BKR-30-183, 480V C&A BUILDLING VENT BD 2A1-A, Compartment 10A, Red Light is OFF.   _____

B.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 3, FCV-67-168 CCP 2A-A ROOM CLR OPEN, is ON.   _____

[4]   **PLACE** Handswitch 2-HS-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, to START, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-183, 480V C&A BUILDLING VENT BD 2A1-A, Compartment 10A, Red Light is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.7   2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER LOGIC (continued)

[5]   **PLACE** Handswitch 2-HS-30-183, CENT CHARGING
PUMP 2A-A ROOM COOLER, to STOP **AND**

VERIFY:

A.   Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A
ROOM COOLER, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-183, 480V C&A BUILDLING
VENT BD 2A1-A, Compartment 10A, Red Light is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-183, CENT CHARGING
PUMP 2A-A ROOM COOLER, to AUTO, **AND**

VERIFY Cooler 2-PMCL-30-183, CENT CHARGING
PUMP 2A-A ROOM COOLER, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-183, CENT CHARGING
PUMP 2A-A RM COOLER TEMP, [A12T/692], sensing bulb to
a temperature greater than 95°F.   _____

[8]   **VERIFY** Cooler 2-PMCL-30-183, CENT CHARGING
PUMP 2A-A ROOM COOLER, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   **Date _____**

6.7   2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-183, CENT CHARGING PUMP 2A-A RM COOLER TEMP, sensing bulb at a temperature greater than 95°F.   _____

    [10.1]   **PLACE** Handswitch 2-HS-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, to STOP, **AND**

            VERIFY Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, STOPS. (**Acc Crit**)   _____

    [10.2]   **PLACE** Handswitch 2-HS-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, to AUTO, **AND**

            VERIFY Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-183, CENT CHARGING PUMP 2A-A RM COOLER TEMP, sensing bulb to a temperature less than 90°F.   _____

[12]   **VERIFY** Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, STOPS.   _____

[13]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, **THEN**

        SECURE Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.8   2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.8 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, at 2-JB-292-1192-B, [A11U/692], is in AUTO, **AND**

ENSURE Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-182, 480V C&A BUILDING VENT BD 2B1-B, Compartment 10A, Red Light is OFF.   _____

B.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 8, FCV-67-170 CCP 2B-B ROOM CLR OPEN, is ON.   _____

[4]   **PLACE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, to START, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-182, 480V C&A BUILDING VENT BD 2B1-B, Compartment 10A, Red Light is ON.   _____

Data Package: Page _____ of _____　　　　　　　　　　**Date _____**

6.8　2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER LOGIC (continued)

[5]　**PLACE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, to STOP, **AND**

　　VERIFY the following:

　　A.　Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)　_____

　　B.　Breaker 2-BKR-30-182, 480V C&A BUILDING VENT BD 2B1-B, Compartment 10A, Red Light is OFF.　_____

[6]　**PLACE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, to AUTO, **AND**

　　VERIFY Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, remains OFF.　_____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]　**HEAT** Temperature Switch 2-TS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER TEMP, [A11U/692], sensing bulb to a temperature greater than 95°F.　_____

[8]　**VERIFY** Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, STARTS. (**Acc Crit**)　_____

[9]　**IF** temperature of the sensing bulb reaches 115°F, **THEN**

　　STOP applying heat to the sensing bulb.　_____

Data Package: Page ____ of ____   **Date _____**

6.8   **2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER LOGIC (continued)**

[10]   **MAINTAIN** Temperature Switch 2-TS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER TEMP, sensing bulb at a temperature greater than 95°F.   _____

　[10.1]   **PLACE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, to STOP, **AND**

　　　　　VERIFY Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, STOPS. (**Acc Crit**)   _____

　[10.2]   **PLACE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, to AUTO, **AND**

　　　　　VERIFY Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER TEMP, sensing bulb to a temperature less than 90°F.   _____

[12]   **VERIFY** Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, STOPS.   _____

[13]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER,**THEN**

　　　　SECURE Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.9   2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.9 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, at 2-JB-292-1553-A, [A12U/693], is in AUTO, **AND**

        ENSURE Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, is OFF.   _____

[3]   **VERIFY** the following:

        A.   Breaker 2-BKR-30-186, 480V C&A BUILDING VENT BD 2A1-A, Compartment 2C, Red Light is OFF.   _____

        B.   Valve 2-FCV-67-346, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL, [A12U/692], is CLOSED.   _____

        C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 23, FCV-67-346 PENT ROOM CLR 2 A1 OPEN, is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to START, **AND**

        VERIFY the following:

        A.   Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STARTS. (**Acc Crit**)   _____

        B.   Breaker 2-BKR-30-186, 480V C&A BUILDING VENT BD 2A1-A, Red Light is ON.   _____

        C.   Valve 2-FCV-67-346, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

        D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 23, FCV-67-346 PENT ROOM CLR 2 A1 OPEN, is ON.   _____

Data Package: Page _____ of _____   **Date _____**

6.9   2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A LOGIC (continued)

[5]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-186, 480V C&A BUILDING VENT BD 2A1-A, Red Light is OFF.   _____

C.   Valve 2-FCV-67-346, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 23, FCV-67-346 PENT ROOM CLR 2 A1 OPEN, is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-186A, PENETRATION ROOM EL 692 COOLER 2A-A TEMP, [A12U/692], sensing bulb to a temperature greater than 85°F.   _____

[8]   **VERIFY** Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 105°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   **Date _____**

6.9   2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-186A PENETRATION ROOM EL 692 COOLER 2A-A TEMP, sensing bulb at a temperature greater than 85°F.   _____

    [10.1]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to STOP, **AND**

           VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STOPS. (**Acc Crit**)   _____

    [10.2]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to AUTO, **AND**

           VERIFY Cooler 2-CLR-30-186-A, PENETRATION ROOM EL 692 COOLER 2A-A, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-186A, PENETRATION ROOM EL 692 COOLER 2A-A TEMP, sensing bulb, until it resets, **AND**

      VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STOPS.   _____

[12]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to STANDBY, **AND**

      VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[13]   **HEAT** Temperature Switch 2-TS-30-186B, PENETRATION ROOM EL 692 COOLER 2A-A TEMP, [A12U/692], sensing bulb to a temperature greater than 90°F.   _____

[14]   **VERIFY** Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STARTS. (**Acc Crit**)   _____

Data Package: Page ____ of ____   **Date _____**

6.9   2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A LOGIC (continued)

[15]   **IF** temperature of the sensing bulb reaches 110°F, **THEN**

STOP applying heat to the sensing bulb.   _____

[16]   **MAINTAIN** Temperature Switch 2-TS-30-186B, PENETRATION ROOM EL 692 COOLER 2A-A TEMP, sensing bulb at a temperature greater than 90°F.   _____

[16.1]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A to STOP, **AND**

VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STOPS. (**Acc Crit**)   _____

[16.2]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to STANDBY, **AND**

VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STARTS.   _____

[17]   **COOL** Temperature Switch 2-TS-30-186B, PENETRATION ROOM EL 692 COOLER 2A-A TEMP, sensing bulb until it resets, **AND**

VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STOPS.   _____

[18]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, remains OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.9   2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A LOGIC (continued)

NOTE
The following step will simulate an Auxiliary Building Isolation (ABI) Signal by placing a jumper across terminal points in Auxiliary Relay panel 1-R-73.

[19]   **PLACE** and **HOLD** a handheld jumper at TB 339, between Pt. 10 and Pt. 11 in Auxiliary Relay Panel 1-R-73.

_____
1st

_____
CV

[20]   **VERIFY** Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STARTS. (**Acc Crit**)   _____

[21]   **REMOVE** handheld jumper at TB 339 between Pt. 10 and Pt. 11 in Auxiliary Relay Panel 1-R-73.

_____
1st

_____
CV

[22]   **VERIFY** Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STOPS. (**Acc Crit**)   _____

[23]   **IF** no further testing is to be performed on Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, **THEN**

SECURE Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A.   _____

Data Package: Page ____ of ____   **Date _____**

6.10   2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.10 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B at, 2-JB-292-1554-B, [A12V/692], is in AUTO, **AND**

ENSURE Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-187, 480V C&A BUILDING VENT BD 2B1-B, Compartment 8B, Red Light is OFF.   _____

B.   Valve 2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A12V/692], is CLOSED.   _____

C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 26, FCV-67-348 PENT ROOM CLR 2 B1 OPEN, is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, to START, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-187, 480V C&A BUILDING VENT BD 2B1-B, Compartment 8B, Red Light is ON.   _____

C.   Valve 2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 26, FCV-67-348 PENT ROOM CLR 2 B1 OPEN,is ON.   _____

Data Package: Page ____ of ____   **Date _____**

6.10   2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B LOGIC (continued)

     [5]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, to STOP, **AND**

          VERIFY the following:

          A.   Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STOPS. (**Acc Crit**)   _____

          B.   Breaker 2-BKR-30-187, 480V C&A BUILDING VENT BD 2B1-B, Red Light is OFF.   _____

          C.   Valve 2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is CLOSED.   _____

          D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 26, FCV-67-348 PENT ROOM CLR 2 B1 OPEN, is OFF.   _____

     [6]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, to AUTO, **AND**

          VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

     [7]   **HEAT** Temperature Switch 2-TS-30-187A, PENETRATION ROOM EL 692 COOLER 2B-B TEMP, [A12V/692], sensing bulb to a temperature greater than 85°F.   _____

     [8]   **VERIFY** Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STARTS. (**Acc Crit**)   _____

     [9]   **IF** temperature of the sensing bulb reaches 105°F, **THEN**

          STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   Date _____

6.10   2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B
LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-187A,
PENETRATION ROOM EL 692 COOLER 2B-B TEMP,
sensing bulb at a temperature greater than 85°F.   _____

[10.1]   **PLACE** Handswitch 2-HS-30-187, PENETRATION
ROOM EL 692 COOLER 2B-B to STOP, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM
EL 692 COOLER 2B-B, STOPS. (**Acc Crit**)   _____

[10.2]   **PLACE** Handswitch 2-HS-30-187-B, PENETRATION
ROOM EL 692 COOLER 2B-B, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM
EL 692 COOLER 2B-B, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-187A, PENETRATION
ROOM EL 692 COOLER 2B-B TEMP, sensing bulb until it
resets, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM
EL 692 COOLER 2B-B, STOPS.   _____

[12]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM
EL 692 COOLER 2B-B, to STANDBY, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM
EL 692 COOLER 2B-B, remains OFF.   _____

CAUTION

**The following steps will simulate a high ambient room temperature using an electric
heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the
bulb temperature with a surface temperature probe.**

---

[13]   **HEAT** Temperature Switch 2-TS-30-187B, PENETRATION
ROOM EL 692 COOLER 2B-B TEMP, [A12V/692], sensing
bulb to a temperature greater than 90°F.   _____

[14]   **VERIFY** Cooler 2-CLR-30-187, PENETRATION ROOM
EL 692 COOLER 2B-B, STARTS. (**Acc Crit**)   _____

Data Package: Page ____ of ____   **Date _____**

6.10   2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B LOGIC (continued)

[15]   **IF** temperature of the sensing bulb reaches 110°F, **THEN**

STOP applying heat to the sensing bulb.   _____

[16]   **MAINTAIN** Temperature Switch 2-TS-30-187B, PENETRATION ROOM EL 692 COOLER 2B-B TEMP, sensing bulb at a temperature greater than 90°F.   _____

[16.1]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, to STOP, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STOPS. (**Acc Crit**)   _____

[16.2]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, to STANDBY, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STARTS.   _____

[17]   **COOL** Temperature Switch 2-TS-30-187B, PENETRATION ROOM EL 692 COOLER 2B-B TEMP, sensing bulb until it resets, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STOPS.   _____

[18]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, remains OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.10   2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B LOGIC (continued)

NOTE

The following step will simulate an Auxiliary Building Isolation (ABI) Signal by placing a jumper across terminal points in Auxiliary Relay panel 1-R-78.

---

[19]   **PLACE** and **HOLD** a handheld jumper at TB 838, between Pt. 1 and Pt. 2 in Auxiliary Relay Panel 1-R-78.

_____
1st

_____
CV

[20]   **VERIFY** Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STARTS. (**Acc Crit**)   _____

[21]   **REMOVE** handheld jumper at TB 838 between Pt. 1 and Pt. 2 in Auxiliary Relay Panel 1-R-78.

_____
1st

_____
CV

[22]   **VERIFY** Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STOPS. (**Acc Crit**)   _____

[23]   **IF** no further testing is to be performed on Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, **THEN**

SECURE Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B.   _____

Data Package: Page ____ of ____   **Date _____**

6.11   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.11 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, at 2-JB-292-1503-A, [A14V/713], is in
AUTO, **AND**

ENSURE Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-196, 480V C&A BUILDING
VENT BD 2A1-A, Compartment 10B, Red Light is OFF.   _____

B.   Valve 2-FCV-67-350, PENT ROOM COOLER 2A-A
ERCW SUP FLOW CNTL, [A14V/713], is CLOSED.   _____

C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 24, FCV-67-350 PENT ROOM CLR 2 A2 OPEN,
is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, to START, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-196, PENETRATION ROOM EL 713
2A-A, STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-196, 480V C&A BUILDING
VENT BD 2A1-A, Compartment 10B, Red Light is ON.   _____

C.   Valve 2-FCV-67-350, PENT ROOM COOLER 2A-A
ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 24, FCV-67-350 PENT ROOM CLR 2 A2 OPEN,
is ON.   _____

Data Package: Page _____ of _____   Date _____

**6.11   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A
LOGIC (continued)**

[5]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-196, PENETRATION ROOM EL 713
COOLER 2A-A, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-196, 480V C&A BUILDING
VENT BD 2A1-A, Compartment 10B, Red Light is OFF.   _____

C.   Valve 2-FCV-67-350, PENT ROOM COOLER 2A-A
ERCW SUP FLOW CNTL, is CLOSED.   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 24, FCV-67-350 PENT ROOM CLR 2 A2 OPEN,
is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-19A, PENETRATION ROOM
EL 713 COOLER 2A-A, to AUTO **AND**

VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, remains OFF.   _____

CAUTION

**The following steps will simulate a high ambient room temperature using an electric
heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the
bulb temperature with a surface temperature probe.**

---

[7]   **HEAT** Temperature Switch 2-TS-30-196A, PENETRATION
ROOM EL 713 COOLER 2A-A TEMP SWITCH, [A14V/713],
sensing bulb to a temperature greater than 90°F.   _____

[8]   **VERIFY** Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 110°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page _____ of _____   Date _____

6.11   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-196A, PENETRATION ROOM EL 713 COOLER 2A-A TEMP SWITCH, sensing bulb at a temperature greater than 90°F.   _____

    [10.1]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, to STOP, **AND**

        VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, STOPS. (**Acc Crit**)   _____

    [10.2]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, to AUTO, **AND**

        VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-196A, PENETRATION ROOM EL 713 COOLER 2A-A TEMP SWITCH, sensing bulb until it resets, **AND**

    VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, STOPS.   _____

[12]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, to STANDBY, **AND**

    VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[13]   **HEAT** Temperature Switch 2-TS-30-196B, PENETRATION ROOM EL 713 COOLER 2A-A TEMP SWITCH, [A14V/713], sensing bulb to a temperature greater than 95°F.   _____

[14]   **VERIFY** Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, STARTS. (**Acc Crit**)   _____

Data Package: Page ____ of ____   **Date _____**

**6.11   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A
LOGIC (continued)**

[15]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

STOP applying heat to the sensing bulb.   _____

[16]   **MAINTAIN** Temperature Switch 2-TS-30-196B,
PENETRATION ROOM EL 713 COOLER 2A-A TEMP
SWITCH, sensing bulb at a temperature greater than 95°F.   _____

   [16.1]   **PLACE** Handswitch 2-HS-30-196, EL 713 PENT ROOM
COOLER 2A-A, to STOP, **AND**

VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, STOPS. (**Acc Crit**)   _____

   [16.2]   **PLACE** Handswitch 2-HS-30-196, PENETRATION
ROOM EL 713 COOLER 2A-A, to STANDBY, **AND**

VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, STARTS.   _____

[17]   **COOL** Temperature Switch 2-TS-30-196B, PENETRATION
ROOM EL 713 COOLER 2A-A TEMP SWITCH, sensing bulb
until it resets, **AND**

VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, STOPS.   _____

[18]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, remains OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.11   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A LOGIC (continued)

NOTE
The following step will simulate an Auxiliary Building Isolation (ABI) Signal by placing a jumper across terminal points in Auxiliary Relay panel 1-R-73.

[19]   **PLACE** and **HOLD** a handheld jumper at TB 340, between Pt. 11 and Pt. 12 in Auxiliary Relay Panel 1-R-73.

_____
1st

_____
CV

[20]   **VERIFY** Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, STARTS. (**Acc Crit**)

_____

[21]   **REMOVE** handheld jumper at TB 340 between Pt. 11 and Pt. 12 in Auxiliary Relay Panel 1-R-73.

_____
1st

_____
CV

[22]   **VERIFY** Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, STOPS. (**Acc Crit**)

_____

[23]   **IF** no further testing is to be performed on Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, **THEN**

SECURE Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A.

_____

Data Package: Page ____ of ____   **Date _____**

6.12   2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.12 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, at 2-JB-292-1505-B, [A14V/713], is in AUTO, **AND**

ENSURE Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-197, 480V C&A BUILDING VENT BD 2B1-B, Compartment 2C, Red Light is OFF.   _____

B.   Valve 2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A14V/713], is CLOSED.   _____

C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 27, FCV-67-352 PENT ROOM CLR 2 B2 OPEN, is OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to START, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-197, 480V C&A BUILDING VENT BD 2B1-B Compartment 2C, Red Light is ON.   _____

C.   Valve 2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B, Window 27, FCV-67-352 PENT ROOM CLR 2 B2 OPEN, is ON.   _____

Data Package: Page _____ of _____   Date _____

6.12   2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B LOGIC (continued)

[5]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM
EL 713 COOLER 2B-B, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-197, PENETRATION ROOM EL 713
COOLER 2B-B, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-197, 480V C&A BUILDING
VENT BD 2B1-B, Compartment 2C, Red Light is OFF.   _____

C.   Valve 2-FCV-67-352, PENT ROOM COOLER 2B-B
ERCW SUP FLOW CNTL, is CLOSED.   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 27, FCV-67-352 PENT ROOM CLR 2 B2 OPEN,
is OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM
EL 713 COOLER 2B-B, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM
EL 713 COOLER 2B-B, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[7]   **HEAT** Temperature Switch 2-TS-30-197A, PENETRATION
ROOM EL 713 COOLER 2B-B TEMP SWITCH, [A14V/713],
sensing bulb to a temperature greater than 90°F.   _____

[8]   **VERIFY** Cooler 2-CLR-30-197, PENETRATION ROOM
EL 713 COOLER 2B-B, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 110°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   **Date _____**

6.12 **2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B LOGIC (continued)**

[10]   **MAINTAIN** Temperature Switch 2-TS-30-197A, PENETRATION ROOM EL 713 COOLER 2B-B TEMP SWITCH, sensing bulb at a temperature greater than 90°F.   _____

    [10.1]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to STOP, **AND**

           VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STOPS. (**Acc Crit**)   _____

    [10.2]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to AUTO, **AND**

           VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-197A, PENETRATION ROOM EL 713 COOLER 2B-B TEMP SWITCH, sensing bulb until it resets, **AND**

       VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STOPS.   _____

[12]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to STANDBY, **AND**

       VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[13]   **HEAT** Temperature Switch 2-TS-30-197B, PENETRATION ROOM EL 713 COOLER 2B-B TEMP SWITCH, [A14V/713], sensing bulb to a temperature greater than 95°F.   _____

[14]   **VERIFY** Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STARTS. (**Acc Crit**)   _____

Data Package: Page ____ of ____   **Date _____**

6.12   2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B LOGIC (continued)

[15]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

STOP applying heat to the sensing bulb.   _____

[16]   **MAINTAIN** Temperature Switch 2-TS-30-197B, PENETRATION ROOM EL 713 COOLER 2B-B TEMP SWITCH, sensing bulb at a temperature greater than 95°F.   _____

[16.1]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to STOP, **AND**

VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STOPS. (**Acc Crit**)   _____

[16.2]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to STANDBY, **AND**

VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STARTS.   _____

[17]   **COOL** Temperature Switch 2-TS-30-197B, PENETRATION ROOM EL 713 COOLER 2B-B TEMP SWITCH, sensing bulb until it resets, **AND**

VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STOPS.   _____

[18]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, remains OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.12   2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B LOGIC (continued)

NOTE
The following step will simulate an Auxiliary Building Isolation (ABI) Signal by placing a jumper across terminal points in Auxiliary Relay panel 1-R-78.

[19]   **PLACE** and **HOLD** a handheld jumper at TB 838, between Pt. 3 and Pt. 4 in Auxiliary Relay Panel 1-R-78.

_____
1st

_____
CV

[20]   **VERIFY** Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STARTS. (**Acc Crit**)

_____

[21]   **REMOVE** handheld jumper at TB 838 between Pt. 3 and Pt. 4 in Auxiliary Relay Panel 1-R-78.

_____
1st

_____
CV

[22]   **VERIFY** Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STOPS. (**Acc Crit**)

_____

[23]   **IF** no further testing is to be performed on Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, **THEN**

SECURE Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B.

_____

Data Package: Page ____ of ____　　　　　　　　　　　**Date _____**

6.13　2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A LOGIC

[1]　**ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.13 have been completed.　　　　　　　　_____

[2]　**ENSURE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE
COOLER 2A-A at 2-JB-292-1555-A, [A15U/692], is in AUTO,
AND

ENSURE Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE
COOLER 2A-A, is OFF.　　　　　　　　　　　　　_____

[3]　**VERIFY** the following:

A.　Breaker 2-BKR-30-201, 480V C&A BUILDING
VENT BD 2A1-A, Compartment 10C, Red Light is OFF.　_____

B.　Valve 2-FCV-67-342, PIPE CHASE COOLER 2A-A
ERCW SUP FLOW CNTL, [A15U/692], is CLOSED.　_____

C.　On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27A,
Window 22, FCV-67-342 PIPE CHASE CLR 2 A OPEN, is
OFF.　　　　　　　　　　　　　　　　　　　_____

[4]　**PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE
COOLER 2A-A, to START, **AND**

VERIFY the following:

A.　Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER
2A-A, STARTS. (**Acc Crit**)　　　　　　　　　_____

B.　Breaker 2-BKR-30-201, 480V C&A BUILDING
VENT BD 2A1-A, Compartment 10C, Red Light is ON.　_____

C.　Valve 2-FCV-67-342, PIPE CHASE COOLER 2A-A
ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)　_____

D.　On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27A,
Window 22, FCV-67-342 PIPE CHASE CLR 2 A OPEN, is
ON.　　　　　　　　　　　　　　　　　　　_____

Data Package: Page ____ of ____   **Date _____**

6.13   2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A LOGIC (continued)

      [5]   **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to STOP, **AND**

             VERIFY the following:

             A.   Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STOPS. (**Acc Crit**)   _____

             B.   Breaker 2-BKR-30-201, 480V C&A BUILDING VENT BD 2A1-A, Compartment 10C, Red Light is OFF.   _____

             C.   Valve 2-FCV-67-342, PIPE CHASE COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.   _____

             D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27A, Window 22, FCV-67-342 PIPE CHASE CLR 2 A OPEN, is OFF.   _____

      [6]   **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to AUTO, **AND**

             VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

      [7]   **HEAT** Temperature Switch 2-TS-30-201A, AB EL 692 PIPE CHASE COOLER 2A-A TEMP, [A12U/692], sensing bulb to a temperature greater than 95°F.   _____

      [8]   **VERIFY** Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STARTS. (**Acc Crit**)   _____

      [9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

             STOP applying heat to the sensing bulb.   _____

Data Package: Page _____ of _____   Date _____

6.13   2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A LOGIC (continued)

[10]   **MAINTAIN** Temperature Switch 2-TS-30-201A, AB EL 692 PIPE CHASE COOLER 2A-A TEMP, sensing bulb at a temperature greater than 95°F.   _____

[10.1]   **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to STOP, **AND**

VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STOPS. (**Acc Crit**)   _____

[10.2]   **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-201A, AB EL 692 PIPE CHASE COOLER 2A-A TEMP, sensing bulb until it resets, **AND**

VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STOPS.   _____

[12]   **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to STANDBY, **AND**

VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[13]   **HEAT** Temperature Switch 2-TS-30-201B, AB EL 692 PIPE CHASE COOLER 2A-A TEMP, [A12U/692], sensing bulb to a temperature greater than 100°F.   _____

[14]   **VERIFY** Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STARTS. (**Acc Crit**)   _____

Data Package: Page _____ of _____   **Date _____**

6.13 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A LOGIC (continued)

[15] **IF** temperature of the sensing bulb reaches 120°F, **THEN**

   STOP applying heat to the sensing bulb.   _____

[16] **MAINTAIN** Temperature Switch 2-TS-30-201B, AB EL 692 PIPE CHASE COOLER 2A-A TEMP, sensing bulb at a temperature greater than 100°F.   _____

   [16.1] **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to STOP, **AND**

      VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STOPS. (**Acc Crit**)   _____

   [16.2] **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to STANDBY, **AND**

      VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STARTS.   _____

[17] **COOL** Temperature Switch 2-TS-30-201B, AB EL 692 PIPE CHASE COOLER 2A-A TEMP, sensing bulb until it resets, **AND**

   VERIFY Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STOPS.   _____

[18] **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to AUTO, **AND**

   VERIFY Cooler 2-CLR-30-201-A, AB EL 692 PIPE CHASE COOLER 2A-A, remains OFF.   _____

Data Package: Page _____ of _____   **Date _____**

6.13   2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A LOGIC (continued)

NOTE

The following step will simulate an Auxiliary Building Isolation (ABI) Signal by placing a jumper across terminal points in Auxiliary Relay panel 1-R-73.

---

[19]   **PLACE** and **HOLD** a handheld jumper at TB 340, between Pt. 9 and Pt. 10 in Auxiliary Relay Panel 1-R-73.

_____
1st

_____
CV

[20]   **VERIFY** Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STARTS. (**Acc Crit**)

_____

[21]   **REMOVE** handheld jumper at TB 340 between Pt. 9 and Pt. 10 in Auxiliary Relay Panel 1-R-73.

_____
1st

_____
CV

[22]   **VERIFY** Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STOPS. (**Acc Crit**)

_____

[23]   **IF** no further testing is to be performed on Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, **THEN**

SECURE Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A..

_____

Data Package: Page _____ of _____   **Date _____**

6.14   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B LOGIC

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.14 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, at 2-JB-292-1556-B, [A14U/692], is in AUTO,
AND

ENSURE cooler 2-CLR-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, is OFF.   _____

[3]   **VERIFY** the following:

A.   Breaker 2-BKR-30-202, 480V C&A BUILDING
VENT BD 2B1-B, Compartment 3B, Red Light is OFF.   _____

B.   Valve 2-FCV-67-344, PIPE CHASE COOLER 2B-B
ERCW SUP FLOW CNTL, [A14U/692], is CLOSED.   _____

C.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 29, FCV-67-344 PIPE CHASE CLR 2 B OPEN, is
OFF.   _____

[4]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, to START, **AND**

VERIFY the following:

A.   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B,
STARTS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-202, 480V C&A BUILDING
VENT BD 2B1-B, Compartment 3B, Red Light is ON.   _____

C.   Valve 2-FCV-67-344, PIPE CHASE COOLER 2B-B
ERCW SUP FLOW CNTL, is OPEN. (**Acc Crit**)   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 29, FCV-67-344 PIPE CHASE CLR 2 B OPEN, is
ON.   _____

Data Package: Page ____ of ____   Date _____

**6.14   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B LOGIC
(continued)**

[5]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER
2B-B, STOPS. (**Acc Crit**)   _____

B.   Breaker 2-BKR-30-202, 480V C&A BUILDING
VENT BD 2B1-B, Compartment 3B, Red Light is OFF.   _____

C.   Valve 2-FCV-67-344, PIPE CHASE COOLER 2B-B
ERCW SUP FLOW CNTL, is CLOSED.   _____

D.   On Panel 0-M-27A, CLRS ERCW SUP, 0-XX-55-27B,
Window 29, FCV-67-344 PIPE CHASE CLR 2 B OPEN, is
OFF.   _____

[6]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, remains OFF.   _____

CAUTION

**The following steps will simulate a high ambient room temperature using an electric
heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the
bulb temperature with a surface temperature probe.**

---

[7]   **HEAT** Temperature Switch 2-TS-30-202A, AB EL 692 PIPE
CHASE COOLER 2B-B TEMP, [A12U/692], sensing bulb to a
temperature greater than 95°F.   _____

[8]   **VERIFY** Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, STARTS. (**Acc Crit**)   _____

[9]   **IF** temperature of the sensing bulb reaches 115°F, **THEN**

STOP applying heat to the sensing bulb.   _____

Data Package: Page ____ of ____   Date _____

6.14   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B LOGIC (continued)

[10]   **MAINTIAN** Temperature Switch 2-TS-30-202A, AB EL 692 PIPE CHASE COOLER 2B-B TEMP, sensing bulb at a temperature greater than 95°F.   _____

[10.1]   **PLACE** Handswitch 2-HS-30-20B, AB EL 692 PIPE CHASE COOLER 2B-B, to STOP, **AND**

VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STOPS. (**Acc Crit**)   _____

[10.2]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, to AUTO, **AND**

VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STARTS.   _____

[11]   **COOL** Temperature Switch 2-TS-30-202A, AB EL 692 PIPE CHASE COOLER 2B-B TEMP, sensing bulb until it resets, **AND**

VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STOPS.   _____

[12]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, to STANDBY, **AND**

VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, remains OFF.   _____

CAUTION

The following steps will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[13]   **HEAT** Temperature Switch 2-TS-30-202B, AB EL 692 PIPE CHASE COOLER 2B-B TEMP, [A12U/692], sensing bulb to a temperature greater than 100°F.   _____

[14]   **VERIFY** Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STARTS. (**Acc Crit**)   _____

Data Package: Page ____ of ____   **Date _____**

6.14   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B LOGIC (continued)

[15]   **IF** temperature of the sensing bulb reaches 120°F, **THEN**

       STOP applying heat to the sensing bulb.   _____

[16]   **MAINTAIN** Temperature Switch 2-TS-30-202B, AB EL 692 PIPE CHASE COOLER 2B-B TEMP, sensing bulb at a temperature greater than 100°F.   _____

    [16.1]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, to STOP, **AND**

          VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STOPS. (**Acc Crit**)   _____

    [16.2]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, to STANDBY, **AND**

          VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STARTS.   _____

[17]   **COOL** Temperature Switch 2-TS-30-202B, AB EL 692 PIPE CHASE COOLER 2B-B TEMP, sensing bulb until it resets, **AND**

       VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STOPS.   _____

[18]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, to AUTO, **AND**

       VERIFY Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, remains OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.14   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B LOGIC (continued)

NOTE

The following step will simulate an Auxiliary Building Isolation (ABI) Signal by placing a jumper across terminal points in Auxiliary Relay panel 1-R-78.

---

[19]   **PLACE** and **HOLD** a handheld jumper at TB 837, between Pt. 9 and Pt. 10 in Auxiliary Relay Panel 1-R-78.

_____
1st

_____
CV

[20]   **VERIFY** Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STARTS. (**Acc Crit**)

_____

[21]   **REMOVE** handheld jumper at TB 837 between Pt. 9 and Pt. 10 in Auxiliary Relay Panel 1-R-78.

_____
1st

_____
CV

[22]   **VERIFY** Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STOPS. (**Acc Crit**)

_____

[23]   **IF** no further testing is to be performed on Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, **THEN**

SECURE Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B.

_____

Data Package: Page ____ of ____   **Date _____**

6.15   2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.15 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM
COOLER, at 2-JB-292-2506-A [A11W/676], is in START, **AND**

ENSURE Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM
COOLER, is ON.   _____

[3]   **OBSERVE** operation of Cooler 2-PMCL-30-175, RHR
PUMP 2A-A ROOM COOLER, **AND**

VERIFY that it is in a steady state condition.   _____

[4]   **ENSURE** Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM
COOLER, air flow measurement has been performed using
GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[5]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
        Acc Crit: 6,925 CFM (6,233 - 7,617)

                                                                             _____

[6]   **PLACE** Handswitch 2-HS-30-175, RHR PUMP 2A-A ROOM
COOLER to STOP, **AND**

VERIFY that Cooler 2-PMCL-30-175, RHR PUMP 2A-A
ROOM COOLER STOPS.   _____

[7]   **IF** no further testing is to be performed on Cooler
2-PMCL-30-175, RHR PUMP 2A-A ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-175, RHR PUMP 2A-A ROOM
COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.16   2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.16 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM
COOLER, at 2-JB-292-2505-B, [A11V/676], is in START, **AND**

ENSURE Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM
COOLER, is ON.   _____

[3]   **OBSERVE** operation of Cooler 2-PMCL-30-176, RHR
PUMP 2B-B ROOM COOLER, **AND**

VERIFY that it is in a steady state condition.   _____

[4]   **ENSURE** Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM
COOLER, air flow measurement has been performed using
GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[5]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
Acc Crit: 6,925 CFM (6,233 - 7,617)

_____

[6]   **PLACE** Handswitch 2-HS-30-176, RHR PUMP 2B-B ROOM
COOLER, to STOP, **AND**

VERIFY that Cooler 2-PMCL-30-176, RHR PUMP 2B-B
ROOM COOLER, STOPS.   _____

[7]   **IF** no further testing is to be performed on Cooler
2-PMCL-30-176, RHR PUMP 2B-B ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-176, RHR PUMP 2B-B ROOM
COOLER.   _____

Data Package: Page ____ of ____   Date _____

6.17   2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.17 have been completed.   _____

[2]   **ENSURE** Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, is OFF, **AND**

   ENSURE Valve 2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, [A10U/676], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

---

[3]   **PLACE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, at 2-JB-292-2502-A, [A10U/676], to START, **AND**

   MEASURE the stroke OPEN time of Valve 2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, **AND**

   VERIFY it meets acceptance criteria.

   _____ seconds   M&TE: _____
   Acc Crit: 10 seconds maximum

                                                                          _____

[5]   **OBSERVE** operation of Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, **AND**

   VERIFY that it is in a steady state condition.   _____

Data Package: Page _____ of _____   Date _____

6.17   2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER AIR FLOW (continued)

[6]   **ENSURE** Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM

Acc Crit: 12,200 CFM (10,980 - 13,420)

_____

[8]   **PLACE** Handswitch 2-HS-30-177, CS PUMP 2A-A ROOM COOLER, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, STOPS.   _____

B.   Valve 2-FCV-67-184, CSP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.   _____

[9]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-177, CS PUMP 2A-A ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.18   2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.18 have been completed.   _____

[2]   **ENSURE** Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, is OFF, **AND**

ENSURE Valve 2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A10U/676], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

---

[3]   **PLACE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER, at 2-JB-292-2501-B, [A11U/676], to START, **AND**

MEASURE the stroke OPEN time of Valve 2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, **AND**

VERIFY it meets acceptance criteria.

_____ seconds   M&TE: _____

Acc Crit: 10 seconds maximum

_____

[5]   **OBSERVE** operation of Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, **AND**

VERIFY that it is in a steady state condition.   _____

[6]   **ENSURE** Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

Data Package: Page _____ of _____ **Date _____**

6.18   **2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER AIR FLOW (continued)**

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
Acc Crit: 12,200 CFM (10,980 - 13,420)

_____

[8]   **PLACE** Handswitch 2-HS-30-178, CS PUMP 2B-B ROOM COOLER, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, STOPS.

_____

B.   Valve 2-FCV-67-186, CSP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is CLOSED

_____

[9]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-178, CS PUMP 2B-B ROOM COOLER.

_____

Data Package: Page _____ of _____   **Date _____**

6.19   2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.19 have been completed.   _____

[2]   **ENSURE** Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM
COOLER, is OFF, **AND**

ENSURE Valve 2-FCV-67-176, SIP ROOM COOLER 2A-A
ERCW SUP FLOW CNTL, [A9V/692], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

---

[3]   **PLACE** Handswitch 2-HS-30-180, SIS PUMP 2A-A ROOM
COOLER, at 2-JB-292-1197-A, [A10V/692], to START, **AND**

MEASURE the stroke OPEN time of Valve 2-FCV-67-176, SIP
ROOM COOLER 2A-A ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-176, SIP
ROOM COOLER 2A-A ERCW SUP FLOW CNTL, **AND**

VERIFY it meets acceptance criteria.

_____ seconds   M&TE: _____
    Acc Crit: 10 seconds maximum

                                                                         _____

[5]   **OBSERVE** operation of Cooler 2-PMCL-30-180, SIS
PUMP 2A-A ROOM COOLER, **AND**

VERIFY that it is in a steady state condition.   _____

[6]   **ENSURE** Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM
COOLER, air flow measurement has been performed using
GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

Data Package: Page ____ of ____   **Date _____**

6.19   2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER AIR FLOW (continued)

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
Acc Crit: 7,850 CFM (7,065 - 8,635)

_____

[8]   **PLACE** Handswitch 2-HS-30-180, SIS PUMP 2A-A ROOM COOLER, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, STOPS.

_____

B.   Valve 2-FCV-67-176, SIP ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.

_____

[9]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-180, SIS PUMP 2A-A ROOM COOLER.

_____

Data Package: Page ____ of ____   **Date _____**

6.20   2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.20 have been completed.   _____

[2]   **ENSURE** Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, is OFF, **AND**

ENSURE Valve 2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A9V/692], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

---

[3]   **PLACE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, at 2-JB-292-1198-B, [A10U/692], to START, **AND**

MEASURE the stroke OPEN time of Valve 2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, **AND**

VERIFY it meets acceptance criteria.

_____ seconds   M&TE: _____

Acc Crit: 10 seconds maximum

_____

[5]   **OBSERVE** operation of Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, **AND**

VERIFY that it is in a steady state condition.   _____

[6]   **ENSURE** Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

Data Package: Page ____ of ____   **Date _____**

6.20   2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER AIR FLOW (continued)

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
Acc Crit: 7,850 CFM (7,065 - 8,635)

_____

[8]   **PLACE** Handswitch 2-HS-30-179, SIS PUMP 2B-B ROOM COOLER, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER STOPS.

_____

B.   Valve 2-FCV-67-182, SIP ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is CLOSED.

_____

[9]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-179, SIS PUMP 2B-B ROOM COOLER.

_____

Data Package: Page ____ of ____   **Date _____**

6.21   2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.21 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, at 2-JB-292-1191-A, [A12T/692], is in START, **AND**

ENSURE Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, is ON.   _____

[3]   **OBSERVE** operation of Cooler 2-PMCL-30-183-A, CENT CHARGING PUMP 2A-A ROOM COOLER, **AND**

VERIFY that it is in a steady state condition.   _____

[4]   **ENSURE** Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[5]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
   Acc Crit: 9,200 CFM (8,280 - 10,120)

_____

[6]   **PLACE** Handswitch 2-HS-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, to STOP, **AND**

VERIFY Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, STOPS.   _____

Data Package: Page ____ of ____   **Date _____**

6.21   2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER AIR FLOW (continued)

[7]   **IF** no further testing is to be performed on Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER, **THEN**

SECURE Cooler 2-PMCL-30-183, CENT CHARGING PUMP 2A-A ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.22   2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER AIR FLOW

[1]   **VERIFY** prerequisites listed in Section 4.0 for SubSection 6.22 have been completed.   _____

[2]   **ENSURE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, at 2-JB-292-1192-B, [A11U/692], is in START, **AND**

ENSURE Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, is ON.   _____

[3]   **OBSERVE** operation of Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, **AND**

VERIFY that it is in a steady state condition.   _____

[4]   **ENSURE** Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[5]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
        Acc Crit: 9,200 CFM (8,280 - 10,120)

_____

[6]   **PLACE** Handswitch 2-HS-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, to STOP, **AND**

VERIFY Cooler 2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER, STOPS.   _____

Data Package: Page ____ of ____   **Date _____**

**6.22   2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM COOLER
AIR FLOW (continued)**

[7]   **IF** no further testing is to be performed on Cooler
2-PMCL-30-182, CENT CHARGING PUMP 2B-B ROOM
COOLER, **THEN**

SECURE Cooler 2-PMCL-30-182, CENT CHARGING
PUMP 2B-B ROOM COOLER.   _____

Data Package: Page ____ of ____   **Date _____**

6.23   2-PMCL-30-186, PENETRATION ROOM EL 692 COOLER 2A-A AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.23 have been completed.   _____

[2]   **ENSURE** Cooler 2-CLR-30-186, PENETRATION ROOM
EL 692 COOLER 2A-A is OFF, **AND**

ENSURE Valve 2-FCV-67-346, PENT ROOM COOLER 2A-A
ERCW SUP FLOW CNTL, [A12U/692], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

---

[3]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM
EL 692 COOLER 2A-A, at 2-JB-292-1553-A, [A12U/692],
to START, **AND**

MEASURE the stroke OPEN time of Valve 2-FCV-67-346,
PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-346, PENT
ROOM COOLER 2A-A ERCW SUP FLOW CNTL, **AND**

VERIFY it meets acceptance criteria.

_____ seconds   M&TE: _____
Acc Crit: 10 seconds maximum

_____

Data Package: Page ____ of ____   **Date _____**

6.23   2-PMCL-30-186, PENETRATION ROOM EL 692 COOLER 2A-A AIR FLOW (continued)

[5]   **OBSERVE** operation of Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, **AND**

VERIFY that it is in a steady state condition.   _____

[6]   **ENSURE** Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
Acc Crit: 4,250 CFM (3,825 - 4,675)

_____

[8]   **PLACE** Handswitch 2-HS-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, STOPS.   _____

B.   Valve 2-FCV-67-346, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.   _____

[9]   **IF** no further testing is to be performed on Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A, **THEN**

SECURE Cooler 2-CLR-30-186, PENETRATION ROOM EL 692 COOLER 2A-A.   _____

Data Package: Page ____ of ____   **Date _____**

6.24   2-PMCL-30-187, PENETRATION ROOM EL 692 COOLER 2B-B AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for SubSection 6.24 have been completed.   _____

[2]   **ENSURE** Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B is OFF, **AND**

   ENSURE Valve 2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A12V/692], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

---

[3]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, at 2-JB-292-1554-B, [A12V/692], to START, **AND**

   MEASURE the stroke OPEN time of Valve 2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, **AND**

   VERIFY it meets acceptance criteria.

   _____ seconds   M&TE: _____
   Acc Crit: 10 seconds maximum

                    _____

[5]   **OBSERVE** operation of Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, **AND**

   VERIFY that it is in a steady state condition.   _____

Data Package: Page _____ of _____   Date _____

6.24   2-PMCL-30-187, PENETRATION ROOM EL 692 COOLER 2B-B AIR FLOW (continued)

[6]   **ENSURE** Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM

Acc Crit: 4,250 CFM (3,825 - 4,675)

_____

[8]   **PLACE** Handswitch 2-HS-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, to STOP, **AND**

VERIFY the following

A.   Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, STOPS.   _____

B.   Valve 2-FCV-67-348, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is CLOSED.   _____

[9]   **IF** no further testing is to be performed on Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B, **THEN**

SECURE Cooler 2-CLR-30-187, PENETRATION ROOM EL 692 COOLER 2B-B.   _____

Data Package: Page ____ of ____   **Date _____**

6.25   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.25 have been completed.   _____

[2]   **ENSURE** Cooler 2-CLR-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, is OFF, **AND**

ENSURE Valve 2-FCV-67-350, PENT ROOM COOLER 2A-A
ERCW SUP FLOW CNTL, [A14V/713], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

---

[3]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM
EL 713 COOLER 2A-A, at 2-JB-292-1503-A, [A14V/713],
to START, **AND**

MEASURE the stroke OPEN time of Valve 2-FCV-67-350,
PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-350, PENT
ROOM COOLER 2A-A ERCW SUP FLOW CNTL, **AND**

VERIFY it meets acceptance criteria.

_____ seconds   M&TE: _____
Acc Crit: 10 seconds maximum

_____

[5]   **OBSERVE** operation of Cooler 2-CLR-30-196,
PENETRATION ROOM EL 713 COOLER 2A-A, **AND**

VERIFY that it is in a steady state condition.   _____

Data Package: Page ____ of ____   **Date _____**

6.25   2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A AIR FLOW (continued)

[6]   **ENSURE** Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
Acc Crit: 3,950 CFM (3,555 - 4,345)

_____

[8]   **PLACE** Handswitch 2-HS-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, STOPS.   _____

B.   Valve 2-FCV-67-350, PENT ROOM COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.   _____

[9]   **IF** no further testing is to be performed on Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A, **THEN**

SECURE Cooler 2-CLR-30-196, PENETRATION ROOM EL 713 COOLER 2A-A.   _____

Data Package: Page ____ of ____　　　　　　　　　　　**Date _____**

6.26　2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B AIR FLOW

[1]　**ENSURE** prerequisites listed in Section 4.0 for SubSection 6.26 have been completed.　　　　　　_____

[2]　**ENSURE** Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, is OFF, **AND**

　　ENSURE Valve 2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, [A14V/713], is CLOSED.　　　　　_____

NOTE
The following steps require valve stroke timing locally at the valve. Local valve stroke timing begins with the initiating signal and is concluded with the completion of valve stem movement.

[3]　**PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, at 2-JB-292-1505-B, [A14V/713], to START, **AND**

　　MEASURE the stroke OPEN time of Valve 2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL.　　　　_____

[4]　**RECORD** stroke OPEN time of Valve 2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, **AND**

　　VERIFY it meets acceptance criteria.

　　　　_____ seconds　　　　M&TE: _____
　　Acc Crit: 10 seconds maximum

　　　　　　　　　　　　　　　　　　　　　　　_____

[5]　**OBSERVE** operation of Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, **AND**

　　VERIFY that it is in a steady state condition.　　　　_____

Data Package: Page ____ of ____   **Date _____**

6.26   2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B AIR FLOW (continued)

[6]   **ENSURE** Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, air flow measurement has been performed using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM

Acc Crit: 3,950 CFM (3,555 - 4,345)

_____

[8]   **PLACE** Handswitch 2-HS-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, STOPS.   _____

B.   Valve 2-FCV-67-352, PENT ROOM COOLER 2B-B ERCW SUP FLOW CNTL, is CLOSED.   _____

[9]   **IF** no further testing is to be performed on Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B, **THEN**

SECURE Cooler 2-CLR-30-197, PENETRATION ROOM EL 713 COOLER 2B-B.   _____

Data Package: Page _____ of _____   **Date _____**

6.27   2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.27 have been completed.   _____

[2]   **ENSURE** Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE
COOLER 2A-A, is OFF, **AND**

ENSURE Valve 2-FCV-67-342, PIPE CHASE COOLER 2A-A
ERCW SUP FLOW CNTL, [A15U/692], is CLOSED.   _____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke
timing begins with the initiating signal and is concluded with the completion of valve stem
movement.

---

[3]   **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE
COOLER 2A-A, at 2-JB-292-1555-A, [A15U/692], to START,
AND

MEASURE the stroke OPEN time of Valve 2-FCV-67-342,
PIPE CHASE COOLER 2A-A ERCW SUP FLOW CNTL.   _____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-342, PIPE
CHASE COOLER 2A-A ERCW SUP FLOW CNTL, **AND**

VERIFY it meets acceptance criteria.

_____ seconds   M&TE: _____
    Acc Crit: 10 seconds maximum

_____

[5]   **OBSERVE** operation of Cooler 2-CLR-30-201, AB EL 692
PIPE CHASE COOLER 2A-A, **AND**

VERIFY that it is in a steady state condition.   _____

[6]   **ENSURE** Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE
COOLER 2A-A, air flow measurement has been performed
using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.   _____

Data Package: Page ____ of ____   **Date _____**

6.27   2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A AIR FLOW (continued)

[7]   **RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM

Acc Crit: 5,400 CFM (4,860 - 5,940)

_____

[8]   **PLACE** Handswitch 2-HS-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, to STOP, **AND**

VERIFY the following:

A.   Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, STOPS.

_____

B.   Valve 2-FCV-67-342, PIPE CHASE COOLER 2A-A ERCW SUP FLOW CNTL, is CLOSED.

_____

[9]   **IF** no further testing is to be performed on Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A, **THEN**

SECURE Cooler 2-CLR-30-201, AB EL 692 PIPE CHASE COOLER 2A-A.

_____

Data Package: Page ____ of ____　　　　　　　　　**Date _____**

6.28   2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B AIR FLOW

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.28 have been completed.　　　　　　　　_____

[2]   **ENSURE** Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, is OFF, **AND**

ENSURE Valve 2-FCV-67-344, PIPE CHASE COOLER 2B-B
ERCW SUP FLOW CNTL, [A14U/692], is CLOSED.　　　_____

NOTE

The following steps require valve stroke timing locally at the valve. Local valve stroke
timing begins with the initiating signal and is concluded with the completion of valve stem
movement.

---

[3]   **PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, at 2-JB-292-1556-B, [A14U/692], to START,
AND

MEASURE the stroke OPEN time of Valve 2-FCV-67-344,
PIPE CHASE COOLER 2B-B ERCW SUP FLOW CNTL.　　_____

[4]   **RECORD** stroke OPEN time of Valve 2-FCV-67-344, PIPE
CHASE COOLER 2B-B ERCW SUP FLOW CNTL, **AND**

VERIFY it meets acceptance criteria.

_____ seconds　　　　　M&TE: _____

Acc Crit: 10 seconds maximum

　　　　　　　　　　　　　　　　　　　　　　　　_____

[5]   **OBSERVE** operation of Cooler 2-CLR-30-202, AB EL 692
PIPE CHASE COOLER 2B-B, **AND**

VERIFY it is in a steady state condition.　　　　　　_____

[6]   **ENSURE** Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE
COOLER 2B-B, air flow measurement has been performed
using GTM-05, **AND**

ENSURE completed GTM-05 data sheets are attached.　_____

Data Package: Page ____ of ____　　　　　　　　　　**Date _____**

6.28　**2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B AIR FLOW (continued)**

[7]　**RECORD** the air flow measurement below, **AND**

VERIFY it meets acceptance criteria.

_____ CFM
Acc Crit: 5,400 CFM (4,860 - 5,940)

_____

[8]　**PLACE** Handswitch 2-HS-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, to STOP, **AND**

VERIFY the following:

A.　Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, STOPS.　_____

B.　Valve 2-FCV-67-344, PIPE CHASE COOLER 2B-B ERCW SUP FLOW CNTL, is CLOSED.　_____

[9]　**IF** no further testing is to be performed on Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B, **THEN**

SECURE Cooler 2-CLR-30-202, AB EL 692 PIPE CHASE COOLER 2B-B.　_____

Data Package: Page ____ of ____　　　　　　　　　　**Date _____**

6.29   HIGH ENERGY LINE BREAK (HELB) DETECTION.

[1]   **ENSURE** prerequisites listed in Section 4.0 for
SubSection 6.29 have been completed.　　　　　　　_____

[2]   **VERIFY** 2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE
BREAK, is CLEAR (**NOT** LIT).　　　　　　　　　_____

[3]   **VERIFY** the Unit 2 Alarm Events Display Screen on
Panel 2-M-16A indicates the following inputs are in
NORMAL (Green):

A.   113-B CVC LTDN HX RM HI TEMP PIPE BREAK
(TS-30-5235 A/B)　　　　　　　　　　　_____

B.   113-B RHR PUMP RM A HI TEMP PIPE BREAK
(TS-30-5236 A/B)　　　　　　　　　　　_____

C.   113-B RHR PUMP RM B HI TEMP PIPE BREAK
(TS-30-5237 A/B)　　　　　　　　　　　_____

D.   113-B RHR HX RM A HI TEMP PIPE BREAK
(TS-30-5238 A/B)　　　　　　　　　　　_____

E.   113-B RHR HX RM B HI TEMP PIPE BREAK
(TS-30-5239 A/B)　　　　　　　　　　　_____

Data Package: Page ____ of ____   **Date _____**

6.29   HIGH ENERGY LINE BREAK (HELB) DETECTION. (continued)

[4]   **VERIFY** The following Indicating Lights on Panel 2-M-6, are OFF:

A.   2-XI-30-5235A, LETDOWN HX PIPE BREAK   _____

B.   2-XI-30-5235B, LETDOWN HX PIPE BREAK   _____

C.   2-XI-30-5236A, RHR PMP RM A PIPE BREAK   _____

D.   2-XI-30-5236B, RHR PMP RM A PIPE BREAK   _____

E.   2-XI-30-5237A, RHR PMP RM B PIPE BREAK   _____

F.   2-XI-30-5237B, RHR PMP RM B PIPE BREAK   _____

G.   2-XI-30-5238A, RHR HX A RM PIPE BREAK   _____

H.   2-XI-30-5238B, RHR HX A RM PIPE BREAK   _____

I.   2-XI-30-5239A, RHR HX B RM PIPE BREAK   _____

J.   2-XI-30-5239B, RHR HX B RM PIPE BREAK   _____

Data Package: Page ____ of ____   **Date _____**

NOTE

SubSections 6.29.2 through 6.29.6 may be performed in any order provided the steps within are performed in the order written.

6.29.2   CVCS LETDOWN HEAT EXCHANGER ROOM HELB DETECTION

CAUTION

The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[1]   **HEAT** Temperature Switch 2-TS-30-5235A, CVCS LETDOWN HT EXCH RM HI TEMP SW, on Panel 2-L-730A, [A10U/737], sensing bulb to a temperature greater than 144°F.   _____

[2]   **IF** temperature of the sensing bulb reaches 165°F, **THEN**

         STOP applying heat to the sensing bulb.   _____

[3]   **VERIFY** the following

         A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, ALARMS. (**Acc Crit**)   _____

         B.   Unit 2 Alarm Events Display Screen indicates 113-B CVC LTDN HX RM HI TEMP PIPE BREAK (TS-30-5235 A/B), is in ALARM (Red). (**Acc Crit**)   _____

         C.   Indicating Light 2-XI-30-5235A, LETDOWN HX PIPE BREAK, is ON. (**Acc Crit**)   _____

Data Package: Page _____ of _____   Date _____

6.29.2   CVCS LETDOWN HEAT EXCHANGER ROOM HELB DETECTION (continued)

[4]   **COOL** Temperature Switch 2-TS-30-5235A, CVCS LETDOWN
HT EXCH RM HI TEMP SW, sensing bulb until it resets, **AND**

VERIFY the following:

A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK,
CLEARS.   _____

B.   Unit 2 Alarm Events Display Screen indicates 113-B CVC
LTDN HX RM HI TEMP PIPE BREAK (TS-30-5235 A/B),
is NORMAL (Green).   _____

C.   Indicating Light 2-XI-30-5235A, LETDOWN HX PIPE
BREAK, is OFF.   _____

CAUTION

The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[5]   **HEAT** Temperature Switch 2-TS-30-5235B, CVCS LETDOWN
HT EXCH RM HI TEMP SW, on Panel 2-L-730B, [A10U/737],
sensing bulb to a temperature greater than 144°F.   _____

[6]   **IF** temperature of the sensing bulb reaches 165°F, **THEN**

STOP applying heat to the sensing bulb.   _____

[7]   **VERIFY** the following

A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK,
ALARMS. (**Acc Crit**)   _____

B.   Unit 2 Alarm Events Display Screen indicates 113-B CVC
LTDN HX RM HI TEMP PIPE BREAK (TS-30-5235 A/B),
is in ALARM (Red). (**Acc Crit**)   _____

C.   Indicating Light 2-XI-30-5235B, LETDOWN HX PIPE
BREAK, is ON. (**Acc Crit**)   _____

Data Package: Page ____ of ____   **Date _____**

6.29.2 CVCS LETDOWN HEAT EXCHANGER ROOM HELB DETECTION (continued)

[8]   **COOL** Temperature Switch 2-TS-30-5235A, CVCS LETDOWN HT EXCH RM HI TEMP SW, sensing bulb until resets, **AND**

VERIFY the following:

A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, CLEARS.   _____

B.   Unit 2 Alarm Events Display Screen indicates 113-B CVC LTDN HX RM HI TEMP PIPE BREAK (TS-30-5235 A/B), is NORMAL (Green).   _____

C.   Indicating Light 2-XI-30-5235B, LETDOWN HX PIPE BREAK, is OFF.   _____

Data Package: Page _____ of _____   **Date _____**

6.29.3 RHR PUMP ROOM 2A HELB DETECTION

┌───┐

CAUTION

The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

└───┘

[1] **HEAT** Temperature Switch 2-TS-30-5236A, RHR PUMP RM A HI TEMP SW, on Panel 2-L-731A, [A10W/676], sensing bulb to a temperature greater than 144°F.   _____

[2] **IF** temperature of the sensing bulb reaches 165°F, **THEN**

   STOP applying heat to the sensing bulb.   _____

[3] **VERIFY** the following

   A. 2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, ALARMS. (**Acc Crit**)   _____

   B. Unit 2 Alarm Events Display Screen indicates 113-B RHR PUMP ROOM A HI TEMP PIPE BREAK (TS-30-5236 A/B), is in ALARM (Red). (**Acc Crit**)   _____

   C. Indicating Light 2-XI-30-5236A, RHR PMP RM A PIPE BREAK, is ON. (**Acc Crit**)   _____

[4] **COOL** Temperature Switch 2-TS-30-5236A, RHR PUMP RM A HI TEMP SW, sensing bulb until it resets, **AND**

   VERIFY the following:

   A. 2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, CLEARS.   _____

   B. Unit 2 Alarm Events Display Screen indicates 113-B RHR PUMP ROOM A HI TEMP PIPE BREAK (TS-30-5236 A/B), is NORMAL (Green).   _____

   C. Indicating Light 2-XI-30-5236A, RHR PMP RM A PIPE BREAK, is OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.29.3   RHR PUMP ROOM 2A HELB DETECTION (continued)

CAUTION
The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe..

    [5]   **HEAT** Temperature Switch 2-TS-30-5236B, RHR PUMP RM A
HI TEMP SW, on Panel 2-L-731B, [A10W/676], sensing bulb
to a temperature greater than 144°F.   _____

    [6]   **IF** temperature of the sensing bulb reaches 165°F, **THEN**

        STOP applying heat to the sensing bulb.   _____

    [7]   **VERIFY** the following

        A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK,
ALARMS. (**Acc Crit**)   _____

        B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR
PUMP ROOM A HI TEMP PIPE BREAK
(TS-30-5236 A/B), is in ALARM (Red). (**Acc Crit**)   _____

        C.   Indicating Light 2-XI-30-5236B, RHR PMP RM A PIPE
BREAK, is ON. (**Acc Crit**)   _____

    [8]   **COOL** Temperature Switch 2-TS-30-5236B, RHR PUMP RM A
HI TEMP SW, sensing bulb until it resets, **AND**

        VERIFY the following:

        A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK,
CLEARS.   _____

        B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR
PUMP ROOM A HI TEMP PIPE BREAK
(TS-30-5236 A/B), is NORMAL (Green).   _____

        C.   Indicating Light 2-XI-30-5236B, RHR PMP RM A PIPE
BREAK, is OFF.   _____

Data Package: Page _____ of _____   Date _____

6.29.4 RHR PUMP ROOM 2B HELB DETECTION

CAUTION

The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[1]   **HEAT** Temperature Switch 2-TS-30-5237A, RHR PUMP RM B HI TEMP SW, on Panel 2-L-732A, [A10V/676], sensing bulb to a temperature greater than 144°F.   _____

[2]   **IF** temperature of the sensing bulb reaches 165°F, **THEN**

    STOP applying heat to the sensing bulb.   _____

[3]   **VERIFY** the following

    A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, ALARMS. (**Acc Crit**)   _____

    B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR PUMP ROOM B HI TEMP PIPE BREAK (TS-30-5237 A/B), is in ALARM (Red). (**Acc Crit**)   _____

    C.   Indicating Light 2-XI-30-5237A, RHR PMP RM B PIPE BREAK, is ON. (**Acc Crit**)   _____

[4]   **COOL** Temperature Switch 2-TS-30-5236A, RHR PUMP RM B HI TEMP SW, sensing bulb until it resets, **AND**

    VERIFY the following:

    A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, CLEARS.   _____

    B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR PUMP ROOM B HI TEMP PIPE BREAK (TS-30-5237 A/B), is NORMAL (Green).   _____

    C.   Indicating Light 2-XI-30-5237A, RHR PMP RM B PIPE BREAK, is OFF.   _____

Data Package: Page _____ of _____   Date _____

6.29.4   RHR PUMP ROOM 2B HELB DETECTION (continued)

CAUTION

The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[5]   **HEAT** Temperature Switch 2-TS-30-5237B, RHR PUMP RM B HI TEMP SW, on Panel 2-L-732B, [A10V/676], sensing bulb to a temperature greater than 144°F.   _____

[6]   **IF** temperature of the sensing bulb reaches 165°F, **THEN**

       STOP applying heat to the sensing bulb.   _____

[7]   **VERIFY** the following

       A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, ALARMS. (**Acc Crit**)   _____

       B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR PUMP ROOM B HI TEMP PIPE BREAK (TS-30-5237 A/B), is in ALARM (Red). (**Acc Crit**)   _____

       C.   Indicating Light 2-XI-30-5237B, RHR PMP RM B PIPE BREAK, is ON. (**Acc Crit**)   _____

[8]   **COOL** Temperature Switch 2-TS-30-5237B, RHR PUMP RM B HI TEMP SW, sensing bulb until it resets, **AND**

       VERIFY the following:

       A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, CLEARS.   _____

       B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR PUMP ROOM B HI TEMP PIPE BREAK (TS-30-5237 A/B), is NORMAL (Green).   _____

       C.   Indicating Light 2-XI-30-5237B, RHR PMP RM B PIPE BREAK, is OFF.   _____

Data Package: Page _____ of _____   Date _____

6.29.5 RHR HEAT EXCHANGER ROOM 2A HELB DETECTION

<table>
<tr><td align="center">CAUTION</td></tr>
<tr><td>The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.</td></tr>
</table>

[1] **HEAT** Temperature Switch 2-TS-30-5238A, RHR HEAT EXCH A ROOM HI TEMP SW, on 2-L-733A, [A10V/713], sensing bulb to greater than 134°F.   _____

[2] **IF** temperature of the sensing bulb reaches 155°F, **THEN**

    STOP applying heat to the sensing bulb.   _____

[3] **VERIFY** the following

    A. 2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, ALARMS. (**Acc Crit**)   _____

    B. Unit 2 Alarm Events Display Screen indicates 113-B RHR HX ROOM A HI TEMP PIPE BREAK (TS-30-5238 A/B), is in ALARM (Red). (**Acc Crit**)   _____

    C. Indicating Light 2-XI-30-5238A, RHR HX A RM PIPE BREAK, is ON. (**Acc Crit**)   _____

[4] **COOL** Temperature Switch 2-TS-30-5238A, RHR HEAT EXCH A ROOM HI TEMP SW, sensing bulb until it resets, **AND**

    VERIFY the following:

    A. 2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, CLEARS.   _____

    B. Unit 2 Alarm Events Display Screen indicates 113-B RHR HX ROOM A HI TEMP PIPE BREAK (TS-30-5238 A/B), is NORMAL (Green).   _____

    C. Indicating Light 2-XI-30-5238A, RHR HX A RM PIPE BREAK, is OFF.   _____

Data Package: Page _____ of _____   Date _____

6.29.5   RHR HEAT EXCHANGER ROOM 2A HELB DETECTION (continued)

CAUTION

The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[5]   **HEAT** Temperature Switch 2-TS-30-5238B, RHR HEAT
EXCH A ROOM HI TEMP SW, on 2-L-733B, [A10W/713],
sensing bulb to greater than 134°F.   _____

[6]   **IF** temperature of the sensing bulb reaches 155°F, **THEN**

STOP applying heat to the sensing bulb.   _____

[7]   **VERIFY** the following

A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK,
ALARMS. (**Acc Crit**)   _____

B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR
HX ROOM A HI TEMP PIPE BREAK (TS-30-5238 A/B), is
in ALARM (Red). (**Acc Crit**)   _____

C.   Indicating Light 2-XI-30-5238B, RHR HX A RM PIPE
BREAK, is ON. (**Acc Crit**)   _____

[8]   **COOL** Temperature Switch 2-TS-30-5238B, RHR HEAT
EXCH A ROOM HI TEMP SW, sensing bulb until it resets,
AND

VERIFY the following:

A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK,
CLEARS.   _____

B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR
HX ROOM A HI TEMP PIPE BREAK (TS-30-5238 A/B), is
NORMAL (Green).   _____

C.   Indicating Light 2-XI-30-5238B, RHR HX A RM PIPE
BREAK, is OFF.   _____

Data Package: Page ____ of ____   Date _____

6.29.6   RHR HEAT EXCHANGER ROOM 2B HELB DETECTION

> **CAUTION**
>
> **The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.**

[1]   **HEAT** Temperature Switch 2-TS-30-5239A, RHR HEAT EXCH B ROOM HI TEMP SW, on 2-L-734A, [A10V/713], sensing bulb to greater than 134°F.   _____

[2]   **IF** temperature of the sensing bulb reaches 155°F, **THEN**

  STOP applying heat to the sensing bulb.   _____

[3]   **VERIFY** the following

  A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, ALARMS. (**Acc Crit**)   _____

  B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR HX ROOM B HI TEMP PIPE BREAK (TS-30-5239 A/B), is in ALARM (Red). (**Acc Crit**)   _____

  C.   Indicating Light 2-XI-30-5239A, RHR HX B RM PIPE BREAK, is ON. (**Acc Crit**)   _____

[4]   **COOL** Temperature Switch 2-TS-30-5239A, RHR HEAT EXCH B ROOM HI TEMP SW, sensing bulb until it resets, **AND**

  VERIFY the following:

  A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, CLEARS.   _____

  B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR HX ROOM B HI TEMP PIPE BREAK (TS-30-5239 A/B), is NORMAL (Green).   _____

  C.   Indicating Light 2-XI-30-5239A, RHR HX B RM PIPE BREAK, is OFF.   _____

Data Package: Page ____ of ____   **Date _____**

6.29.6   RHR HEAT EXCHANGER ROOM 2B HELB DETECTION (continued)

CAUTION

The following step will simulate a high ambient room temperature using an electric heatgun. Heat the temperature switch sensing bulb SLOWLY while monitoring the bulb temperature with a surface temperature probe.

---

[5]   **HEAT** Temperature Switch 2-TS-30-5239B, RHR HEAT EXCH B ROOM HI TEMP SW, on 2-L-734B, [A10U/713], sensing bulb to greater than 134°F.   _____

[6]   **IF** temperature of the sensing bulb reaches 155°F, **THEN**

      STOP applying heat to the sensing bulb.   _____

[7]   **VERIFY** the following

      A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, ALARMS. (**Acc Crit**)   _____

      B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR HX ROOM B HI TEMP PIPE BREAK (TS-30-5239 A/B), is in ALARM (Red). (**Acc Crit**)   _____

      C.   Indicating Light 2-XI-30-5239B, RHR HX B RM PIPE BREAK, is ON. (**Acc Crit**)   _____

[8]   **COOL** Temperature Switch 2-TS-30-5239B, RHR HEAT EXCH B ROOM HI TEMP SW, sensing bulb until it resets, **AND**

      VERIFY the following:

      A.   2-XA-55-6A-113B, RHR/CVCS HI TEMP PIPE BREAK, CLEARS.   _____

      B.   Unit 2 Alarm Events Display Screen indicates 113-B RHR HX ROOM B HI TEMP PIPE BREAK (TS-30-5239 A/B), is NORMAL (Green).   _____

      C.   Indicating Light 2-XI-30-5239B, RHR HX B RM PIPE BREAK, is OFF.   _____

Data Package: Page ____ of ____   Date _____

7.0   POST PERFORMANCE ACTIVITIES

[1]   **NOTIFY** the Unit 2 US/SRO of the test completion and system
       alignment.   _____

8.0   RECORDS

A.   QA Records

Completed Test Package.

B.   Non-QA Records

None

Appendix A
(Page 1 of 4)

TEST PROCEDURES/INSTRUCTIONS REFERENCE REVIEW

Data Package: Page ____ of ____   Date _____

NOTES
1)   Additional copies of this table may be made as necessary.
2)   Initial and date indicates review has been completed for impact

PROCEDURE/ INSTRUCTION	REVISION/CHANGES	IMPACT Yes/No	INITIAL AND DATE (N/A for no change)
SMP-4.0			
SMP-8.0			
SMP-9.0			
0-SOI-67.01			
GTM-05			
GTM-03			
2-TSD-030A-01			
FSAR Section 9.2.1 Section 9.4.5.3 Table 14.2-1 Shts 4 & 5, 36 & 37 of 90			
2-PTI-067-02			
2-PTI-062-01			
2-PTI-063-5A			
2-PTI-063-05B			
2-PTI-072-01			
2-PTI-074-01			
2-PTI-262-01			
2-PTI-262-02			
G-37			
0-PI-OPS-1.1			

Appendix A
(Page 2 of 4)

TEST PROCEDURES/INSTRUCTIONS REFERENCE REVIEW

Data Package: Page _____ of _____   **Date _____**

PROCEDURE/ INSTRUCTION	REVISION/CHANGES	IMPACT Yes/No	INITIAL AND DATE (N/A for no change)
WBN2-30AB-4001			
WBN2-67-4002			

Appendix A
(Page 3 of 4)
TEST PROCEDURES/INSTRUCTIONS REFERENCE REVIEW

Data Package: Page _____ of _____   **Date _____**

PROCEDURE/ INSTRUCTION	REVISION/CHANGES	IMPACT Yes/No	INITIAL AND DATE (N/A for no change)
SSD-2-TS-30-175			
SSD-2-TS-30-176			
SSD-2-TS-30-177			
SSD-2-TS-30-178			
SSD-2-TS-30-179			
SSD-2-TS-30-180			
SSD-2-TS-30-182			
SSD-2-TS-30-183			
SSD-2-TS-30-186A			
SSD-2-TS-30-186B			
SSD-2-TS-30-187A			
SSD-2-TS-30-187B			
SSD-2-TS-30-196A			
SSD-2-TS-30-196B			
SSD-2-TS-30-197A			
SSD-2-TS-30-197B			
SSD-2-TS-30-201A			
SSD-2-TS-30-201B			
SSD-2-TS-30-202A			
SSD-2-TS-30-202B			

Appendix A
(Page 4 of 4)
TEST PROCEDURES/INSTRUCTIONS REFERENCE REVIEW

Data Package: Page ____ of ____   **Date _____**

PROCEDURE/ INSTRUCTION	REVISION/CHANGES	IMPACT Yes/No	INITIAL AND DATE (N/A for no change)
SSD-2-TS-30-5235A			
SSD-2-TS-30-5235B			
SSD-2-TS-30-5236A			
SSD-2-TS-30-5236B			
SSD-2-TS-30-5237A			
SSD-2-TS-30-5237B			
SSD-2-TS-30-5238A			
SSD-2-TS-30-5238B			
SSD-2-TS-30-5239A			
SSD-2-TS-30-5239B			

Appendix B
(Page 1 of 1)

TEMPORARY CONDITION LOG

Data Package: Page ____ of ____   **Date _____**

NOTE
These steps will be N/A'd if no temporary condition existed. Additional copies of this table may be made as necessary.

ITEM No.	TEMPORARY CONDITION DESCRIPTION	PERFORMED		RETURNED TO NORMAL	
		Step No.	Performed By/Date CV By/Date	Step No.	Returned By/Date CV By/Date

Appendix C
(Page 1 of 3)

PERMANENT PLANT INSTRUMENTATION LOG

Data Package: Page _____ of _____   Date _____

INSTRUMENT OR INSTRUMENT LOOP #	CAL DUE DATE	FILLED AND VENTED[1]	PLACED IN SERVICE[1]	USED FOR QUANTITATIVE ACC CRIT		POST-TEST CAL DATE[2]	POST-TEST CALIBRATION ACCEPTABLE[2]
		INIT/DATE	INIT/DATE	YES	NO		INITIAL/DATE
2-TS-30-175		N/A	N/A		NO	N/A	N/A
2-TS-30-176		N/A	N/A		NO	N/A	N/A
2-TS-30-177		N/A	N/A		NO	N/A	N/A
2-TS-30-178		N/A	N/A		NO	N/A	N/A
2-TS-30-179		N/A	N/A		NO	N/A	N/A
2-TS-30-180		N/A	N/A		NO	N/A	N/A
2-TS-30-182		N/A	N/A		NO	N/A	N/A
2-TS-30-183		N/A	N/A		NO	N/A	N/A

Appendix C
(Page 2 of 3)

PERMANENT PLANT INSTRUMENTATION LOG

Data Package: Page _____ of _____   Date _____

INSTRUMENT OR INSTRUMENT LOOP #	CAL DUE DATE	FILLED AND VENTED[1]	PLACED IN SERVICE[1]	USED FOR QUANTITATIVE ACC CRIT		POST-TEST CAL DATE[2]	POST-TEST CALIBRATION ACCEPTABLE[2]
		INIT/DATE	INIT/DATE	YES	NO		INITIAL/DATE
2-TS-30-186A		N/A	N/A		NO	N/A	N/A
2-TS-30-186B		N/A	N/A		NO	N/A	N/A
2-TS-30-187A		N/A	N/A		NO	N/A	N/A
2-TS-30-187B		N/A	N/A		NO	N/A	N/A
2-TS-30-196A		N/A	N/A		NO	N/A	N/A
2-TS-30-196B		N/A	N/A		NO	N/A	N/A
2-TS-30-197A		N/A	N/A		NO	N/A	N/A
2-TS-30-197B		N/A	N/A		NO	N/A	N/A
2-TS-30-201A		N/A	N/A		NO	N/A	N/A
2-TS-30-201B		N/A	N/A		NO	N/A	N/A
2-TS-30-202A		N/A	N/A		NO	N/A	N/A
2-TS-30-202B		N/A	N/A		NO	N/A	N/A

Appendix C
(Page 3 of 3)

PERMANENT PLANT INSTRUMENTATION LOG

Data Package: Page _____ of _____   Date _____

INSTRUMENT OR INSTRUMENT LOOP #	CAL DUE DATE	FILLED AND VENTED[1] INIT/DATE	PLACED IN SERVICE[1] INIT/DATE	USED FOR QUANTITATIVE ACC CRIT		POST-TEST CAL DATE[2]	POST-TEST CALIBRATION ACCEPTABLE[2] INITIAL/DATE
				YES	NO		
2-TS-30-5235A		N/A	N/A		NO	N/A	N/A
2-TS-30-5235B		N/A	N/A		NO	N/A	N/A
2-TS-30-5236A		N/A	N/A		NO	N/A	N/A
2-TS-30-5236B		N/A	N/A		NO	N/A	N/A
2-TS-30-5237A		N/A	N/A		NO	N/A	N/A
2-TS-30-5237B		N/A	N/A		NO	N/A	N/A
2-TS-30-5238A		N/A	N/A		NO	N/A	N/A
2-TS-30-5238B		N/A	N/A		NO	N/A	N/A
2-TS-30-5239A		N/A	N/A		NO	N/A	N/A
2-TS-30-5239B		N/A	N/A		NO	N/A	N/A

[1] These items may be initialed and dated by personnel performing the task. Instrumentation not required to be filled and vented may be identified as Not Applicable. (N/A)

[2] May be identified as Not Applicable (N/A) if instrument was not used to verify/record quantitative acceptance criteria data.

Appendix D
(Page 1 of 2)

ELECTRICAL LINEUP

Data Package: Page _____ of _____   **Date _____**

SECTIONS	IDENTIFICATION	DESCRIPTION	LOCATION	POSITION	INIT
6.1, 6.15	2-BKR-30-175	RHR PUMP 2A-A RM COOLER	C&A Building Vent BD 2A1-A Compartment 9A	ON (CLOSED)	
6.2, 6.16	2-BKR-30-176	RHR PUMP 2B-B RM COOLER	C&A Building Vent BD 2B1-B Compartment 9A	ON (CLOSED)	
6.3, 6.17	2-BKR-30-177	CS PUMP 2A-A RM COOLER	C&A Building Vent BD 2A1-A Compartment 3C	ON (CLOSED)	
6.4, 6.18	2-BKR-30-178	CS PUMP 2B-B RM COOLER	C&A Building Vent BD 2B1-B Compartment 3C	ON (CLOSED)	
6.5, 6.19	2-BKR-30-180	SIS PUMP 2A-A RM COOLER	C&A Building Vent BD 2A1-A Compartment 8A	ON (CLOSED)	
6.6, 6.20	2-BKR-30-179	SIS PUMP 2B-B RM COOLER	C&A Building Vent BD 2B1-B Compartment 8A	ON (CLOSED)	
6.7, 6.21	2-BKR-30-183	CENT CHG PUMP 2A-A RM COOLER	C&A Building Vent BD 2A1-A Compartment 10A	ON (CLOSED)	
6.8, 6.22	2-BKR-30-182	CENT CHG PUMP 2B-B RM COOLER	C&A Building Vent BD 2B1-B Compartment 10A	ON (CLOSED)	
6.9, 6.23	2-BKR-30-186	PENT RM EL 692 CLR 2A-A	C&A Building Vent BD 2A1-A Compartment 2C	ON (CLOSED)	
6.10, 6.24	2-BKR-30-187	PENT RM EL 692 CLR 2B-B	C&A Building Vent BD 2B1-B Compartment 8B	ON (CLOSED)	

Appendix D
(Page 2 of 2)

ELECTRICAL LINEUP

Data Package: Page _____ of _____   Date _____

SECTIONS	IDENTIFICATION	DESCRIPTION	LOCATION	POSITION	INIT
6.11, 6.25	2-BKR-30-196	PENT RM EL 713 CLR 2A-A	C&A Building Vent BD 2A1-A Compartment 10B	ON (CLOSED)	
6.12, 6.26	2-BKR-30-197	PENT RM EL 713 CLR 2B-B	C&A Building Vent BD 2B1-B Compartment 2C	ON (CLOSED)	
6.13, 6.27	2-BKR-30-201	AB EL 692 PIPE CHASE CLR 2A-A	C&A Building Vent BD 2A1-A Compartment 10C	ON (CLOSED)	
6.14, 6.28	2-BKR-30-202	AB EL 692 PIPE CHASE CLR 2B-B	C&A Building Vent BD 2B1-B Compartment 3B	ON (CLOSED)	
6.29	2-BKR-235-1/11-D	AUX RELAY RACK A BUS TO PANEL 2-R-75	120V AC Vital Inst Pwr BD 2-I	ON (CLOSED)	
6.29	2-BKR-235-2/9-E	AUX RELAY RACK B BUS TO PANEL 2-R-75	120V AC Vital Inst Pwr BD 2-II	ON (CLOSED)	
6.29	2-BKR-235-2/10-E	AUX RELAY RACK 2-R-75 BUS C	120V AC Vital Inst Pwr BD 2-II	ON (CLOSED)	
6.29	2-BKR-235-3/30-F	SEPERATION AUX RELAY PANELS 2-R-73/2-R-74	120V AC Vital Inst Pwr BD 2-III	ON (CLOSED)	
6.29	2-BKR-235-4/39-G	SEPERATION AUX RELAY PANELS 2-R-77/2-R-78	120V AC Vital Inst Pwr BD 2-IV	ON (CLOSED)	

Appendix E
(Page 1 of 1)

SWITCH LINEUP

Data Package: Page _____ of _____   Date _____

SECTION	SWITCH NUMBER	SWITCH LOCATION	NOMENCLATURE	POSITION	VERIFIED BY INITIALS
6.1	2-HS-30-175	2-JB-292-2506-A [A11W/676]	RHR PUMP 2A-A ROOM COOLER	AUTO after STOP	
6.2	2-HS-30-176	2-JB-292-2505-B [A11V/676]	RHR PUMP 2B-B ROOM COOLER	AUTO after STOP	
6.3	2-HS-30-177	2-JB-292-2502-A [A10U/676]	CS PUMP 2A-A ROOM COOLER	AUTO after STOP	
6.4	2-HS-30-178	2-JB-292-2501-B [A11U/676]	CS PUMP 2B-B ROOM COOLER	AUTO after STOP	
6.5	2-HS-30-180	2-JB-292-1197-A [A10V/692]	SIS PUMP 2A-A ROOM COOLER	AUTO after STOP	
6.6	2-HS-30-179	2-JB-292-1198-B [A10U/692]	SIS PUMP 2B-B ROOM COOLER	AUTO after STOP	
6.7	2-HS-30-183	2-JB-292-1191-A [A12T/692]	CENT CHARGING PUMP 2A-A ROOM COOLER	AUTO after STOP	
6.8	2-HS-30-182	2-JB-292-1192-B [A11U/692]	CENT CHARGING PUMP 2B-B ROOM COOLER	AUTO after STOP	
6.9	2-HS-30-186	2-JB-292-1553-A [A12U/692]	PENETRATION ROOM EL 692 COOLER 2A-A	AUTO after STOP	
6.10	2-HS-30-187	2-JB-292-1554-B [A12V/692]	PENETRATION ROOM EL 692 COOLER 2B-B	AUTO after STOP	
6.11	2-HS-30-196	2-JB-292-1503-A [A14V/713]	PENETRATION ROOM EL 713 COOLER 2A-A	AUTO after STOP	
6.12	2-HS-30-197	2-JB-292-1505-B [A14V/713]	PENETRATION ROOM EL 713 COOLER 2B-B	AUTO after STOP	
6.13	2-HS-30-201	2-JB-292-1555-A [A15U/692]	AB EL 692 PIPE CASE COOLER 2A-A	AUTO after STOP	
6.14	2-HS-30-202	2-JB-292-1556-B [A14U/692]	AB EL 692 PIPE CASE COOLER 2B-B FLOW	AUTO after STOP	