Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[21] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[22] **VERIFY** Computer Point F0401D, RCL1 2 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[23] **POSITION** FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the left (NORMAL). _____

[24] **VERIFY** the following:

A. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is CLEAR. _____

B. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

[25] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[26] **VERIFY** Computer Point F0401D, RCL1 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[27] **POSITION** FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the right (TRIP). _____

[28] **VERIFY** the following:

A. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is in ALARM. _____

E. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

F. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

G. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

[29] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[30] **VERIFY** Computer Point F0402D, RCL1 3 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[31] **POSITION** FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the left (NORMAL). _____

[32] **VERIFY** the following:

A. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is CLEAR. _____

B. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

[33] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[34] **VERIFY** Computer Point F0402D, RCL1 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[35] **POSITION** the following:

A. FS/414A, RC Flow LP 1 CH1, at 2-R-1 to the right (TRIP). _____

B. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the right (TRIP). _____

[36] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is in ALARM. _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is in ALARM. _____

C. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

E. Annunciator 70C (XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIP BLOCKED, is CLEAR _____

[37] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[38] **VERIFY** the following computer points:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[39] **POSITION** FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the left (NORMAL). _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[40] **VERIFY** the following:

A. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is CLEAR. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[41] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[42] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[43] **POSITION** FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the right (TRIP). _____

[44] **VERIFY** the following:

A. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[45] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[46] **VERIFY** the following computer points:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[47] **POSITION** FS/414A, RC Flow LP 1 CH 1, at 2-R-1 to the left (NORMAL). _____

[48] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is in CLEAR. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[49] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[50] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[51] **POSITION** FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the right (TRIP). _____

[52] **VERIFY** the following:

A. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[53] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[54] **VERIFY** the following computer points:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP. _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR. _____

[55] **POSITION** the following:

A. FS/415A, RC Flow LP 1 CH2, at 2-R-5 to the left (NORMAL) _____

B. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the left (NORMAL) _____

[56] **VERIFY** the following:

A. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is CLEAR. _____

B. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is CLEAR. _____

C. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[57] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[58] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[59] **POSITION** the following:

A. FS/414A, RC Flow LP 1 CH1, at 2-R-1 to the right (TRIP) _____

B. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the right (TRIP) _____

C. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the right (TRIP) _____

[60] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is in ALARM. _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is in ALARM. _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is in ALARM. _____

D. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[61] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[62] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is CLEAR to put NC41N bistable, at 2-M-13 in NORMAL _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is CLEAR to put NC42N bistable, at 2-M-13 in NORMAL _____

C. PS/505A, HI Press to P-7, at 2-R-4 to the left (NORMAL) _____

[63] **VERIFY** the following:

A. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

B. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

C. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is in ALARM _____

D. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

E. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

[64] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[65] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[66] **POSITION** the following:

A. FS/414A, RC Flow LP 1 CH1, at 2-R-1 to the left (NORMAL) _____

B. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the left (NORMAL) _____

C. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the left (NORMAL) _____

[67] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is CLEAR. _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is CLEAR. _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is CLEAR. _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

E. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

F. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[68] **VERIFY** the following:

A. Trip Status Light 16 (2-XX-55-6A, 2-M-6), TURBINE PWR > P13 PS-1-73A, is in ALARM _____

B. Trip Status Light 4 (2-XX-55-5, 2-M-5), PR >P8 NC41N, is in ALARM _____

C. Trip Status Light 24 (2-XX-55-5, 2-M-5), PR >P8 NC42N, is in ALARM _____

D. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

E. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

F. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

[69] **POSITION** FS/424A, RC Flow LP 2 CH 1, at 2-R-1 to the right (TRIP). _____

[70] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is in ALARM to put NC41N bistable, at 2-M-13 in TRIPPED. _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is in ALARM to put NC42N bistable, at 2-M-13 in TRIPPED. _____

C. PS/505A, HI Press to P-7, at 2-R-4 to the right (TRIP). _____

[71] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

E. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is in ALARM. _____

F. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

G. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

H. Unit 2 Event Display Monitor indicates 121-B RCS LOOP 2 FLOW LO is in ALARM (Red) _____

[72] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[73] **VERIFY** Computer Point F0420D, RCL2 1 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[74] **POSITION** FS/424A, RC Flow LP 2 CH 1, at 2-R-1 to the left (NORMAL). _____

[75] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is CLEAR. _____

B. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

C. Unit 2 Event Display Monitor indicates 121-B RCS LOOP 2 FLOW LO is in NORMAL (Blue) _____

[76] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[77] **VERIFY** Computer Point F0420D, RCL2 1 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[78] **POSITION** FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the right (TRIP). _____

[79] **VERIFY** the following:

A. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is in ALARM. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is in ALARM. _____

[80] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[81] **VERIFY** Computer Point F0421D, RCL2 2 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[82] **POSITION** FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the left (NORMAL). _____

[83] **VERIFY** the following:

A. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is CLEAR. _____

B. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

[84] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[85] **VERIFY** Computer Point F0421D, RCL2 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[86] **POSITION** FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the right (TRIP). _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[87] **VERIFY** the following:

A. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is in ALARM. _____

[88] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[89] **VERIFY** Computer Point F0422D, RCL2 3 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[90] **POSITION** FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the left (NORMAL). _____

[91] **VERIFY** the following:

A. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is CLEAR. _____

B. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

[92] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[93] **VERIFY** Computer Point F0422D, RCL2 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[94] **POSITION** the following:

A. FS/424A, RC Flow LP 2 CH1, at 2-R-1 to the right (TRIP). _____

B. FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the right (TRIP). _____

[95] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is in ALARM. _____

B. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is in ALARM. _____

C. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

E. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is in ALARM _____

[96] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[97] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[98] **POSITION** FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the left (NORMAL). _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[99] **VERIFY** the following:

A. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is CLEAR. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[100] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[101] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR _____

[102] **POSITION** FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the right (TRIP). _____

[103] **VERIFY** the following:

A. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[104] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[105] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[106] **POSITION** FS/424A, RC Flow LP 2 CH 1, at 2-R-1 to the left (NORMAL). _____

[107] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is CLEAR. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[108] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[109] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR _____

[110] **POSITION** FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the right (TRIP). _____

[111] **VERIFY** the following:

A. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[112] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[113] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[114] **POSITION** the following:

A. FS/425A, RC Flow LP 2 CH2, at 2-R-5 to the left (NORMAL). _____

B. FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the left (NORMAL). _____

[115] **VERIFY** the following:

A. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is CLEAR. _____

B. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is CLEAR. _____

C. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[116] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[117] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR _____

[118] **POSITION** the following:

A. FS/424A, RC Flow LP 2 CH1, at 2-R-1 to the right (TRIP). _____

B. FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the right (TRIP). _____

C. FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the right (TRIP). _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[119] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is in ALARM. _____

B. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is in ALARM. _____

C. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is in ALARM. _____

D. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[120] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[121] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is CLEAR to put NC41N bistable, at 2-M-13 in NORMAL _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is CLEAR to put NC42N bistable, at 2-M-13 in NORMAL _____

C. PS/505A, HI Press to P-7, at 2-R-4 to the left (NORMAL) _____

[122] **VERIFY** the following:

A. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

B. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

C. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is in ALARM _____

D. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

E. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

[123] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[124] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[125] **POSITION** the following:

A. FS/424A, RC Flow LP 2 CH1, at 2-R-1 to the left (NORMAL). _____

B. FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the left (NORMAL). _____

C. FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the left (NORMAL). _____

[126] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is CLEAR. _____

B. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is CLEAR. _____

C. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is CLEAR. _____

D. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

E. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

F. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[127] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is in ALARM to put NC41N bistable, at 2-M-13 in TRIPPED _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is in ALARM to put NC42N bistable, at 2-M-13 in TRIPPED _____

C. PS/505A, HI Press to P-7, at 2-R-4 to the right (TRIP) _____

[128] **VERIFY** the following:

A. Trip Status Light 16 (2-XX-55-6A, 2-M-6), TURBINE PWR > P13 PS-1-73A, is in ALARM _____

B. Trip Status Light 4 (2-XX-55-5, 2-M-5), PR >P8 NC41N, is in ALARM _____

C. Trip Status Light 24 (2-XX-55-5, 2-M-5), PR >P8 NC42N, is in ALARM _____

D. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is CLEAR _____

E. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

F. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

[129] **POSITION** FS/434A, RC Flow LP 3 CH1, at 2-R-1 to the right (TRIP). _____

[130] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is in ALARM. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

E. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

F. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is in ALARM. _____

G. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

H. Unit 2 Event Display Monitor indicates 122-B RCS LOOP 3 FLOW LO is in ALARM (Red) _____

[131] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[132] **VERIFY** Computer Point F0440D, RCL3 1 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[133] **POSITION** FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the left (NORMAL). _____

[134] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is CLEAR. _____

B. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

C. Unit 2 Event Display Monitor indicates 122-B RCS LOOP 3 FLOW LO is in NORMAL (Blue) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[135] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[136] **VERIFY** Computer Point F0440D, RCL3 1 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[137] **POSITION** FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the right (TRIP). _____

[138] **VERIFY** the following:

A. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is in ALARM. _____

[139] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[140] **VERIFY** Computer Point F0441D, RCL3 2 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[141] **POSITION** FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the left (NORMAL). _____

[142] **VERIFY** the following:

A. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is CLEAR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

B. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

[143] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[144] **VERIFY** Computer Point F0441D, RCL3 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[145] **POSITION** FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the right (TRIP). _____

[146] **VERIFY** the following:

A. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

E. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

F. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is in ALARM. _____

G. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

[147] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[148] **VERIFY** Computer Point F0442D, RCL3 3 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[149] **POSITION** FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the left (NORMAL). _____

[150] **VERIFY** the following:

A. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is CLEAR. _____

B. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

[151] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[152] **VERIFY** Computer Point F0442D, RCL3 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[153] **POSITION** the following:

A. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the right (TRIP). _____

B. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the right (TRIP). _____

[154] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is in ALARM. _____

B. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is in ALARM. _____

C. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

E. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is in ALARM _____

[155] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[156] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[157] **POSITION** FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the left (NORMAL). _____

[158] **VERIFY** the following:

A. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is CLEAR. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[159] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[160] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[161] **POSITION** FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the right (TRIP). _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[162] **VERIFY** the following:

A. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is in ALARM. _____

B. Annunciator 78D (XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM _____

C. Annunciator 78E (XA-55-4D, 2-M-.4), TWO LOOP FLOW LO, is CLEAR _____

[163] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[164] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[165] **POSITION** FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the left (NORMAL). _____

[166] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is CLEAR. _____

B. Annunciator 78D (XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[167] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[168] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[169] **POSITION** FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the right (TRIP). _____

[170] **VERIFY** the following:

A. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is in ALARM. _____

B. Annunciator 78D (XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM _____

C. Annunciator 78E (XA-55-4D, 2-M-.4), TWO LOOP FLOW LO, is CLEAR _____

[171] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[172] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[173] **POSITION** the following:

A. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the left (NORMAL). _____

B. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the left (NORMAL). _____

[174] **VERIFY** the following

A. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is CLEAR. _____

B. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is CLEAR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

C. Annunciator 78D (XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

D. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR _____

[175] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[176] **POSITION** the following:

A. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the right (TRIP). _____

B. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the right (TRIP). _____

C. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the right (TRIP). _____

[177] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is in ALARM. _____

B. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is in ALARM. _____

C. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is in ALARM. _____

D. Annunciator 78D (XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM _____

E. Annunciator 78E (XA-55-4D, 2-M-.4), TWO LOOP FLOW LO, is CLEAR _____

F. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is in ALARM _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[178] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[179] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[180] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is CLEAR to put NC41N bistable, at 2-M-13 in NORMAL _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is CLEAR to put NC42N bistable, at 2-M-13 in NORMAL _____

C. PS/505A, HI Press to P-7, at 2-R-4 to the left (NORMAL) _____

[181] **VERIFY** the following:

A. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

B. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

C. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is in ALARM _____

D. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

E. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[182] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[183] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[184] **POSITION** the following:

A. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the left (NORMAL). _____

B. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the left (NORMAL). _____

C. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the left (NORMAL). _____

[185] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is CLEAR. _____

B. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is CLEAR. _____

C. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is CLEAR. _____

D. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

E. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

F. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[186] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is in ALARM to put NC41N bistable, at 2-M-13 in TRIPPED _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P8 lamp on front of drawer is in ALARM to put NC42N bistable, at 2-M-13 in TRIPPED _____

C. PS/505A, HI Press to P-7, at 2-R-4 to the right (TRIP) _____

[187] **VERIFY** the following:

A. Trip Status Light 16 (2-XX-55-6A, 2-M-6), TURBINE PWR > P13 PS-1-73A, is in ALARM _____

B. Trip Status Light 4 (2-XX-55-5, 2-M-5), PR >P8 NC41N, is in ALARM _____

C. Trip Status Light 24 (2-XX-55-5, 2-M-5), PR >P8 NC42N, is in ALARM _____

D. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is CLEAR _____

E. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

F. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

[188] **POSITION** FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the right (TRIP). _____

[189] **VERIFY** the following:

A. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

E. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR. _____

F. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

G. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is in ALARM. _____

H. Unit 2 Event Display Monitor indicates 123-B RCS LOOP 4 FLOW LO is in ALARM (Red) _____

[190] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[191] **VERIFY** Computer Point F0460D, RCL4 1 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[192] **POSITION** FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the left (NORMAL). _____

[193] **VERIFY** the following:

A. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is CLEAR. _____

B. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

C. Unit 2 Event Display Monitor indicates 123-B RCS LOOP 4 FLOW LO is in NORMAL (Blue) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[194] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[195] **VERIFY** Computer Point F0460D, RCL4 1 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[196] **POSITION** FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the right (TRIP). _____

[197] **VERIFY** the following:

A. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is in ALARM. _____

[198] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[199] **VERIFY** Computer Point F0461D, RCL4 2 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

[200] **POSITION** FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the left (NORMAL). _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[201] **VERIFY** the following:

A. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is CLEAR. _____

B. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

[202] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[203] **VERIFY** Computer Point F0461D, RCL4 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[204] **POSITION** FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the right (TRIP). _____

[205] **VERIFY** the following:

A. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

D. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is in ALARM. _____

[206] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[207] **VERIFY** Computer Point F0462D, RCL4 3 LO FLOW PARTIAL RX TRIP, indicates TRIP. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[208] **POSITION** FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the left (NORMAL). _____

[209] **VERIFY** the following:

A. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is CLEAR. _____

B. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

[210] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[211] **VERIFY** Computer Point F0462D, RCL4 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR. _____

[212] **POSITION** the following:

A. FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the right (TRIP) _____

B. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the right (TRIP) _____

[213] **VERIFY** the following:

A. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is in ALARM. _____

B. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is in ALARM. _____

C. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in CLEAR. _____

E. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is in ALARM. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[214] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[215] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[216] **POSITION** FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the left (NORMAL). _____

[217] **VERIFY** the following:

A. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is CLEAR. _____

B. Annunciator 78D (XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[218] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[219] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[220] **POSITION** FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the right (TRIP). _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[221] **VERIFY** the following:

A. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR. _____

[222] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[223] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer PointF0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[224] **POSITION** FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the left (NORMAL). _____

[225] **VERIFY** the following:

A. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is CLEAR. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

[226] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[227] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[228] **POSITION** FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the right (TRIP). _____

[229] **VERIFY** the following:

A. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is in ALARM. _____

B. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

C. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR. _____

[230] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[231] **VERIFY** the following:

A. Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates TRIP _____

B. Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

[232] **POSITION** the following:

A. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the left (NORMAL). _____

B. FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the left (NORMAL). _____

[233] **VERIFY** the following:

A. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is CLEAR. _____

B. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is CLEAR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

C. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR. _____

D. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR _____

[234] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[235] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[236] **POSITION** the following:

A. FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the right (TRIP). _____

B. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the right (TRIP). _____

C. FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the right (TRIP). _____

[237] **VERIFY** the following:

A. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is in ALARM. _____

B. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is in ALARM. _____

C. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is in ALARM. _____

D. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is in ALARM. _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR. _____

F. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is in ALARM _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[238] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[239] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P10 lamp on front of drawer is CLEAR to put NC41M bistable, at 2-M-13 in NORMAL _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P10 lamp on front of drawer is CLEAR to put NC42M bistable, at 2-M-13 in NORMAL _____

C. PS/505A, HI Press to P-7, at 2-R-4 to the left (NORMAL) _____

[240] **VERIFY** the following:

A. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

B. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

C. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is in ALARM _____

D. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

E. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

[241] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[242] **VERIFY** Computer Point F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR. _____

[243] **POSITION** the following:

A. FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the left (NORMAL). _____

B. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the left (NORMAL) _____

C. FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the left (NORMAL). _____

[244] **POSITION** the following:

A. PS/505A, HI Press to P-7, at 2-R-4 to the right (TRIP) _____

B. FS/414A, RC Flow LP 1 CH 1, at 2-R-1 to the right (TRIP) _____

C. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the right (TRIP) _____

D. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the right (TRIP) _____

[245] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is in ALARM. _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is in ALARM. _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is in ALARM. _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is in ALARM _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

F. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

G. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

[246] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[247] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR. _____

[248] **POSITION** the following:

A. FS/424A, RC Flow LP 2 CH 1, at 2-R-1 to the right (TRIP) _____

B. FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the right (TRIP) _____

C. FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the right (TRIP) _____

[249] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is in ALARM. _____

B. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is in ALARM. _____

C. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is in ALARM _____

D. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is in ALARM. _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in ALARM. _____

F. Unit 2 Event Display Monitor indicates 78-E RT-TWO LOOP FLOW LO is in ALARM (Red) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[250] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[251] **VERIFY** computer point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates TRIP. _____

[252] **POSITION** the following:

A. FS/414A, RC Flow LP 1 CH 1, at 2-R-1 to the left (NORMAL) _____

B. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the left (NORMAL) _____

C. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the left (NORMAL) _____

[253] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is CLEAR _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is CLEAR _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is CLEAR _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

F. Unit 2 Event Display Monitor indicates 78-E RT-TWO LOOP FLOW LO is in NORMAL (Blue) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[254] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[255] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR. _____

[256] **POSITION** the following:

A. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the right (TRIP). _____

B. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the right (TRIP). _____

C. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the right (TRIP) _____

[257] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is in ALARM. _____

B. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is in ALARM. _____

C. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is in ALARM. _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in ALARM. _____

E. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is ALARM. _____

[258] **VERIFY** computer point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates TRIP. _____

[259] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[260] **POSITION** the following:

A. FS/424A, RC Flow LP 2 CH 1, at 2-R-1 to the left (NORMAL). _____

B. FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the left (NORMAL) _____

C. FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the left (NORMAL) _____

[261] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is CLEAR _____

B. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is CLEAR _____

C. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is CLEAR _____

D. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[262] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[263] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[264] **POSITION** the following:

A. FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the right (TRIP) _____

B. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the right (TRIP) _____

C. FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the right (TRIP) _____

[265] **VERIFY** the following:

A. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is in ALARM _____

B. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is in ALARM _____

C. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is in ALARM _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in ALARM. _____

E. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is ALARM. _____

[266] **VERIFY** computer point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates TRIP. _____

[267] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[268] **POSITION** the following:

A. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the left (NORMAL) _____

B. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the left (NORMAL) _____

C. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the left (NORMAL) _____

[269] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is CLEAR _____

B. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is CLEAR _____

C. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is CLEAR _____

D. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

[270] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47). _____

B. UV COIL VOLTAGE Meter (2-R-50). _____

[271] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[272] **POSITION** the following:

A. FS/414A, RC Flow LP 1 CH 1, at 2-R-1 to the right (TRIP) _____

B. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the right (TRIP) _____

C. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the right (TRIP) _____

[273] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is in ALARM. _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is in ALARM. _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is in ALARM. _____

D. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is in ALARM _____

E. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in ALARM. _____

[274] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[275] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates TRIP. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[276] **POSITION** the following:

A. FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the left (NORMAL). _____

B. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the left (NORMAL). _____

C. FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the left (NORMAL). _____

[277] **VERIFY** the following:

A. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is CLEAR. _____

B. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is CLEAR. _____

C. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is CLEAR. _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR. _____

E. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR. _____

[278] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[279] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[280] **POSITION** the following:

A. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the right (TRIP). _____

B. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the right (TRIP). _____

C. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the right (TRIP) _____

[281] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is in ALARM. _____

B. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is in ALARM. _____

C. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is in ALARM. _____

D. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in ALARM. _____

E. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is ALARM. _____

[282] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[283] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates TRIP. _____

[284] **POSITION** the following:

A. FS/414A, RC Flow LP 1 CH 1, at 2-R-1 to the left (NORMAL). _____

B. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the left (NORMAL) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

C. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the left (NORMAL) _____

D. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the left (NORMAL) _____

E. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the left (NORMAL) _____

F. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the left (NORMAL) _____

[285] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is CLEAR _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is CLEAR _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is CLEAR _____

D. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is CLEAR _____

E. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is CLEAR _____

F. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is CLEAR _____

G. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

H. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR. _____

I. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR. _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[286] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[287] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR. _____

[288] **POSITION** the following:

A. FS/424A, RC Flow LP 2 CH 1, at 2-R-1 to the right (TRIP). _____

B. FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the right (TRIP). _____

C. FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the right (TRIP). _____

D. FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the right (TRIP). _____

E. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the right (TRIP). _____

F. FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the right (TRIP). _____

[289] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is in ALARM _____

B. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is in ALARM _____

C. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is in ALARM _____

D. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is in ALARM _____

E. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is in ALARM _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

F. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is in ALARM _____

G. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in ALARM. _____

H. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is in ALARM. _____

I. Annunciator 123B (2-XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is in ALARM _____

[290] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[291] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates TRIP. _____

[292] **POSITION** the following:

A. FS/414A, RC Flow LP 1 CH 1, at 2-R-1 to the right (TRIP). _____

B. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the right (TRIP). _____

C. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the right (TRIP). _____

D. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the right (TRIP). _____

E. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the right (TRIP). _____

F. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the right (TRIP) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[293] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is in ALARM. _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is in ALARM. _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is in ALARM. _____

D. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is in ALARM. _____

E. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is in ALARM. _____

F. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is in ALARM. _____

G. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is in ALARM _____

H. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is ALARM. _____

I. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is in ALARM. _____

[294] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[295] **VERIFY** Computer Point F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates TRIP. _____

[296] **POSITION** PS/505A, HI Press to P-7, at 2-R-4 to the left (NORMAL) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

[297] **VERIFY** the following:

A. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

B. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

C. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is in ALARM _____

D. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

E. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

[298] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[299] **ENSURE** the following:

A. FS/414A, RC Flow LP 1 CH 1, at 2-R-1 to the left (NORMAL). _____

B. FS/424A, RC Flow LP 2 CH 1, at 2-R-1 to the left (NORMAL). _____

C. FS/434A, RC Flow LP 3 CH 1, at 2-R-1 to the left (NORMAL) _____

D. FS/444A, RC Flow LP 4 CH 1, at 2-R-1 to the left (NORMAL) _____

E. FS/415A, RC Flow LP 1 CH 2, at 2-R-5 to the left (NORMAL) _____

F. FS/425A, RC Flow LP 2 CH 2, at 2-R-5 to the left (NORMAL) _____

G. FS/435A, RC Flow LP 3 CH 2, at 2-R-5 to the left (NORMAL) _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

H. FS/445A, RC Flow LP 4 CH 2, at 2-R-5 to the left (NORMAL) _____

I. FS/416A, RC Flow LP 1 CH 3, at 2-R-9 to the left (NORMAL) _____

J. FS/426A, RC Flow LP 2 CH 3, at 2-R-9 to the left (NORMAL) _____

K. FS/436A, RC Flow LP 3 CH 3, at 2-R-9 to the left (NORMAL) _____

L. FS/446A, RC Flow LP 4 CH 3, at 2-R-9 to the left (NORMAL) _____

[300] **DE-ENERGIZE** Power Supplies at the following locations:

A. TB124, Terminals 1,2 (NIS Rack I/Rear/2-M-13) _____

B. TB124, Terminals 7,8 (NIS Rack I/Rear/2-M-13) _____

C. TB224, Terminals 1,2 (NIS Rack II/Rear/2-M-13) _____

D. TB224, Terminals 7,8 (NIS Rack II/Rear/2-M-13) _____

[301] **REMOVE** all test equipment from the following locations:

A. TB124, Terminals 1,2 (NIS Rack I/Rear/2-M-13) _____

_____ CV

B. TB124, Terminals 7,8 (NIS Rack I/Rear/2-M-13) _____

_____ CV

C. TB224, Terminals 1,2 (NIS Rack II/Rear/2-M-13) _____

_____ CV

D. TB224, Terminals 7,8 (NIS Rack II/Rear/2-M-13) _____

_____ CV

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

WARNING

118 VAC is present in the following step.

[302] **LAND** the disconnected internal/vendor leads at the following locations:

A. TB124, Terminal 1 (NIS Rack I/Rear/2-M-13) _____

_____ CV

B. TB124, Terminal 2 (NIS Rack I/Rear/2-M-13) _____

_____ CV

C. TB124, Terminal 7 (NIS Rack I/Rear/2-M-13) _____

_____ CV

D. TB124, Terminal 8 (NIS Rack I/Rear/2-M-13) _____

_____ CV

E. TB224, Terminal 1 (NIS Rack II/Rear/2-M-13) _____

_____ CV

F. TB224, Terminal 2 (NIS Rack II/Rear/2-M-13) _____

_____ CV

G. TB224, Terminal 7 (NIS Rack II/Rear/2-M-13) _____

_____ CV

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

H. TB224, Terminal 8 (NIS Rack II/Rear/2-M-13) _____

_____ CV

[303] **VERIFY** the following:

A. Trip Status Light 4 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6A, is CLEAR _____

B. Trip Status Light 24 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6B, is CLEAR _____

C. Trip Status Light 44 (2-XX-55-6A, 2-M-6), LOOP 1 FLOW LO FS-68-6D, is CLEAR _____

D. Trip Status Light 5 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29A, is CLEAR _____

E. Trip Status Light 25 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29B, is CLEAR _____

F. Trip Status Light 45 (2-XX-55-6A, 2-M-6), LOOP 2 FLOW LO FS-68-29D, is CLEAR _____

G. Trip Status Light 6 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48A, is CLEAR _____

H. Trip Status Light 26 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48B, is CLEAR _____

I. Trip Status Light 46 (2-XX-55-6A, 2-M-6), LOOP 3 FLOW LO FS-68-48D, is CLEAR _____

J. Trip Status Light 7 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71A, is CLEAR _____

K. Trip Status Light 27 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71B, is CLEAR _____

L. Trip Status Light 47 (2-XX-55-6A, 2-M-6), LOOP 4 FLOW LO FS-68-71D, is CLEAR _____

M. Annunciator 78D (2-XA-55-4D, 2-M-4), ONE LOOP FLOW LO, is CLEAR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

N. Annunciator 78E (2-XA-55-4D, 2-M-4), TWO LOOP FLOW LO, is CLEAR _____

O. Annunciator 70C (2-XA-55-4A, 2-M-4), P-8 LO PWR FLOW TRIPS BLOCKED, is in ALARM _____

P. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

Q. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

R. Annunciator 120B (2-XA-55-6B, 2-M-6), RCS LOOP 1 FLOW LO, is CLEAR _____

S. Annunciator 121B (2-XA-55-6B, 2-M-6), RCS LOOP 2 FLOW LO, is CLEAR _____

T. Annunciator 122B (2-XA-55-6B, 2-M-6), RCS LOOP 3 FLOW LO, is CLEAR _____

U. Annunciator 123B (2XA-55-6B, 2-M-6), RCS LOOP 4 FLOW LO, is CLEAR _____

[304] **VERIFY** the following Computer Points:

A. F0400D, RCL1 1 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

B. F0401D, RCL1 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

C. F0402D, RCL1 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

D. F0403D, RCL LO FLOW ABOVE P-8 CAUSES RX TRIP, indicates NOT TR _____

E. F0420D, RCL2 1 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

F. F0421D, RCL2 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

G. F0422D, RCL2 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

Date _____

6.13 Reactor Coolant Low Flow Reactor Trip (continued)

H. F0423D, RCL LO FLOW ABOVE P-7 CAUSES RX TRIP, indicates NOT TR _____

I. F0440D, RCL3 1 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

J. F0441D, RCL3 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

K. F0442D, RCL3 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

L. F0460D, RCL4 1 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

M. F0461D, RCL4 2 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

N. F0462D, RCL4 3 LO FLOW PARTIAL RX TRIP, indicates NOT TR _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip

NOTE

The UV Coil Voltage meter (M501) will be used to verify Reactor trip status, A reading of 0 VDC (≤ 5 VDC) will indicate "Reactor tripped status" and a reading of 42 VDC (≥ 35 VDC) will indicate "Reactor not tripped" status.

[1] **ENSURE** prerequisites listed in Section 4.0 for Subsection 6.14 have been completed. _____

[2] **ENSURE** the following:

A. PS/455A, High Pressure Reactor Trip, at 2-R-1 to the left (NORMAL). _____

B. PS/456A, High Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

C. PS/457A, High Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

D. PS/458A, High Pressure Reactor Trip, at 2-R-28 to the left (NORMAL). _____

[3] **VERIFY** the following:

A. Trip Status Light 11 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-340A, is CLEAR _____

B. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is CLEAR _____

C. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is CLEAR _____

D. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is CLEAR _____

E. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is CLEAR _____

F. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[4] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[5] **POSITION** PS/455A, High Pressure Reactor Trip, at 2-R-1 to the right (TRIP). _____

[6] **VERIFY** the following:

A. Trip Status Light 11 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-340A, is in ALARM. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 124-B PZR PRESS HI is in ALARM (Red) _____

[7] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[8] **VERIFY** the following computer points:

A. P0480D, PZR HI PRESSURE 1 PARTIAL RX TRIP, indicates TRIP _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[9] **POSITION** PS/455A, High Pressure Reactor Trip, at 2-R-1 to the left (NORMAL). _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[10] **VERIFY** the following:

A. Trip Status Light 11 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-340A, is CLEAR. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is CLEAR. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 124-B PZR PRESS HI is in NORMAL (Blue) _____

[11] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[12] **VERIFY** the following computer points:

A. P0480D, PZR HI PRESSURE 1 PARTIAL RX TRIP, indicates NOT TR _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[13] **POSITION** PS/456A, High Pressure Reactor Trip, at 2-R-5 to the right (TRIP). _____

[14] **VERIFY** the following:

A. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is in ALARM. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[15] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[16] **VERIFY** the following computer points:

A. P0481D, PZR HI PRESSURE 2 PARTIAL RX TRIP, indicates TRIP _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[17] **POSITION** PS/456A, High Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[18] **VERIFY** the following:

A. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is CLEAR. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is CLEAR. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

[19] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[20] **VERIFY** the following computer points:

A. P0481D, PZR HI PRESSURE 2 PARTIAL RX TRIP, indicates NOT TR _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[21] **POSITION** PS/457A, High Pressure Reactor Trip, at 2-R-9 to the right (TRIP). _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[22] **VERIFY** the following:

A. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is in ALARM. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

[23] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[24] **VERIFY** the following computer points:

A. P0482D, PZR HI PRESSURE 3 PARTIAL RX TRIP, indicates TRIP _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[25] **POSITION** PS/457A, High Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

[26] **VERIFY** the following:

A. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is CLEAR. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is CLEAR. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

[27] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[28] **VERIFY** the following computer points:

A. P0482D, PZR HI PRESSURE 3 PARTIAL RX TRIP, indicates NOT TR _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[29] **POSITION** PS/458A, High Pressure Reactor Trip, at 2-R-28 to the right (TRIP). _____

[30] **VERIFY** the following:

A. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is in ALARM. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

[31] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[32] **VERIFY** the following computer points:

A. P0497D, PZR HI PRESSURE 4 PARTIAL RX TRIP, indicates TRIP _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[33] **POSITION** PS/458A, High Pressure Reactor Trip, at 2-R-28 to the left (NORMAL). _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[34] **VERIFY** the following:

A. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is CLEAR. _____

B. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is CLEAR. _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

[35] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[36] **VERIFY** the following computer points:

A. P0497D, PZR HI PRESSURE 4 PARTIAL RX TRIP, indicates NOT TR _____

B. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

[37] **POSITION** the following:

A. PS/455A, HIgh Pressure Reactor trip, at 2-R-1 to the right (TRIP). _____

B. PS/456A, HIgh Pressure Reactor trip, at 2-R-5 to the right (TRIP). _____

[38] **VERIFY** the following:

A. Trip Status Light 11 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-340A, is in ALARM _____

B. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is in ALARM _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is in ALARM. _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

D. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

E. Unit 2 Event Display Monitor indicates 77-C RT-PZR PRESS HI is in ALARM (Red) _____

[39] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[40] **VERIFY** computer Point P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates TRIP. _____

[41] **POSITION** PS/456A, High Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[42] **VERIFY** the following:

A. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is CLEAR _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR. _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

D. Unit 2 Event Display Monitor indicates 77-C RT-PZR PRESS HI is in NORMAL (Blue) _____

[43] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[44] **VERIFY** Computer Point P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR. _____

[45] **POSITION** PS/457A, High Pressure Reactor Trip, at 2-R-9 to the right (TRIP). _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[46] **VERIFY** the following:

A. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is in ALARM _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is in ALARM. _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

[47] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[48] **POSITION** PS/457A, High Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

[49] **VERIFY** the following:

A. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is CLEAR _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR. _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

[50] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[51] **POSITION** PS/458A, High Pressure Reactor Trip, at 2-R-28 to the right (TRIP) _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[52] **VERIFY** the following:

A. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is in ALARM _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is in ALARM. _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

[53] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[54] **POSITION** the following:

A. PS/458A, High Pressure Reactor Trip, at 2-R-28 to the left (NORMAL) _____

B. PS/455A, High Pressure Reactor Trip, at 2-R-1 to the left (NORMAL) _____

[55] **VERIFY** the following:

A. Trip Status Light 11 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-340A, is CLEAR _____

B. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is CLEAR _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR. _____

D. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is CLEAR. _____

[56] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[57] **POSITION** the following:

A. PS/456A, High Pressure Reactor Trip, at 2-R-5 to the right (TRIP) _____

B. PS/457A, High Pressure Reactor Trip, at 2-R-9 to the right (TRIP) _____

[58] **VERIFY** the following:

A. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is in ALARM _____

B. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is in ALARM _____

C. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is in ALARM. _____

D. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

[59] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[60] **POSITION** PS/457A, High Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

[61] **VERIFY** the following:

A. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is CLEAR _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR. _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[62] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[63] **POSITION** PS/458A, High Pressure Reactor Trip, at 2-R-28 to the right (TRIP). _____

[64] **VERIFY** the following:

A. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is in ALARM _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is in ALARM _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

[65] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[66] **POSITION** PS/456A, High Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[67] **VERIFY** the following:

A. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is CLEAR _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[68] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[69] **POSITION** PS/457A, High Pressure Reactor Trip, at 2-R-9 to the right (TRIP). _____

[70] **VERIFY** the following:

A. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is in ALARM _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is in ALARM _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM. _____

[71] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[72] **POSITION** PS/457A, High Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

[73] **VERIFY** the following:

A. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is CLEAR _____

B. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

C. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is in ALARM _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[74] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[75] **POSITION** the following:

A. PS/455A, High Pressure Reactor Trip, at 2-R-1 to the right (TRIP) _____

B. PS/456A, High Pressure Reactor Trip, at 2-R-5 to the right (TRIP) _____

C. PS/457A, High Pressure Reactor Trip, at 2-R-9 to the right (TRIP) _____

[76] **VERIFY** the following:

A. Trip Status Light 11 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-340A, is in ALARM _____

B. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is in ALARM _____

C. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is in ALARM _____

D. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is in ALARM _____

E. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is in ALARM _____

[77] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

[78] **POSITION** the following:

A. PS/455A, High Pressure Reactor Trip, at 2-R-1 to the left (NORMAL). _____

B. PS/456A, High Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

C. PS/457A, High Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

D. PS/458A, High Pressure Reactor Trip, at 2-R-28 to the left (NORMAL). _____

[79] **VERIFY** the following:

A. Trip Status Light 11 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-340A, is CLEAR _____

B. Trip Status Light 31 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-334A, is CLEAR _____

C. Trip Status Light 51 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-323A, is CLEAR _____

D. Trip Status Light 71 (2-XX-55-6A, 2-M-6), PZR PRESS HI RX TRIP PS-68-322A, is CLEAR _____

E. Annunciator 124B (2-XA-55-6C, 2-M-6), PZR PRESS HI, is CLEAR _____

F. Annunciator 77C (2-XA-55-4D, 2-M-4), PZR PRESS HI, is CLEAR _____

[80] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[81] **VERIFY** the following computer points:

A. P0480D, PZR HI PRESSURE 1 PARTIAL RX TRIP, indicates NOT TR _____

Date _____

6.14 Pressurizer High Pressure Reactor Trip (continued)

B. P0481D, PZR HI PRESSURE 2 PARTIAL RX TRIP, indicates NOT TR _____

C. P0482D, PZR HI PRESSURE 3 PARTIAL RX TRIP, indicates NOT TR _____

D. P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR _____

E. P0497D, PZR HI PRESSURE 4 PARTIAL RX TRIP, indicates NOT TR _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip

NOTE

The UV Coil Voltage meter (M501) will be used to verify Reactor trip status, A reading of 0 VDC (≤ 5 VDC) will indicate "Reactor tripped status" and a reading of 42 VDC (≥ 35 VDC) will indicate "Reactor not tripped" status.

[1] **ENSURE** prerequisites listed in Section 4.0 for subsection 6.15 have been completed. _____

[2] **POSITION** the following:

A. PS/455C, Low Pressure Reactor Trip, at 2-R-1 to the left (NORMAL). _____

B. PS/456C, Low Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

C. PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

D. PS/458C, Low Pressure Reactor Trip, at 2-R-28 to the left (NORMAL). _____

[3] **VERIFY** the following:

A. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is CLEAR. _____

B. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is CLEAR. _____

C. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is CLEAR. _____

D. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is CLEAR. _____

E. Trip Status Light 16 (2-XX-55-6A, 2-M-6), TURBINE PWR >P13 PS-1-73A, is CLEAR. _____

F. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is CLEAR _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

G. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

H. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

I. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

[4] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47). _____

B. UV COIL VOLTAGE Meter (2-R-50). _____

[5] **POSITION** the following:

A. PS/505A, Hi Press to P-7, at 2-R-4 to the right (TRIP) _____

B. PS/455C, Low Pressure Reactor Trip, at 2-R-1 to the right (TRIP) _____

[6] **VERIFY** the following:

A. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is in ALARM. _____

B. Trip Status Light 16 (2-XX-55-6A, 2-M-6), TURBINE PWR >P13 PS-1-73A, is in ALARM. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM _____

D. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

E. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

F. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

G. Unit 2 Event Display Monitor indicates 124-C PZR PRESS LO is in ALARM (Red) _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[7] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[8] **VERIFY** the following computer points:

A. P0484D, PZR LO PRESSURE 1 PARTIAL RX TRIP, indicates TRIP _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

[9] **POSITION** PS/455C, Low Pressure Reactor Trip, at 2-R-1 to the left (NORMAL). _____

[10] **VERIFY** the following:

A. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is CLEAR. _____

B. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is CLEAR. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 124-C PZR PRESS LO is in NORMAL (Blue) _____

[11] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[12] **VERIFY** the following computer points:

A. P0484D, PZR LO PRESSURE 1 PARTIAL RX TRIP, indicates NOT TR _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[13] **POSITION** PS/456C, Low Pressure Reactor Trip, at 2-R-5 to the right (TRIP). _____

[14] **VERIFY** the following:

A. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is in ALARM. _____

B. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

[15] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[16] **VERIFY** the following computer points:

A. P0485D, PZR LO PRESSURE 2 PARTIAL RX TRIP, indicates TRIP _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

[17] **POSITION** PS/456C, Low Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[18] **VERIFY** the following:

A. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is CLEAR. _____

B. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is CLEAR. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[19] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[20] **VERIFY** the following computer points:

A. P0485D, PZR LO PRESSURE 2 PARTIAL RX TRIP, indicates NOT TR _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

[21] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the right (TRIP). _____

[22] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is in ALARM. _____

B. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

[23] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[24] **VERIFY** the following computer points:

A. P0486D, PZR LO PRESSURE 3 PARTIAL RX TRIP, indicates TRIP _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

[25] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[26] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is CLEAR. _____

B. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is CLEAR. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

[27] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[28] **VERIFY** the following computer points:

A. P0486D, PZR LO PRESSURE 3 PARTIAL RX TRIP, indicates NOT TR _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

[29] **POSITION** PS/458C, Low Pressure Reactor Trip, at 2-R-28 to the right (TRIP). _____

[30] **VERIFY** the following:

A. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is in ALARM. _____

B. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

[31] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[32] **VERIFY** the following computer points:

A. P0487D, PZR LO PRESSURE 4 PARTIAL RX TRIP, indicates TRIP _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

[33] **POSITION** PS/458C, Low Pressure Reactor Trip, at 2-R-28 to the left (NORMAL). _____

[34] **VERIFY** the following:

A. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is CLEAR. _____

B. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is CLEAR. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

[35] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[36] **VERIFY** the following computer points:

A. P0487D, PZR LO PRESSURE 4 PARTIAL RX TRIP, indicates NOT TR _____

B. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

[37] **POSITION** the following:

A. PS/455C, Low Pressure Reactor Trip, at 2-R-1 to the right (TRIP) _____

B. PS/456C, Low Pressure Reactor Trip, at 2-R-5 to the right (TRIP) _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[38] **VERIFY** the following:

A. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is in ALARM. _____

B. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is in ALARM. _____

C. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is in ALARM. _____

D. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

E. Unit 2 Event Display Monitor indicates 77-D RT-PZR PRESS LO is in ALARM (Red) _____

[39] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[40] **VERIFY** Computer Point P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates TRIP. _____

[41] **POSITION** PS/456C, Low Pressure Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[42] **VERIFY** the following:

A. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is CLEAR. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

D. Unit 2 Event Display Monitor indicates 77-D RT-PZR PRESS LO is in NORMAL (Blue) _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[43] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[44] **VERIFY** Computer Point P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR. _____

[45] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the right (TRIP). _____

[46] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is in ALARM. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is in ALARM. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

[47] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[48] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

[49] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is CLEAR. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[50] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[51] **POSITION** PS/458C, Low Pressure Reactor Trip, at 2-R-28 to the right (TRIP). _____

[52] **VERIFY** the following:

A. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is in ALARM. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is in ALARM. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

[53] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[54] **POSITION** PS/455C, Low Pressure Reactor Trip, at 2-R-1 to the left (NORMAL). _____

[55] **VERIFY** the following:

A. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is CLEAR. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[56] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[57] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the right (TRIP). _____

[58] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is in ALARM. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is in ALARM. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

[59] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[60] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

[61] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is CLEAR. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[62] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[63] **POSITION** PS/456C, Low Pressure Reactor Trip, at 2-R-5 to the right (TRIP). _____

[64] **VERIFY** the following:

A. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is in ALARM. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is in ALARM. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

[65] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[66] **POSITION** PS/458C, Low Pressure Reactor Trip, at 2-R-28 to the left (NORMAL). _____

[67] **VERIFY** the following:

A. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is CLEAR. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[68] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[69] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the right (TRIP). _____

[70] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is in ALARM. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is in ALARM. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

[71] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[72] **POSITION** PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the left (NORMAL). _____

[73] **VERIFY** the following:

A. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is CLEAR. _____

B. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR. _____

C. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[74] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[75] **POSITION** the following:

A. PS/455C, Low Pressure Reactor Trip, at 2-R-1 to the right (TRIP) _____

B. PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the right (TRIP) _____

C. PS/458C, Low Pressure Reactor Trip, at 2-R-28 to the right (TRIP) _____

[76] **VERIFY** the following:

A. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is in ALARM. _____

B. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is in ALARM. _____

C. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is in ALARM. _____

D. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is in ALARM. _____

E. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is in ALARM _____

[77] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[78] **POSITION** PS/505A, Hi Press To P-7, at 2-R-4 to the left (NORMAL). _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[79] **VERIFY** the following:

A. Trip Status Light 16 (2-XX-55-6A, 2-M-6), TURBINE PWR >P13 PS-1-73A, is CLEAR _____

B. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is in ALARM. _____

C. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is in ALARM. _____

D. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is in ALARM. _____

E. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is in ALARM. _____

F. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM. _____

G. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM. _____

H. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is in ALARM. _____

I. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

[80] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[81] **VERIFY** Computer Point P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[82] **POSITION** the following:

A. PS/455C, Low Pressure Reactor Trip, at 2-R-1 to the left (NORMAL) _____

B. PS/456C, Low Pressure Reactor Trip, at 2-R-5 to the left (NORMAL) _____

C. PS/457C, Low Pressure Reactor Trip, at 2-R-9 to the left (NORMAL) _____

D. PS/458C, Low Pressure Reactor Trip, at 2-R-28 to the left (NORMAL) _____

[83] **VERIFY** the following:

A. Trip Status Light 10 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-340E, is CLEAR. _____

B. Trip Status Light 30 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-334E, is CLEAR. _____

C. Trip Status Light 50 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-323E, is CLEAR. _____

D. Trip Status Light 70 (2-XX-55-6A, 2-M-6), PZR PRESS LOW RX TRIP PS-68-322E, is CLEAR. _____

E. Annunciator 124C (2-XA-55-6C, 2-M-6), PZR PRESS LO, is CLEAR _____

F. Annunciator 77D (2-XA-55-4D, 2-M-4), PZR PRESS LO, is CLEAR _____

G. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

H. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM. _____

[84] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.15 Pressurizer Low Pressure Reactor Trip (continued)

[85] **VERIFY** the following computer points:

A. P0486D, PZR LO PRESSURE 3 PARTIAL RX TRIP, indicates NOT TR _____

B. P0487D, PZR LO PRESSURE 4 PARTIAL RX TRIP, indicates NOT TR _____

C. P0488D, PZR LO PRESSURE & P7 CAUSES RX TRIP, indicates NOT TR _____

D. P0484D, PZR LO PRESSURE 1 PARTIAL RX TRIP, indicates NOT TR _____

E. P0485D, PZR LO PRESSURE 2 PARTIAL RX TRIP, indicates NOT TR _____

Date _____

6.16 Pressurizer High Level Reactor Trip

NOTE

The UV Coil Voltage meter (M501) will be used to verify Reactor trip status, A reading of 0 VDC (≤ 5 VDC) will indicate "Reactor tripped status" and a reading of 42 VDC (≥ 35 VDC) will indicate "Reactor not tripped" status

[1] **ENSURE** prerequisites listed in Section 4.0 for Subsection 6.16 have been completed. _____

[2] **POSITION** the following:

A. LS/459A, Pzr High Level Reactor Trip, at 2-R-1 to the left (NORMAL) _____

B. LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the left (NORMAL) _____

C. LS/461A, Pzr High Level Reactor Trip, at 2-R-19 in NORMAL _____

[3] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-339A, is CLEAR _____

B. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is CLEAR _____

C. Trip Status Light 49 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-320A, is CLEAR _____

D. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is CLEAR _____

E. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

F. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

G. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM. _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[4] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[5] **POSITION** the following:

A. PS/505A, Hi Press to P-7, at 2-R-4 to the right (TRIP) _____

B. LS/459A, Pzr High Level Reactor Trip, at 2-R-1 to the right (TRIP) _____

[6] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-339A, is in ALARM. _____

B. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

D. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR. _____

E. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR. _____

[7] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[8] **VERIFY** the following computer points:

A. L0480D, PZR HI LEVEL 1 PARTIAL RX TRIP, indicates TRIP _____

B. L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR _____

[9] **POSITION** LS/459A, Pzr High Level Reactor Trip, at 2-R-1 to the left (NORMAL). _____

[10] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-339A, is CLEAR. _____

B. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is CLEAR. _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

[11] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[12] **VERIFY** the following computer points:

A. L0480D, PZR HI LEVEL 1 PARTIAL RX TRIP, indicates NOT TR _____

B. L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR _____

[13] **POSITION** LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the right (TRIP). _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[14] **VERIFY** the following:

A. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is in ALARM. _____

B. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

[15] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[16] **VERIFY** the following computer points:

A. L0481D, PZR HI LEVEL 2 PARTIAL RX TRIP, indicates TRIP _____

B. L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR _____

[17] **POSITION** LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[18] **VERIFY** the following:

A. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is CLEAR. _____

B. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is CLEAR. _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

[19] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[20] **VERIFY** the following computer points:

A. L0481D, PZR HI LEVEL 2 PARTIAL RX TRIP, indicates NOT TR _____

B. L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR _____

[21] **POSITION** LS/461A, Pzr High Level Reactor Trip, at 2-R-19 in TRIPPED. _____

[22] **VERIFY** the following:

A. Trip Status Light 49 (2-XX-55-6A, 2-M-6), PZR LEVEL HI LS-68-320A, is in ALARM. _____

B. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

[23] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[24] **VERIFY** the following computer points:

A. L0482D, PZR HI LEVEL 3 PARTIAL RX TRIP, indicates TRIP _____

B. L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR _____

[25] **POSITION** LS/461A, Pzr High Level Reactor Trip, at 2-R-19 in NORMAL. _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[26] **VERIFY** the following:

A. Trip Status Light 49 (2-XX-55-6A, 2-M-6), PZR LEVEL HI LS-68-320A, is CLEAR. _____

B. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is CLEAR. _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

[27] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[28] **VERIFY** the following computer points:

A. L0482D, PZR HI LEVEL 3 PARTIAL RX TRIP, indicates NOT TR _____

B. L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR _____

[29] **POSITION** the following:

A. LS/459A, Pzr High Level Reactor Trp, at 2-R-1 to the right (TRIP) _____

B. LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the right (TRIP) _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[30] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-339A, is in ALARM _____

B. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is in ALARM _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is in ALARM. _____

D. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

[31] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[32] **VERIFY** Computer Point L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates TRIP. _____

[33] **POSITION** LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[34] **VERIFY** the following:

A. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is CLEAR _____

B. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR. _____

C. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

[35] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[36] **VERIFY** Computer Point L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR. _____

[37] **POSITION** LS/461A, Pzr High Level Reactor Trip, at 2-R-19 in TRIPPED. _____

[38] **VERIFY** the following:

A. Trip Status Light 49 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-320A, is in ALARM _____

B. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is in ALARM. _____

C. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

[39] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[40] **POSITION** LS/459A, Pzr High Level Reactor Trip, at 2-R-1 to the left (NORMAL) _____

[41] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-339A, is CLEAR. _____

B. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR. _____

C. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

[42] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[43] **POSITION** LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the right (TRIP) _____

[44] **VERIFY** the following:

A. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is in ALARM _____

B. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is in ALARM. _____

C. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

[45] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[46] **POSITION** LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the left (NORMAL). _____

[47] **VERIFY** the following:

A. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is CLEAR _____

B. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR. _____

C. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

[48] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

[49] **POSITION** the following:

A. LS/459A, Pzr High Level Reactor Trip, at 2-R-1 to the right (TRIP) _____

B. LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the right (TRIP) _____

[50] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-339A, is in ALARM _____

B. Trip Status Light 29 (2-XX-55-6A, 2-M-6, PZR LEVEL HI LS-68-335A, is in ALARM _____

C. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is in ALARM. _____

D. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

[51] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[52] **POSITION** PS/505A, Hi Press To P-7, at 2-R-4 to the left (NORMAL). _____

[53] **VERIFY** the following:

A. Trip Status Light 16 (2-XX-55-6A, 2-M-6), TURBINE PWR >P13 PS-1-73A, is CLEAR _____

B. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

C. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM. _____

D. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is in ALARM. _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

E. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

[54] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[55] **VERIFY** Computer Point P0483D, PZR HI PRESSURE CAUSES RX TRIP, indicates NOT TR. _____

[56] **POSITION** the following:

A. LS/459A, Pzr High Level Reactor Trip, at 2-R-1 to the left (NORMAL) _____

B. LS/460A, Pzr High Level Reactor Trip, at 2-R-5 to the left (NORMAL) _____

C. LS/461A, Pzr High Level Reactor Trip, at 2-R-19 in NORMAL _____

[57] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[58] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-6A, 2-M-6), PZR LEVEL HI LS-68-339A, is CLEAR _____

B. Trip Status Light 29 (2-XX-55-6A, 2-M-6), PZR LEVEL HI LS-68-335A, is CLEAR _____

C. Trip Status Light 49 (2-XX-55-6A, 2-M-6), PZR LEVEL HI LS-68-320A, is CLEAR _____

D. Annunciator 124A (2-XA-55-6C, 2-M-6), PZR LEVEL HI, is CLEAR _____

Date _____

6.16 Pressurizer High Level Reactor Trip (continued)

E. Annunciator 77E (2-XA-55-4D, 2-M-4), PZR LEVEL HI, is CLEAR _____

F. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

G. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM. _____

[59] **VERIFY** the following computer points:

A. L0482D, PZR HI LEVEL 3 PARTIAL RX TRIP, indicates NOT TR _____

B. L0483D, PZR HI LEVEL & P7 CAUSES RX TRIP, indicates NOT TR _____

C. L0480D, PZR HI LEVEL 1 PARTIAL RX TRIP indicates NOT TR _____

D. L0481D, PZR HI LEVEL 2 PARTIAL RX TRIP, indicates NOT TR _____

6.17 Turbine Trip Reactor Trip

NOTES

1) The SSPS input logic signal shown on drawing 47W611-99-6 (Reference 2.2.1C.4) as Stop Valve A Fully Closed is identified as 2-ZS-47-28(33/T1) on drawing 2-45W600-47-1 (Reference 2.2.1B.3). The following information may be shown in a similar manner:

Valve	2-47W611-99-6	2-45W600-47-1
STPV1	Stop Valve A	2-ZS-47-28(33/T1)
STPV2	Stop Valve B	2-ZS-47-30(33/T2)
STPV3	Stop Valve C	2-ZS-47-32(33/T3)
STPV4	Stop Valve D	2-ZS-47-34(33/T4)

2) SSPS contacts jumpered in Step 4.3[44] are Open for the Stop Valve Closed/Tripped position, and Closed for the Stop Valve Open/Normal position. Thus, the following will apply throughout this subsection.

   Open Jumper = Valve Closed/Tripped

   Closed Jumper = Valve Open/Normal

3) To change the Tripped/Not Tripped state of the Stop Valves two actions will be carried out, one for Train A and one for Train B.

4) Refer to Table 4, Nuclear Instrumentation System (NIS) - Channel Trip/Return to Normal, for instructions on how to trip/return to normal bistables listed in this subsection.

5) In this subsection, the following identifiers will be used:

Relay ID	Location	Description	Section Identifier
2-RLY-099-K635	2-R-48	Generator Trip,120 VAC	2-RLY-099-K635 (Train A/2-R-48)
2-RLY-099-K635	2-R-51	Generator Trip,120 VAC	2-RLY-099-K635 (Train B/2-R-51)

Date _____

6.17 Turbine Trip Reactor Trip (continued)

NOTES

6) The UV Coil Voltage meter (M501) will be used to verify Reactor trip status, A reading of 0 VDC (≤ 5 VDC) will indicate "Reactor tripped status" and a reading of 42 VDC (≥ 35 VDC) will indicate "Reactor not tripped" status.

7) During the simulation of NIS Power Range Bistables NC41S, NC42S, NC43S and NC44S at 50%- power, the NIS Power Range Bistables, Trip Status lights and annunciators associated with NC41P - NC44P will activate at greater than 25% power and the NC41M - NC44M will activate at greater than 10% power. To prevent an unwanted Reactor Trip, the 2-N47A and 2-N47B "PR Tr (A/B) Block P10" Main Control Board block switches will be placed to BLOCK in Steps 6.17[3] thru Steps 6.17[6]. When returning Bistables NC41S, NC42S, NC43S and NC44S to NORMAL in this subsection, the performer should not drop below 10% indicated power unless directed to ensure that the 2-N47A/B Blocks do not reset and cause an unwanted Reactor Trip. The Power Range High Neutron Flux Low Setpoint Reactor Trip (NC41P, NC42P, NC43P and NC44P) will automatically unblock with any 3 out of 4 Channels below the P-10 setpoint (10% indicated power)

   Should the Power Range High Neutron Flux Low Setpoint Reactor Trip become unblocked and cause an unwarranted reactor trip, repeat Steps 6.17[3] thru Steps 6.17[6] to block the trip and make a note in the Chronological Test Log.

8) Positioning individual power range channel bistables in and out of trip status may cause flux deviation alarms on the NIS panel (2-M-13) and annunciator panel (2-XA-55-4B) 83B, 83C, 83D and 83E.

9) During manipulation of the Power Range potentiometers, if indicated power level is increased greater than 5% within 2 seconds a PR Rate Trip bistable will occur. If this condition is encountered the bistable can be cleared by holding the Rate Mode switch in RESET until the Positive Rate TRIP lamp on the drawer clears then releasing the switch.

[1] **ENSURE** prerequisites listed in Section 4.0 for Subsection 6.17 have been complete. _____

[2] **ENSURE** the following:

A. STPV1, Stop Vlv A/Tr A CH 1, at 2-R-46 in NORMAL (CLOSED Jumper) (TB109 - 3,4) _____

B. STPV2, Stop Vlv B/Tr A CH 2, at 2-R-46 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

C. STPV3, Stop Vlv C/Tr A CH 3, at 2-R-46 in NORMAL (CLOSED Jumper) (TB308 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

D. STPV4, Stop Vlv D/T A CH 4, at 2-R-46 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

E. STPV1, Stop Vlv A/Tr B CH 1, at 2-R-49 in NORMAL (CLOSED Jumper) (TB109 - 3,4) _____

F. STPV2, Stop Vlv B/Tr B CH 2, at 2-R-49 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

G. STPV3, Stop Vlv C/Tr B CH 3, at 2-R-49 in NORMAL (CLOSED Jumper) (TB308 - 3,4) _____

H. STPV4, Stop Vlv D/Tr B CH 4, at 2-R-49 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

I. 2-HS-47-73, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1666-D (Aux Inst. Rm), in NORMAL. _____

J. 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in NORMAL. _____

K. 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1668-F, (Aux Inst Rm) in NORMAL. _____

[3] **POSITION** the following:

A. N41 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P10 lamp on front of drawer is in ALARM to put NC41M bistable, in TRIPPED. _____

B. N42 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P10 lamp on front of drawer is in ALARM to put NC42M bistable, in TRIPPED. _____

C. N43 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P10 lamp on front of drawer is in ALARM to put NC43M bistable, in TRIPPED. _____

D. N44 Detector A and, if necessary Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE PERMISSIVE P10 lamp on front of drawer is in ALARM to put NC44M bistable, in TRIPPED. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[4] **POSITION** the following:

A. 2-N47A, PR LO POWER TRIP BLOCK P-10, at 2-M-4 in BLOCK _____

B. 2-N47B, PR LO POWER TRIP BLOCK P-10, at 2-M-4 in BLOCK _____

[5] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-5, 2-M-5), PR >P10 NC41M, is in ALARM. _____

B. Trip Status Light 25 (2-XX-55-5, 2-M-5), PR >P10 NC42M, is in ALARM. _____

C. Trip Status Light 45 (2-XX-55-5, 2-M-5), PR >P10 NC43M, is in ALARM. _____

D. Trip Status Light 65 (2-XX-55-5, 2-M-5), PR >P10 NC44M, is in ALARM. _____

E. Annunciator 64E (2-XA-55-4A, 2-M-4), P-10 NUC AT POWER PERMISSIVE, is in ALARM. _____

F. Annunciator 64D (2-XA-55-4A, 2-M-4), POWER RANGE LO SETPOINT TRIP BLOCKED, is in ALARM. _____

[6] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[7] **POSITION** the following:

A. N41 Detector A and, if necessary, Detector B TEST SIGNAL potentiometer UNTIL OVERPOWER TRIP LOW RANGE lamp on front of drawer is in ALARM to put NC41P, at 2-M-13 bistable in TRIPPED _____

B. N42 Detector A and, if necessary, Detector B TEST SIGNAL potentiometer UNTIL OVERPOWER TRIP LOW RANGE lamp on front of drawer is in ALARM to put NC42P bistable, at 2-M-13 in TRIPPED _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

C. N43 Detector A and, if necessary, Detector B TEST SIGNAL potentiometer UNTIL OVERPOWER TRIP LOW RANGE lamp on front of drawer is in ALARM to put NC43P bistable, at 2-M-13 in TRIPPED _____

D. N44 Detector A and, if necessary, Detector B TEST SIGNAL potentiometer UNTIL OVERPOWER TRIP LOW RANGE lamp on front of drawer is in ALARM to put NC44P bistable, at 2-M-13 in TRIPPED _____

[8] **VERIFY** the contact state for 2-RLY-99-K635 (Train A/2-R-48) (Reference 2.2.1D.124 - 2-54114-1-7246D11-24):

A. TB650 -1, 2 OPEN _____

M&TE _____ Cal Due Date _____ _____

B. TB650 -3, 4 OPEN _____

M&TE _____ Cal Due Date _____ _____

C. TB650 -5, 6 OPEN _____

M&TE _____ Cal Due Date _____ _____

D. TB650 -7, 8 CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[9] **VERIFY** the contact state for 2-RLY-99-K635 (Train B/2-R-51) (Reference 2.2.1D.124 - 2-54114-1-0-24):

A. TB650 -1, 2 OPEN _____

M&TE _____ Cal Due Date _____ _____

B. TB650 -3, 4 OPEN _____

M&TE _____ Cal Due Date _____ _____

C. TB650 -5, 6 OPEN _____

M&TE _____ Cal Due Date _____ _____

D. TB650 -7, 8 CLOSED _____

M&TE _____ Cal Due Date _____ _____

[10] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[11] **VERIFY** the following:

A. Trip Status Light 6 (2-XX-55-5, 2-M-5), PR FLUX HI LO SET PT NC41P, is in ALARM _____

B. Trip Status Light 26 (2-XX-55-5, 2-M-5), PR FLUX HI LO SETPT NC42P, is in ALARM _____

C. Trip Status Light 46 (2-XX-55-5, 2-M-5), PR FLUX HI LO SETPT NC43P, is in ALARM _____

D. Trip Status Light 66 (2-XX-55-5, 2-M-5), PR FLUX HI LO SETPT NC44P, is in ALARM _____

E. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is CLEAR _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

F. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is CLEAR _____

G. Trip Status Light 58 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 3 CLOSED, is CLEAR _____

H. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is CLEAR _____

I. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is CLEAR _____

J. Trip Status Light 17 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-1, is CLEAR _____

K. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is CLEAR _____

L. Trip Status Light 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is CLEAR _____

M. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is CLEAR _____

N. Annunciator 69E (2-XA-55-4A, 2-M-4), P-9 RX TRIP FROM TURB TRIP BLOCKED, is in ALARM _____

O. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

P. Annunciator 80D (2-XA-55-4D, 2-M-4), POWER RANGE FLUX HI (LO SETPT), is CLEAR. _____

[12] **ENSURE** the following:

A. N41 Detector A and, if necessary, Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE P9 lamp on front of drawer is in ALARM to put NC41S bistable, at 2-M-13 in TRIPPED. _____

B. N42 Detector A and, if necessary, Detector B TEST SIGNAL potentiometer UNTIL POWER ABOVE P9 lamp on front of drawer is in ALARM to put NC42S bistable, at 2-M-13 in TRIPPED. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

C. STPV1, Stop Vlv A/Tr A CH 1, in TRIPPED (OPEN Jumper at 2-R-46 TB109 - 3,4). _____

D. STPV1, Stop Vlv A/Tr B CH 1, in TRIPPED (OPEN Jumper at 2-R-49 TB109 - 3,4). _____

[13] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-5, 2-M-5) , PR >P9 NC41S, is in ALARM _____

B. Trip Status Light 29 (2-XX-55-5, 2-M-5) , PR >P9 NC42S, is in ALARM _____

C. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is in ALARM _____

D. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM _____

E. Annunciator 69E (2-XA-55-4A, 2-M-4), P-9 RX TRIP FROM TURB TRIP BLOCKED, is CLEAR _____

F. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

G. Unit 2 Event Display Monitor indicates 121-C TURBINE STOP VALVES CLOSED is in ALARM (Red) _____

H. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

I. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[14] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[15] **VERIFY** the following Computer Points:

A. Y0391D, TURB STOP VALVE 1 CL PARTIAL RX TRIP, indicates TRIP _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[16] **POSITION** the following:

A. STPV1, Stop Vlv A/Tr A CH 1, at 2-R-46 in NORMAL (CLOSED Jumper) (TB109 - 3,4) _____

B. STPV1, Stop Vlv A/Tr B CH 1, at 2-R-49 in NORMAL (CLOSED Jumper) (TB109 - 3,4) _____

[17] **VERIFY** the following:

A. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is CLEAR _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is CLEAR _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 121-C TURBINE STOP VALVES CLOSED is in NORMAL (Blue) _____

E. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

F. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[18] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[19] **VERIFY** the following Computer Points:

A. Y0391D, TURB STOP VALVE 1 CL PARTIAL RX TRIP, indicates NOT TR _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[20] **POSITION** the following:

A. STPV2, Stop Vlv B/Tr A CH 2, at 2-R-46 in TRIPPED (OPEN Jumper) (TB209 - 3,4) _____

B. STPV2, Stop Vlv B/Tr B CH 2, at 2-R-49 in TRIPPED (OPEN Jumper) (TB209 - 3,4) _____

[21] **VERIFY** the following:

A. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is in ALARM. _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[22] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[23] **VERIFY** the following Computer Points:

A. Y0392D, TURB STOP VALVE 2 CL PARTIAL RX TRIP, indicates TRIP _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[24] **POSITION** the following:

A. STPV2, Stop Vlv B/Tr A CH 2, at 2-R-46 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

B. STPV2, Stop Vlv B/Tr B CH 2, at 2-R-49 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

[25] **VERIFY** the following:

A. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is CLEAR. _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is CLEAR. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[26] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[27] **VERIFY** the following Computer Points:

A. Y0392D, TURB STOP VALVE 2 CL PARTIAL RX TRIP, indicates NOT TR _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[28] **POSITION** the following:

A. STPV3, Stop Vlv C/Tr A CH 3, at 2-R-46 in TRIPPED (OPEN Jumper) (TB308 - 3,4) _____

B. STPV3, Stop Vlv C/Tr B CH 3, at 2-R-49 in TRIPPED (OPEN Jumper) (TB308 - 3,4) _____

[29] **VERIFY** the following:

A. Trip Status Light 58 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 3 CLOSED, is in ALARM. _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[30] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[31] **VERIFY** the following Computer Points:

A. Y0393D, TURB STOP VALVE 3 CL PARTIAL RX TRIP, indicates TRIP _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[32] **POSITION** the following:

A. STPV3, Stop Vlv C/Tr A CH 3, at 2-R-46 in NORMAL (CLOSED Jumper) (TB308 - 3,4) _____

B. STPV3, Stop Vlv C/Tr B CH 3, at 2-R-49 in NORMAL (CLOSED Jumper) (TB308 - 3,4) _____

[33] **VERIFY** the following:

A. Trip Status Light 58 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 3 CLOSED, is CLEAR. _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is CLEAR. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[34] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[35] **VERIFY** the following Computer Points:

A. Y0393D, TURB STOP VALVE 3 CL PARTIAL RX TRIP, indicates NOT TR _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[36] **POSITION** the following:

A. STPV4, Stop Vlv D/T A CH 4, at 2-R-46 in TRIPPED (OPEN Jumper) (TB407 - 3,4) _____

B. STPV4, Stop Vlv D/Tr B CH 4, at 2-R-49 in TRIPPED (OPEN Jumper) (TB407 - 3,4) _____

[37] **VERIFY** the following:

A. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is in ALARM. _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[38] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[39] **VERIFY** the following Computer Points:

A. Y0394D, TURB STOP VALVE 4 CL PARTIAL RX TRIP, indicates TRIP _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[40] **POSITION** the following:

A. STPV4, Stop Vlv D/T A CH 4, at 2-R-46 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

B. STPV4, Stop Vlv D/Tr B CH 4, at 2-R-49 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

[41] **VERIFY** the following:

A. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is CLEAR. _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is CLEAR. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[42] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[43] **VERIFY** the following Computer Points:

A. Y0394D, TURB STOP VALVE 4 CL PARTIAL RX TRIP, indicates NOT TR _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[44] **POSITION** the following:

A. STPV1, Stop Vlv A/Tr A CH 1, in TRIPPED (OPEN Jumper at 2-R-46 TB109 - 3,4) _____

B. STPV1, Stop Vlv A/Tr B CH 1, in TRIPPED (OPEN Jumper at 2-R-49 TB109 - 3,4) _____

C. STPV2, Stop Vlv B/Tr A CH 2, at 2-R-46 in TRIPPED (OPEN Jumper) (TB209 - 3,4) _____

D. STPV2, Stop Vlv B/Tr B CH 2, at 2-R-49 in TRIPPED (OPEN Jumper) (TB209 - 3,4) _____

E. STPV4, Stop Vlv D/T A CH 4, at 2-R-46 in TRIPPED (OPEN Jumper) (TB407 - 3,4) _____

F. STPV4, Stop Vlv D/Tr B CH 4, at 2-R-49 in TRIPPED (OPEN Jumper) (TB407 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[45] **VERIFY** the following:

A. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is in ALARM _____

B. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is in ALARM _____

C. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is in ALARM. _____

D. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

E. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

F. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

G. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[46] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[47] **POSITION** the following:

A. STPV4, Stop Vlv D/TR A CH 4, at 2-R-46 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

B. STPV4, Stop Vlv D/TR B CH 4, at 2-R-49 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[48] **VERIFY** the following:

A. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is CLEAR. _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

C. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

D. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[49] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[50] **POSITION** the following:

A. STPV3, Stop Vlv C/Tr A CH 3, at 2-R-46 in TRIPPED (OPEN Jumper) (TB308 - 3,4) _____

B. STPV3, Stop Vlv C/Tr B CH 3, at 2-R-49 in TRIPPED (OPEN Jumper) (TB308 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[51] **VERIFY** the following:

A. Trip Status Light 58 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 3 CLOSED, is in ALARM. _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

C. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

D. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[52] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[53] **POSITION** the following:

A. STPV2, Stop Vlv B/Tr A CH 2, at 2-R-46 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

B. STPV2, Stop Vlv B/Tr B CH 2, at 2-R-49 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[54] **VERIFY** the following:

A. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is CLEAR _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

C. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

D. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[55] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[56] **POSITION** the following:

A. STPV4, Stop Vlv D/Tr A CH 4, at 2-R-46 in TRIPPED (OPEN Jumper) (TB407 - 3,4) _____

B. STPV4, Stop Vlv D/Tr B CH 4, at 2-R-49 in TRIPPED (OPEN Jumper) (TB407 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[57] **VERIFY** the following:

A. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is in ALARM. _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

C. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

D. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[58] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[59] **POSITION** the following:

A. STPV1, Stop Vlv A/Tr A CH 1, at 2-R-46 in NORMAL (CLOSED Jumper) (TB109 - 3,4) _____

B. STPV1, Stop Vlv A/Tr B CH 1, at 2-R-49 in NORMAL (CLOSED Jumper) (TB109 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[60] **VERIFY** the following:

A. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is CLEAR _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

C. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

D. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[61] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[62] **POSITION** the following:

A. STPV2, Stop Vlv B/Tr A CH 2, at 2-R-46 in TRIPPED (OPEN Jumper) (TB209 - 3,4) _____

B. STPV2, Stop Vlv B/Tr B CH 2, at 2-R-49 in TRIPPED (OPEN Jumper) (TB209 - 3,4) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[63] **VERIFY** the following:

A. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is in ALARM. _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

C. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

D. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[64] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[65] **POSITION** the following:

A. STPV1, Stop Vlv A/Tr A CH 1, at 2-R-46 in TRIPPED (OPEN Jumper) (TB109 - 3,4) _____

B. STPV1, Stop Vlv A/Tr B CH 1, at 2-R-49 in TRIPPED (OPEN Jumper) (TB109 - 3,4) _____

[66] **VERIFY** the following:

A. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is in ALARM _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is in ALARM. _____

C. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[67] **VERIFY** the contact state for 2-RLY-099-K635 (Train A/2-R-48)

A. TB650-1, 2 CLOSED _____

B. TB650-3, 4 CLOSED _____

C. TB650-5, 6 CLOSED _____

D. TB650-7, 8 OPEN _____

M&TE _____ Cal Due Date _____ _____

[68] **VERIFY** the contact state for 2-RLY-099-K635 (Train A/2-R-51)

A. TB650-1, 2 CLOSED _____

B. TB650-3, 4 CLOSED _____

C. TB650-5, 6 CLOSED _____

D. TB650-7, 8 OPEN _____

M&TE _____ Cal Due Date _____ _____

[69] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[70] **VERIFY** Computer Point Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates TRIP. _____

[71] **POSITION** the following:

A. 2-HS-47-73, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1666-D (Aux Inst. Rm), in TEST. _____

B. 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in TEST. _____

C. 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1668-F (Aux Inst. Rm), in TEST. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[72] **VERIFY** the following:

A. Trip Status Light 17 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-1, is ALARM. _____

B. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is ALARM. _____

C. Trip Status Light 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is ALARM. _____

D. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is in ALARM. _____

E. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

F. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is in ALARM. _____

[73] **VERIFY** the contact state for 2-RLY-099-K635 (Train A/2-R-48)

A. TB650-1, 2 CLOSED _____

B. TB650-3, 4 CLOSED _____

C. TB650-5, 6 CLOSED _____

D. TB650-7, 8 OPEN _____

M&TE _____ Cal Due Date _____ _____

[74] **VERIFY** the contact state for 2-RLY-099-K635 (Train A/2-R-51)

A. TB650-1, 2 CLOSED _____

B. TB650-3, 4 CLOSED _____

C. TB650-5, 6 CLOSED _____

D. TB650-7, 8 OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[75] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[76] **POSITION** NC41S, PR CH1 POWER ABOVE PERMISSIVE P9 bistable, in NORMAL. _____

[77] **VERIFY** the following:

A. Annunciator 69E (2-XA-55-4A, 2-M-4), P-9 RX TRIP FROM TURB TRIP BLOCKED, is in ALARM. _____

B. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

F. Computer Point Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR. _____

[78] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[79] **POSITION** the following:

A. 2-HS-47-73, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1666-D (Aux Inst. Rm), in NORMAL. _____

B. 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in NORMAL. _____

C. 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1668-F (Aux Inst. Rm), in NORMAL. _____

[80] **VERIFY** the following:

A. Trip Status Light 17 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-1, is CLEAR _____

B. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is CLEAR _____

C. Trip Status Light 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is CLEAR _____

D. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is CLEAR _____

E. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is in ALARM. _____

F. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

G. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

H. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

I. Computer Point Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[81] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[82] **POSITION** the following:

A. STPV1, Stop Vlv A/Tr A CH 1, at 2-R-46 in NORMAL (CLOSED Jumper) (TB109 - 3,4). _____

B. STPV1, Stop Vlv A/Tr B CH 1, at 2-R-49 in NORMAL (CLOSED Jumper) (TB109 - 3,4) _____

C. STPV2, Stop Vlv B/Tr A CH 2, at 2-R-46 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

D. STPV2, Stop Vlv B/Tr B CH 2, at 2-R-49 in NORMAL (CLOSED Jumper) (TB209 - 3,4) _____

E. STPV3, Stop Vlv C/Tr A CH 3, at 2-R-46 in NORMAL (CLOSED Jumper) (TB308 - 3,4) _____

F. STPV3, Stop Vlv C/Tr B CH 3, at 2-R-49 in NORMAL (CLOSED Jumper) (TB308 - 3,4) _____

G. STPV4, Stop Vlv D/Tr A CH 4, at 2-R-46 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

H. STPV4, Stop Vlv D/Tr B CH 4, at 2-R-49 in NORMAL (CLOSED Jumper) (TB407 - 3,4) _____

I. 2-HS-47-73, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1666-D (Aux Inst. Rm), in TEST. _____

J. 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in TEST. _____

K. 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1668-F (Aux Inst. Rm), in TEST. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[83] **VERIFY** the following:

A. Trip Status Light 17 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-1, is ALARM. _____

B. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is ALARM. _____

C. Trip Status Light 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is ALARM. _____

D. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is CLEAR. _____

E. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is CLEAR. _____

F. Trip Status Light 58 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 3 CLOSED, is CLEAR. _____

G. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is CLEAR. _____

H. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is CLEAR. _____

I. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

J. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, CLOSED. _____

M&TE _____ Cal Due Date _____ _____

K. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, CLOSED. _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[84] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[85] **POSITION** NC41S, PR CH1 POWER ABOVE PERMISSIVE P9 bistable, in TRIPPED. _____

[86] **VERIFY** the following:

A. Trip Status Light 9 (2-XX-55-5, 2-M-5) , PR >P9 NC41S, is in ALARM _____

B. Annunciator 69E (2-XA-55-4A, 2-M-4), P-9 RX TRIP FROM TURB TRIP BLOCKED, is CLEAR. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is in ALARM. _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, CLOSED. _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, CLOSED. _____

M&TE _____ Cal Due Date _____ _____

F. Computer Point Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates TRIP. _____

[87] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[88] **POSITION** the following:

A. 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in NORMAL. _____

B. 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1668-F (Aux Inst. Rm), in NORMAL. _____

[89] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[90] **VERIFY** the following:

A. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is CLEAR _____

B. Trip Status Light 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is CLEAR _____

C. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is in CLEAR. _____

D. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

E. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

F. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[91] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[92] **VERIFY** the following Computer Points:

A. P0396D, TURB HYD OIL LO PRESSURE 1 PARTIAL R, indicates TRIP _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[93] **POSITION** 2-HS-47-73, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1666-D (Aux Inst. Rm), in NORMAL. _____

[94] **VERIFY** the following:

A. TRIP STATUS LIGHT 17 (2-XA-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-1, is CLEAR. _____

B. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is CLEAR. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[95] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[96] **VERIFY** the following Computer Points:

A. P0396D, TURB HYD OIL LO PRESSURE 1 PARTIAL R, indicates NOT TR _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[97] **POSITION** 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in TEST. _____

[98] **VERIFY** the following:

A. TRIP STATUS LIGHT 37 (2-XA-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is in ALARM. _____

B. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is in ALARM. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[99] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[100] **VERIFY** the following Computer Points:

A. P0397D, TURB HYD OIL LO PRESSURE 2 PARTIAL R, indicates TRIP _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[101] **POSITION** 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in NORMAL. _____

[102] **VERIFY** the following:

A. TRIP STATUS LIGHT 37 (2-XA-55-4A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is CLEAR. _____

B. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO STOP OIL PRESS LO, is CLEAR. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650 - 5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650 - 5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[103] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[104] **VERIFY** the following Computer Points:

A. P0397D, TURB HYD OIL LO PRESSURE 2 PARTIAL R, indicates NOT TR _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[105] **POSITION** 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1668-F (Aux Inst. Rm), in TEST. _____

[106] **VERIFY** the following:

A. TRIP STATUS LIGHT 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is in ALARM. _____

B. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is in ALARM. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650 - 5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650 - 5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[107] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[108] **VERIFY** the following Computer Points:

A. P0398D, TURB HYD OIL LO PRESSURE 3 PARTIAL R, indicates TRIP _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[109] **POSITION** 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1668-F (Aux Inst. Rm), in NORMAL. _____

[110] **VERIFY** the following:

A. TRIP STATUS LIGHT 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is CLEAR. _____

B. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is CLEAR. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

D. Contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

E. Contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[111] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[112] **VERIFY** the following Computer Points:

A. P0398D, TURB HYD OIL LO PRESSURE 3 PARTIAL R, indicates NOT TR _____

B. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

[113] **POSITION** the following:

A. 2-HS-47-73, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1666-D, in TEST _____

B. 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in TEST _____

[114] **VERIFY** the contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

[115] **VERIFY** the contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

[116] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[117] **VERIFY** the following:

A. Trip Status Light 17 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-1, is in ALARM. _____

B. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is in ALARM. _____

C. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is in ALARM. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

D. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is in ALARM. _____

[118] **VERIFY** Computer Point Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates TRIP. _____

[119] **POSITION** 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW, at 2-JB-290-1669-E (Aux Inst. Rm), in NORMAL. _____

[120] **VERIFY** the contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[121] **VERIFY** the contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[122] **VERIFY** the following:

A. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is CLEAR _____

B. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR. _____

C. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is in ALARM. _____

[123] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[124] **VERIFY** Computer Point Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR. _____

[125] **POSITION** 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW at 2-JB-290-1668-F, in TEST. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[126] **VERIFY** the contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

[127] **VERIFY** the contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

[128] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[129] **POSITION** 2-HS-47-73, AUTO STOP OIL PRESSURE LOW TEST SW at 2-JB-290-1666-D (Aux Inst. Rm), in NORMAL. _____

[130] **VERIFY** the contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[131] **VERIFY** the contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[132] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[133] **POSITION** 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW at 2-JB-290-1669-E (Aux Inst. Rm), in TEST. _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[134] **VERIFY** the contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

[135] **VERIFY** the contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, CLOSED _____

M&TE _____ Cal Due Date _____ _____

[136] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[137] **POSITION** the following:

A. 2-HS-47-74, AUTO STOP OIL PRESSURE LOW TEST SW at 2-JB-290-1669-E (Aux Inst. Rm), in NORMAL. _____

B. 2-HS-47-75, AUTO STOP OIL PRESSURE LOW TEST SW at 2-JB-290-1668-F (Aux Inst. Rm), in NORMAL. _____

[138] **VERIFY** the contact state of 2-RLY-99-K635 (Train A/2-R-48) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

[139] **VERIFY** the contact state of 2-RLY-99-K635 (Train B/2-R-51) TB650-5, 6, OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[140] **ROTATE** the following:

A. N41 Detector A and Detector B TEST SIGNAL potentiometer Fully CCW to put all bistables for N41, at 2-M-13 in NORMAL. _____

B. N42 Detector A and Detector B TEST SIGNAL potentiometer Fully CCW to put all bistables for N42, at 2-M-13 in NORMAL. _____

C. N43 Detector A and Detector B TEST SIGNAL potentiometer Fully CCW to put all bistables for N43, at 2-M-13 in NORMAL. _____

D. N44 Detector A and Detector B TEST SIGNAL potentiometer Fully CCW to put all bistables for N44, at 2-M-13 in NORMAL. _____

[141] **VERIFY** the following:

A. Trip Status Light 5 (2-XX-55-5, 2-M-5), PR >P10 NC41M, is CLEAR _____

B. Trip Status Light 25 (2-XX-55-5, 2-M-5), PR >P10 NC42M, is CLEAR _____

C. Trip Status Light 45 (2-XX-55-5, 2-M-5), PR >P10 NC43M, is CLEAR _____

D. Trip Status Light 65 (2-XX-55-5, 2-M-5), PR >P10 NC44M, is CLEAR _____

E. Trip Status Light 18 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 1 CLOSED, is CLEAR _____

F. Trip Status Light 38 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 2 CLOSED, is CLEAR _____

G. Trip Status Light 58 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 3 CLOSED, is CLEAR _____

H. Trip Status Light 78 (2-XX-55-6A, 2-M-6), TURBINE STOP VLV 4 CLOSED, is CLEAR _____

I. Annunciator 121C (2-XA-55-6B, 2-M-6), TURBINE STOP VALVES CLOSED, is CLEAR _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

J. Trip Status Light 17 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-1, is CLEAR _____

K. Trip Status Light 37 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-2, is CLEAR _____

L. Trip Status Light 57 (2-XX-55-6A, 2-M-6), AUTO STOP OIL PRESS LO 63AST-3, is CLEAR _____

M. Annunciator 64D (2-XA-55-4A, 2-M-4), POWER RANGE LO SETPOINT TRIP BLOCKED, is CLEAR. _____

N. Annunciator 121D (2-XA-55-6B, 2-M-6), TURB AUTO-STOP OIL PRESS LO, is CLEAR _____

O. Annunciator 76B (2-XA-55-4D, 2-M-4), TURBINE TRIP, is CLEAR _____

[142] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.17 Turbine Trip Reactor Trip (continued)

[143] **VERIFY** the following computer points:

A. P0396D, TURB HYD OIL LO PRESSURE 1 PARTIAL R, indicates NOT TR _____

B. P0397D, TURB HYD OIL LO PRESSURE 2 PARTIAL R, indicates NOT TR _____

C. P0398D, TURB HYD OIL LO PRESSURE 3 PARTIAL R, indicates NOT TR _____

D. Y0390D, TURB TRIP & P9 CAUSES RX TRIP, indicates NOT TR _____

E. Y0391D, TURB STOP VALVE 1 CL PARTIAL RX TRIP, indicates NOT TR _____

F. Y0392D, TURB STOP VALVE 2 CL PARTIAL RX TRIP, indicates NOT TR _____

G. Y0393D, TURB STOP VALVE 3 CL PARTIAL RX TRIP, indicates NOT TR _____

H. Y0394D, TURB STOP VALVE 4 CL PARTIAL RX TRIP, indicates NOT TR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start

NOTES

1) In this subsection, the following identifiers will be used:

RELAY ID	LOCATION	DESCRIPTION	SECTION IDENTIFIER
2-RLY-099-K633A	2-R-48	MOTOR DRIVEN AUX FEED PUMP LO-LO STEAM GENERATOR LEVEL (1/4)	2-RLY-99-K633 (Train A/2-R-48)
2-RLY-099-K633B	2-R-51	MOTOR DRIVEN AUX FEED PUMP LO-LO STEAM GENERATOR LEVEL (1/4)	2-RLY-99-K633 (Train B/2-R-51)
2-RLY-099-K634A	2-R-48	TURBINE DRIVEN AUX FEED PUMP LO-LO STEAM GENERATOR LEVEL (2/4)	2-RLY-99-K634 (Train A/2-R-48)
2-RLY-099-K634B	2-R-51	TURBINE DRIVEN AUX FEED PUMP LO-LO STEAM GENERATOR LEVEL (2/4)	2-RLY-99-K634 (Train B/2-R-51)

2) The UV Coil Voltage meter (M501) will be used to verify Reactor trip status, A reading of 0 VDC (≤ 5 VDC) will indicate "Reactor tripped status" and a reading of 42 VDC (≥ 35 VDC) will indicate "Reactor not tripped" status.

3) There is a Time Trip Delay (TTD) of 8 minutes associated with a low-low level SG trip for a single channel and a 6 minute delay for multiple channels. After tripping the bistables these wait times must pass before verification of the associated trip.

[1] **ENSURE** prerequisites listed in Section 4.0 for Subsection 6.18 have been completed. _____

[2] **ENSURE** the following Eagle 21 Protection channels:

A. LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

B. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

C. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

D. LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

E. LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

F. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

G. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

H. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

I. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

J. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

K. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

L. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[3] **VERIFY** the contact state for 2-RLY-099-K633 (Train A/2-R-48):

A. TB632-1, 2 OPEN. _____

B. TB632-5, 6 OPEN. _____

M&TE _____ Cal Due Date _____ _____

[4] **VERIFY** the contact state for 2-RLY-099-K634 (Train A/2-R-48)

A. TB632-9, 10 OPEN _____

B. TB633-1, 2 CLOSED _____

C. TB633-3, 4 CLOSED _____

M&TE _____ Cal Due Date _____ _____

[5] **VERIFY** the contact state for 2-RLY-099-K633 (Train B/2-R-51)

A. TB632-1, 2 OPEN _____

B. TB632-5, 6 OPEN _____

M&TE _____ Cal Due Date _____ _____

[6] **VERIFY** the contact state for 2-RLY-099-K634 (Train B/2-R-51)

A. TB632-9, 10 OPEN _____

B. TB633-1, 2 CLOSED _____

C. TB633-3, 4 CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[7] **VERIFY** the following:

A. Annunciator 116E (2-XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is CLEAR _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is CLEAR _____

C. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR _____

D. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is CLEAR _____

E. Annunciator 77B (2-XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

F. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

G. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

H. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

[8] **VERIFY** the following:

A. Trip Status Light 40 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-38B, is CLEAR _____

B. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is CLEAR _____

C. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is CLEAR _____

D. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is CLEAR _____

E. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

F. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is CLEAR _____

G. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is CLEAR _____

H. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR _____

I. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is CLEAR _____

J. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is CLEAR _____

K. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is CLEAR _____

L. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is CLEAR _____

[9] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[10] **ENSURE** LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP). _____

[11] **VERIFY** the following:

A. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is in ALARM. _____

B. Annunciator 116E (XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is in ALARM _____

C. Annunciator 77B (XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 116-E SG 1 LEVEL LO-LO is in ALARM (Red) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[12] Verify the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN. _____

M&TE _____ Cal Due Date _____ _____

[13] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[14] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[15] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[16] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[17] **VERIFY** the following Computer Points:

A. L0405D, SG #1 LO LO LVL PARTIAL RX T PS IV, indicates TRIP _____

B. L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[18] **POSITION** LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[19] **VERIFY** the following:

A. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is CLEAR. _____

B. Annunciator 116E (XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is CLEAR _____

C. Annunciator 77B (XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 116-E SG 1 LEVEL LO-LO is in NORMAL (Blue) _____

[20] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[21] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[22] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[23] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[24] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[25] **VERIFY** the following Computer Points:

A. L0405D, SG #1 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

B. L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[26] **POSITION** LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

[27] **VERIFY** the following:

A. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is in ALARM. _____

B. Annunciator 116E (XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is in ALARM _____

C. Annunciator 77B (XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

[28] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[29] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[30] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[31] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[32] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[33] **VERIFY** the following Computer Points:

A. L0404D, SG #1 LO LO LVL PARTIAL RX T PS III, indicates TRIP _____

B. L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[34] **POSITION** LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

[35] **VERIFY** the following:

A. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is in CLEAR. _____

B. Annunciator 116E (XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is CLEAR _____

C. Annunciator 77B (XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

[36] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[37] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[38] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[39] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[40] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[41] **VERIFY** the following Computer Points:

A. L0404D, SG #1 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

B. L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[42] **POSITION** LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

[43] **VERIFY** the following:

A. Trip Status Light 40 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-38B, is in ALARM. _____

B. Annunciator 116E (XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is in ALARM _____

C. Annunciator 77B (XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[44] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[45] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[46] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[47] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[48] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[49] **VERIFY** the following Computer Points:

A. L0403D, SG #1 LO LO LVL PARTIAL RX T PS II, indicates TRIP _____

B. L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[50] **POSITION** LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[51] **VERIFY** the following:

A. Trip Status Light 40 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-38B, is CLEAR. _____

B. Annunciator 116E (XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is CLEAR _____

C. Annunciator 77B (XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

[52] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[53] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[54] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[55] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[56] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[57] **VERIFY** the following Computer Points:

A. L0403D, SG #1 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

B. L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[58] **POSITION** the following:

A. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[59] **VERIFY**

A. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is in ALARM _____

B. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is in ALARM _____

C. Annunciator 116E (XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is in ALARM _____

D. Annunciator 77B (XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is in ALARM. _____

E. Unit 2 Event Display Monitor indicates 77-B RT-SG 1 LEVEL LO-LO is in ALARM (Red) _____

[60] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[61] **VERIFY** Computer Point L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates TRIP. _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[62] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[63] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[64] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[65] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[66] **POSITION** LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

[67] **VERIFY** the following:

A. Annunciator 77B (2-XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR. _____

B. Unit 2 Event Display Monitor indicates 77-B RT-SG 1 LEVEL LO-LO is in NORMAL (Blue) _____

[68] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[69] **VERIFY** Computer Point L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[70] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[71] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[72] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[73] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[74] **POSITION** LS/519B, Low Low Level Reactor -Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

[75] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[76] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[77] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[78] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[79] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[80] **POSITION** LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

[81] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[82] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[83] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[84] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[85] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[86] **POSITION** LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

[87] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[88] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[89] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[90] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[91] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[92] **POSITION** LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[93] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[94] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[95] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[96] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[97] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[98] **POSITION** the following:

A. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/518B, Low Low Level Reactor Trip and AUX Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[99] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[100] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[101] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[102] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[103] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[104] **POSITION** the following:

A. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

B. LS/518B, Low Low Level Reactor Trip and AUX Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

C. LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

[105] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[106] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[107] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[108] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[109] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[110] **POSITION** LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP). _____

[111] **VERIFY** the following:

A. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is in ALARM. _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is in ALARM _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 117-E SG 2 LEVEL LO-LO is in ALARM (Red) _____

[112] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[113] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[114] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[115] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[116] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[117] **VERIFY** the following Computer Points:

A. L0425D, SG #2 LO LO LVL PARTIAL RX T PS IV, indicates TRIP _____

B. L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[118] **POSITION** LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

[119] **VERIFY** the following:

A. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is CLEAR. _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is CLEAR _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 117-E SG 2 LEVEL LO-LO is in NORMAL (Blue) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[120] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[121] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[122] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[123] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[124] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[125] **VERIFY** the following Computer Points:

A. L0425D, SG #2 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

B. L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[126] **POSITION** LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[127] **VERIFY** the following:

A. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is in ALARM. _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is in ALARM _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

[128] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[129] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[130] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[131] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[132] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[133] **VERIFY** the following Computer Points:

A. L0424D, SG #2 LO LO LVL PARTIAL RX T PS III, indicates TRIP _____

B. L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[134] **POSITION** LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[135] **VERIFY** the following:

A. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR. _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is CLEAR _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

[136] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[137] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[138] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[139] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[140] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[141] **VERIFY** the following Computer Points:

A. L0424D, SG #2 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

B. L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[142] **POSITION** LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

[143] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is in ALARM. _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is in ALARM _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

[144] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[145] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[146] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[147] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[148] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[149] **VERIFY** the following Computer Points:

A. L0423D, SG #2 LO LO LVL PARTIAL RX T PS II, indicates TRIP _____

B. L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[150] **POSITION** LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

[151] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is CLEAR. _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is CLEAR _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[152] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[153] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[154] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[155] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[156] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[157] **VERIFY** the following Computer Points:

A. L0423D, SG #2 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

B. L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[158] **POSITION** the following:

A. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[159] **VERIFY** the following:

A. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is in ALARM _____

B. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is in ALARM _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is in ALARM _____

D. Unit 2 Event Display Monitor indicates 78-B RT-SG 2 LEVEL LO-LO is in ALARM (Red) _____

[160] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[161] **VERIFY** Computer Point L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates TRIP. _____

[162] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[163] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[164] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[165] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[166] **POSITION** LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[167] **VERIFY** the following:

A. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR _____

B. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR. _____

C. Unit 2 Event Display Monitor indicates 78-B RT-SG 2 LEVEL LO-LO is in NORMAL (Blue) _____

[168] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[169] **VERIFY** Computer Point L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR. _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[170] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[171] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[172] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[173] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[174] **POSITION** LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

[175] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is in ALARM _____

B. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is in ALARM _____

[176] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[177] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[178] VERIFY the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[179] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[180] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[181] **POSITION** LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

[182] **VERIFY** the following:

A. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is CLEAR _____

B. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

[183] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[184] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[185] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[186] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[187] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[188] **POSITION** LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

[189] **VERIFY** the following:

A. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is in ALARM _____

B. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is in ALARM _____

[190] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[191] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[192] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[193] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[194] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[195] **POSITION** LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[196] **VERIFY** the following:

A. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR _____

B. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

[197] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[198] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[199] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[200] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[201] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[202] **POSITION** the following:

A. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[203] **VERIFY** the following:

A. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is in ALARM _____

B. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is in ALARM _____

C. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is in ALARM _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[204] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[205] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[206] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[207] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[208] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[209] **POSITION** the following:

A. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

B. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

C. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[210] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is CLEAR _____

B. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR _____

C. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is CLEAR _____

D. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

[211] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[212] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[213] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[214] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[215] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[216] **POSITION** LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP). _____

[217] **VERIFY** the following:

A. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is in ALARM. _____

B. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is in ALARM _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 118-E SG 3 LEVEL LO-LO is in ALARM (Red) _____

[218] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[219] **VERIFY** the following computer points:

A. L0445D, SG #3 LO LO LVL PARTIAL RX T PS IV, indicates TRIP _____

B. L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[220] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[221] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[222] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[223] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[224] **POSITION** LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

[225] **VERIFY** the following:

A. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is CLEAR. _____

B. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 118-E SG 3 LEVEL LO-LO is in NORMAL (Blue) _____

[226] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[227] **VERIFY** the following computer points:

A. L0445D, SG #3 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

B. L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[228] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[229] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[230] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[231] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[232] **POSITION** LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

[233] **VERIFY** the following:

A. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM. _____

B. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is in ALARM _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

[234] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[235] **VERIFY** the following computer points:

A. L0444D, SG #3 LO LO LVL PARTIAL RX T PS III, indicates TRIP _____

B. L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[236] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[237] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[238] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[239] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[240] **POSITION** LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[241] **VERIFY** the following:

A. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR. _____

B. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[242] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[243] **VERIFY** the following computer points:

A. L0444D, SG #3 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

B. L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[244] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[245] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[246] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[247] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[248] **POSITION** LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[249] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is in ALARM. _____

B. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is in ALARM _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

[250] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[251] **VERIFY** the following computer points:

A. L0443D, SG #3 LO LO LVL PARTIAL RX T PS II, indicates TRIP _____

B. L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[252] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[253] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[254] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[255] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[256] **POSITION** LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL). _____

[257] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is CLEAR. _____

B. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR. _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

[258] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[259] **VERIFY** the following computer points:

A. L0443D, SG #3 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

B. L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[260] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[261] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[262] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[263] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[264] **POSITION** the following:

A. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[265] **VERIFY** the following:

A. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM _____

B. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is in ALARM _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM. _____

D. Unit 2 Event Display Monitor indicates 79-B RT-SG 3 LEVEL LO-LO is in ALARM (Red) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[266] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[267] **VERIFY** Computer Point L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates TRIP. _____

[268] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[269] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[270] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[271] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[272] **POSITION** LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[273] **VERIFY** the following:

A. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR _____

B. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR. _____

C. Unit 2 Event Display Monitor indicates 79-B RT-SG 3 LEVEL LO-LO is in NORMAL (Blue) _____

[274] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[275] **VERIFY** Computer Point L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR. _____

[276] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[277] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[278] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[279] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[280] **POSITION** LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

[281] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is in ALARM _____

B. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM. _____

[282] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[283] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[284] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[285] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[286] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[287] **POSITION** LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[288] **VERIFY** the following:

A. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is CLEAR _____

B. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR. _____

[289] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[290] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[291] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[292] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[293] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[294] **POSITION** LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[295] **VERIFY** the following:

A. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM _____

B. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM. _____

[296] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[297] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[298] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[299] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[300] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[301] **POSITION** LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[302] **VERIFY** the following:

A. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR _____

B. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR. _____

[303] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[304] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[305] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[306] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[307] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[308] **POSITION** the following:

A. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[309] **VERIFY** the following:

A. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is in ALARM _____

B. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM _____

C. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM. _____

[310] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[311] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[312] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[313] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[314] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[315] **POSITION** the following:

A. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

B. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

C. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

[316] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is CLEAR _____

B. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR _____

C. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is CLEAR _____

D. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR _____

E. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR. _____

[317] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[318] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[319] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[320] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[321] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[322] **POSITION** LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP). _____

[323] **VERIFY** the following:

A. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is in ALARM. _____

B. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is in ALARM _____

C. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 119-E SG 4 LEVEL LO-LO is in ALARM (Red) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[324] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[325] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[326] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[327] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[328] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[329] **VERIFY** the following computer points:

A. L0465D, SG #4 LO LO LVL PARTIAL RX T PS IV, indicates TRIP _____

B. L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[330] **POSITION** LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[331] **VERIFY** the following:

A. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is CLEAR. _____

B. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is CLEAR _____

C. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 119-E SG 4 LEVEL LO-LO is in NORMAL (Blue) _____

[332] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[333] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[334] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[335] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[336] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[337] **VERIFY** the following computer points:

A. L0465D, SG #4 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

B. L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[338] **POSITION** LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

[339] **VERIFY** the following:

A. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is in ALARM. _____

B. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is in ALARM _____

C. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

[340] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[341] **VERIFY** the following computer points:

A. L0464D, SG #4 LO LO LVL PARTIAL RX T PS III, indicates TRIP _____

B. L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[342] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[343] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[344] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[345] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[346] **POSITION** LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[347] **VERIFY** the following:

A. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is CLEAR. _____

B. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is CLEAR _____

C. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

[348] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[349] **VERIFY** the following computer points:

A. L0464D, SG #4 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

B. L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[350] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[351] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[352] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[353] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[354] **POSITION** LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

[355] **VERIFY** the following:

A. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is in ALARM. _____

B. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is in ALARM _____

C. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[356] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[357] **VERIFY** the following computer points:

A. L0463D, SG #4 LO LO LVL PARTIAL RX T PS II, indicates TRIP _____

B. L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[358] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[359] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[360] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[361] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[362] **POSITION** LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[363] **VERIFY** the following:

A. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is CLEAR. _____

B. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is CLEAR _____

C. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

[364] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[365] **VERIFY** the following computer points:

A. L0463D, SG #4 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

B. L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

[366] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[367] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[368] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[369] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[370] **POSITION** the following:

A. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[371] **VERIFY** the following:

A. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is in ALARM _____

B. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is in ALARM _____

C. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is in ALARM _____

D. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is in ALARM _____

E. Unit 2 Event Display Monitor indicates 80-B RT-SG 4 LEVEL LO-LO is in ALARM (Red) _____

[372] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[373] **VERIFY** Computer Point L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates TRIP. _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[374] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[375] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[376] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[377] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[378] **POSITION** LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[379] **VERIFY** the following:

A. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is CLEAR _____

B. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

C. Unit 2 Event Display Monitor indicates 80-B RT-SG 4 LEVEL LO-LO is in NORMAL (Blue) _____

[380] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[381] **VERIFY** Computer Point L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR. _____

[382] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[383] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[384] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[385] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[386] **POSITION** LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP). _____

[387] **VERIFY** the following:

A. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is in ALARM _____

B. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is in ALARM _____

[388] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[389] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[390] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN. _____

M&TE _____ Cal Due Date _____ _____

[391] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[392] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[393] **POSITION** LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

[394] **VERIFY** the following:

A. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is CLEAR _____

B. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

[395] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[396] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[397] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[398] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[399] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[400] **POSITION** LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP). _____

[401] **VERIFY** the following:

A. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is in ALARM _____

B. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is in ALARM _____

[402] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[403] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[404] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[405] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[406] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[407] **POSITION** LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL). _____

[408] **VERIFY** the following:

A. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is CLEAR _____

B. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

[409] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[410] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[411] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[412] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[413] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[414] **POSITION** the following:

A. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

[415] **VERIFY** the following:

A. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is in ALARM _____

B. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is in ALARM _____

C. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is in ALARM _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[416] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[417] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[418] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[419] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[420] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[421] **POSITION** the following:

A. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

B. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

C. LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[422] **VERIFY** the following:

A. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is CLEAR _____

B. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is CLEAR _____

C. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is CLEAR _____

D. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

E. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is CLEAR _____

[423] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[424] **VERIFY** the contact state of 2-RLY-99-K633 (Train A/2-R-48) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[425] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[426] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[427] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[428] **POSITION** the following:

A. LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

B. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

C. LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

D. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

E. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

F. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

[429] **VERIFY** the following:

A. Trip Status Light 40 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-38B, is in ALARM _____

B. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is in ALARM _____

C. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is in ALARM _____

D. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is in ALARM _____

E. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is in ALARM _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

F. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is in ALARM _____

G. Annunciator 77B (2-XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is in ALARM _____

H. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is in ALARM _____

I. Annunciator 116E (2-XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is in ALARM _____

J. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is in ALARM _____

[430] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[431] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[432] **VERIFY** the contact state of 2-RLY-099-K634 (Train A/2-R-48).

A. TB632 - 9, 10, CLOSED **[Acc Crit]** _____

B. TB633 - 1, 2 OPEN **[Acc Crit]** _____

C. TB633 - 3, 4 OPEN **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[433] **VERIFY** the contact state of 2-RLY-099-K633 (Train B/2-R-51) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[434] **VERIFY** the contact state of 2-RLY-099-K634 (Train B/2-R-51).

A. TB632 - 9, 10, CLOSED **[Acc Crit]** _____

B. TB633 - 1, 2 OPEN **[Acc Crit]** _____

C. TB633 - 3, 4 OPEN **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[435] **POSITION** the following:

A. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

B. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

C. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

[436] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is CLEAR _____

B. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR _____

C. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is CLEAR _____

D. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is CLEAR _____

E. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[437] **VERIFY** the contact state of 2-RLY-099-K634 (Train A/2-R-48).

A. TB632 - 9, 10, OPEN _____

B. TB633 - 1, 2 CLOSED _____

C. TB633 - 3, 4 CLOSED _____

M&TE _____ Cal Due Date _____ _____

[438] **VERIFY** the contact state of 2-RLY-099-K634 (Train B/2-R-51).

A. TB632 - 9, 10, OPEN _____

B. TB633 - 1, 2 CLOSED _____

C. TB633 - 3, 4 CLOSED _____

M&TE _____ Cal Due Date _____ _____

[439] **POSITION** the following:

A. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

B. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

C. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

[440] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is in ALARM _____

B. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM _____

C. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is in ALARM _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

D. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is in ALARM _____

E. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM _____

[441] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[442] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[443] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[444] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[445] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[446] **POSITION** the following:

A. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 in NORMAL _____

B. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 in NORMAL _____

C. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

[447] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is CLEAR _____

B. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR _____

C. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is CLEAR _____

D. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR _____

E. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

[448] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[449] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[450] **POSITION** the following:

A. LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

B. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

C. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

[451] **VERIFY** the following:

A. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is in ALARM _____

B. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is in ALARM _____

C. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is in ALARM _____

D. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is in ALARM _____

E. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is in ALARM _____

[452] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[453] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[454] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[455] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[456] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[457] **POSITION** the following:

A. LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

B. LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

C. LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

D. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

E. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

F. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[458] **VERIFY** the following:

A. Trip Status Light 40 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-38B, is CLEAR _____

B. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is CLEAR _____

C. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is CLEAR _____

D. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is CLEAR _____

E. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is CLEAR _____

F. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is CLEAR _____

G. Annunciator 77B (2-XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

H. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

I. Annunciator 116E (2-XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is CLEAR _____

J. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is CLEAR _____

[459] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[460] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[461] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[462] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[463] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[464] **POSITION** the following:

A. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

B. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

C. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

D. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

E. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

F. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

[465] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is in ALARM _____

B. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is in ALARM _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

C. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is in ALARM _____

D. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is in ALARM _____

E. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM _____

F. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is in ALARM _____

G. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is in ALARM _____

H. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM _____

I. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is in ALARM _____

J. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is in ALARM _____

[466] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[467] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[468] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[469] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[470] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[471] **POSITION** the following:

A. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

B. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

C. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

[472] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is CLEAR _____

B. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR _____

C. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is CLEAR _____

D. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

E. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR _____

[473] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[474] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[475] **POSITION** the following:

A. LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

B. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

C. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

[476] **VERIFY** the following:

A. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is in ALARM _____

B. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is in ALARM _____

C. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is in ALARM _____

D. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is in ALARM _____

E. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is in ALARM _____

[477] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[478] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[479] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[480] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[481] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[482] **POSITION** the following:

A. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

B. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

C. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[483] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is CLEAR _____

B. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR _____

C. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is CLEAR _____

D. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

[484] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[485] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[486] **POSITION** the following:

A. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

B. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

C. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[487] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is in ALARM _____

B. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM _____

C. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is in ALARM _____

D. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM _____

[488] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[489] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[490] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[491] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[492] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[493] **ENSURE** the following:

A. LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

B. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

C. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

D. LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the right (TRIP) _____

E. LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

F. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

G. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

H. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the right (TRIP) _____

I. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

J. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

K. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP). _____

L. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the right (TRIP) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[494] **VERIFY** the following:

A. Trip Status Light 40 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-38B, is in ALARM _____

B. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is in ALARM _____

C. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is in ALARM _____

D. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is in ALARM _____

E. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is in ALARM _____

F. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is in ALARM _____

G. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is in ALARM _____

H. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is in ALARM _____

I. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is in ALARM _____

J. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is in ALARM _____

K. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is in ALARM _____

L. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is in ALARM _____

M. Annunciator 77B (2-XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is in ALARM _____

N. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is in ALARM _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

O. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is in ALARM _____

P. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is in ALARM _____

Q. Annunciator 116E (2-XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is in ALARM _____

R. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is in ALARM _____

S. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is in ALARM _____

T. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is in ALARM _____

[495] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[496] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[497] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[498] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[499] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is CLOSED. **[Acc Crit]** _____

M&TE _____ Cal Due Date _____ _____

[500] **POSITION** the following:

A. LS/519B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

B. LS/529B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

C. LS/539B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

D. LS/549B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-5 to the left (NORMAL) _____

E. LS/518B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

F. LS/528B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

G. LS/538B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

H. LS/548B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-11 to the left (NORMAL) _____

I. LS/517B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

J. LS/527B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

K. LS/537B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL). _____

L. LS/547B, Low Low Level Reactor Trip and Aux Feedwater Pump Start, at 2-R-12 to the left (NORMAL) _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

[501] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[502] **VERIFY** the contact state of 2-RLY-099-K633 (Train A/2-R-48) TB632 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[503] **VERIFY** the contact state of 2-RLY-99-K634 (Train A/2-R-48) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[504] **VERIFY** the contact state of 2-RLY-99-K633 (Train B/2-R-51) TB632-1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[505] **VERIFY** the contact state of 2-RLY-99-K634 (Train B/2-R-51) TB632-9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[506] **VERIFY** the following:

A. Annunciator 116E (2-XA-55-6B, 2-M-6), SG 1 LEVEL LO-LO, is CLEAR _____

B. Annunciator 117E (2-XA-55-6B, 2-M-6), SG 2 LEVEL LO-LO, is CLEAR _____

C. Annunciator 118E (2-XA-55-6B, 2-M-6), SG 3 LEVEL LO-LO, is CLEAR _____

D. Annunciator 119E (2-XA-55-6B, 2-M-6), SG 4 LEVEL LO-LO, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

E. Annunciator 77B (2-XA-55-4D, 2-M-4), SG 1 LEVEL LO-LO, is CLEAR _____

F. Annunciator 78B (2-XA-55-4D, 2-M-4), SG 2 LEVEL LO-LO, is CLEAR _____

G. Annunciator 79B (2-XA-55-4D, 2-M-4), SG 3 LEVEL LO-LO, is CLEAR _____

H. Annunciator 80B (2-XA-55-4D, 2-M-4), SG 4 LEVEL LO-LO, is CLEAR _____

[507] **VERIFY** the following:

A. Trip Status Light 40 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-38B, is CLEAR _____

B. Trip Status Light 64 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-39B, is CLEAR _____

C. Trip Status Light 88 (2-XX-55-6B, 2-M-6), SG 1 LEVEL LO-LO LS-3-42B, is CLEAR _____

D. Trip Status Light 41 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-51B, is CLEAR _____

E. Trip Status Light 65 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-52B, is CLEAR _____

F. Trip Status Light 89 (2-XX-55-6B, 2-M-6), SG 2 LEVEL LO-LO LS-3-55B, is CLEAR _____

G. Trip Status Light 42 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-93B, is CLEAR _____

H. Trip Status Light 66 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-94B, is CLEAR _____

I. Trip Status Light 90 (2-XX-55-6B, 2-M-6), SG 3 LEVEL LO-LO LS-3-97B, is CLEAR _____

J. Trip Status Light 43 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-106B, is CLEAR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

K. Trip Status Light 67 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-107B, is CLEAR _____

L. Trip Status Light 91 (2-XX-55-6B, 2-M-6), SG 4 LEVEL LO-LO LS-3-110B, is CLEAR _____

[508] **VERIFY** the following computer points:

A. L0403D, SG #1 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

B. L0404D, SG #1 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

C. L0405D, SG #1 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

D. L0406D, STM GEN 1 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

E. L0423D, SG #2 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

F. L0424D, SG #2 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

G. L0425D, SG #2 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

H. L0426D, STM GEN 2 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

I. L0443D, SG #3 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

J. L0444D, SG #3 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

K. L0445D, SG #3 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

L. L0446D, STM GEN 3 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

Date _____

6.18 Steam Generator Low Low Level Reactor Trip and Auxiliary Feedwater Motor Driven and Turbine Driven Pumps Start (continued)

M. L0463D, SG #4 LO LO LVL PARTIAL RX T PS II, indicates NOT TR _____

N. L0464D, SG #4 LO LO LVL PARTIAL RX T PS III, indicates NOT TR _____

O. L0465D, SG #4 LO LO LVL PARTIAL RX T PS IV, indicates NOT TR _____

P. L0466D, STM GEN 4 LO LO LEVEL CAUSES RX TRIP, indicates NOT TR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip

NOTE

The UV Coil Voltage meter (M501) will be used to verify Reactor trip status, A reading of 0 VDC (≤ 5 VDC) will indicate "Reactor tripped status" and a reading of 42 VDC (≥ 35 VDC) will indicate "Reactor not tripped" status

[1] **ENSURE** prerequisites listed in Section 4.0 for subsection 6.19 have been completed. _____

[2] **ENSURE** the following:

A. PS/505A, Hi Press to P-7, at 2-R-4 to the left (NORMAL) _____

B. PS/506A.Hi Press to P-7, at 2-R-8 to the left (NORMAL) _____

C. 2-HS-68-343, RCP 1 UNDERVOLTAGE REACTOR TRIP TEST SW, at 2-JB-290-3404-D (Aux Inst. Rm) in NORMAL _____

D. 2-HS-68-345, RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, at 2-JB-290-3405-E (Aux Inst. Rm), in NORMAL _____

E. 2-HS-68-347, RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, at 2-JB-290-3406-F (Aux Inst. Rm), in NORMAL _____

F. 2-HS-68-349, RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, at 2-JB-290-3407-G (Aux Inst. Rm), in NORMAL _____

G. 2-HS-68-344, RCP 1 UNDERFREQUENCY REACTOR TRIP TEST SW, at 2-JB-290-3404-D (Aux Inst. Rm) in NORMAL _____

H. 2-HS-68-346, RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, at 2-JB-290-3405-E (Aux Inst. Rm) in NORMAL _____

I. 2-HS-68-348, RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, at 2-JB-290-3406-F (Aux Inst. Rm) in NORMAL _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

J. 2-HS-68-350, RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, at 2-JB-290-3407-G (Aux Inst. Rm) in NORMAL _____

[3] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[4] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[5] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[6] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[7] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[8] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[9] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[10] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[11] **VERIFY** the contact state for 2-RLY-099-K627 (Train A/2-R-48)

A. TB636 - 1, 2 OPEN _____

B. TB636 - 3, 4 OPEN _____

C. TB636 - 5, 6 OPEN _____

D. TB636 - 7, 8 OPEN _____

M&TE _____ Cal Due Date _____ _____

[12] **VERIFY** the contact state for 2-RLY-099-K641 (Train A/2-R-48)

A. TB647 - 5, 6 OPEN _____

B. TB647 - 7, 8 OPEN _____

C. TB647 - 9, 10 OPEN _____

D. TB647 - 11,12 OPEN _____

M&TE _____ Cal Due Date _____ _____

[13] **VERIFY** the contact state for 2-RLY-099-K627 (Train B/2-R-51)

A. TB636 - 1, 2 OPEN _____

B. TB636 - 3, 4 OPEN _____

C. TB636 - 5, 6 OPEN _____

D. TB636 - 7,8 OPEN _____

M&TE _____ Cal Due Date _____ _____

[14] **VERIFY** the contact state for 2-RLY-099-K641 (Train B/2-R-51)

A. TB647 - 5, 6 OPEN _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

B. TB647 - 7, 8 OPEN _____

C. TB647 - 9, 10 OPEN _____

D. TB647 - 11,12 OPEN _____

M&TE _____ Cal Due Date _____ _____

[15] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is CLEAR _____

B. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is CLEAR _____

C. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is CLEAR _____

D. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is CLEAR _____

E. Trip Status Light 2 (2-XX-55-6A, 2-M-6), RCP 1 UNDER FREQUENCY, is CLEAR _____

F. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is CLEAR _____

G. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is CLEAR _____

H. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is CLEAR _____

I. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

J. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

K. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[16] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

NOTE

Steps 6.19[17] through 6.19[166] verify the Undervoltage Trip Logic.

[17] **POSITION** PS/505A, Hi Press to P-7, at 2-R-4 to the right (TRIP). _____

[18] **VERIFY** Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR. _____

[19] **POSITION** 2-HS-68-343, RCP 1 UNDERVOLTAGE REACTOR TRIP TEST SW, at 2-JB-290-3404-D (Aux Inst. Rm) in TEST. _____

[20] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[21] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[22] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[23] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[24] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[25] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[26] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[27] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[28] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 122-E RCP BOARD UNDERVOLTAGE is in ALARM (Red) _____

[29] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[30] **VERIFY** the following Computer Points:

A. V0320D, RCP BUS 1 UNDER VOLT PARTIAL RX TRIP, indicates TRIP _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

[31] **POSITION** 2-HS-68-343, RCP 1 UNDERVOLTAGE REACTOR TRIP TEST SW, at 2-JB-290-3404-D (Aux Inst. Rm), in NORMAL. _____

[32] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 122-E RCP BOARD UNDERVOLTAGE is in NORMAL (Blue) _____

[33] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[34] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[35] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[36] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[37] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[38] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[39] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[40] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[41] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[42] **VERIFY** the following Computer Points:

A. V0320D, RCP BUS 1 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[43] **POSITION** 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST. _____

[44] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[45] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[46] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[47] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[48] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[49] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[50] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[51] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[52] **VERIFY** the following:

A. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

[53] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[54] **VERIFY** the following Computer Points:

A. V0321D, RCP BUS 2 UNDER VOLT PARTIAL RX TRIP, indicates TRIP _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

[55] **POSITION** 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERVOLTAGE- REACTOR TRIP TEST SW, in NORMAL. _____

[56] **VERIFY** the following:

A. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[57] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[58] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[59] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[60] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[61] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[62] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[63] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[64] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[65] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[66] **VERIFY** the following Computer Points:

A. V0321D, RCP BUS 2 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

[67] **POSITION** 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE- REACTOR TRIP TEST SW, in TEST. _____

[68] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[69] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[70] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[71] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[72] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[73] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[74] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[75] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[76] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

[77] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[78] **VERIFY** the following Computer Points:

A. V0322D, RCP BUS 3 UNDER VOLT PARTIAL RX TRIP, indicates TRIP _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[79] **POSITION** 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL. _____

[80] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

[81] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[82] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[83] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[84] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[85] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[86] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[87] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[88] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[89] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[90] **VERIFY** the following Computer Points:

A. V0322D, RCP BUS 3 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

[91] **POSITION** 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST. _____

[92] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[93] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[94] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[95] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[96] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[97] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[98] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[99] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[100] **VERIFY** the following:

A. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[101] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[102] **VERIFY** the following Computer Points:

A. V0323D, RCP BUS 4 UNDER VOLT PARTIAL RX TRIP, indicates TRIP _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

[103] **POSITION** 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL. _____

[104] **VERIFY** the contact state of 2-RLY-099-K124 (Train A/2-R-48) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[105] **VERIFY** the contact state of 2-RLY-099-K239 (Train A/2-R-48) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[106] **VERIFY** the contact state of 2-RLY-099-K328 (Train A/2-R-48) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[107] **VERIFY** the contact state of 2-RLY-099-K413 (Train A/2-R-48) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[108] **VERIFY** the contact state of 2-RLY-099-K124 (Train B/2-R-51) TB633 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[109] **VERIFY** the contact state of 2-RLY-099-K239 (Train B/2-R-51) TB633 - 7, 8, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[110] **VERIFY** the contact state of 2-RLY-099-K328 (Train B/2-R-51) TB633 - 9, 10, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[111] **VERIFY** the contact state of 2-RLY-099-K413 (Train B/2-R-51) TB633 - 11, 12, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[112] **VERIFY** the following:

A. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

[113] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[114] **VERIFY** the following Computer Points:

A. V0323D, RCP BUS 4 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

B. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[115] **POSITION** the following:

A. 2-HS-68-343, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

B. 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

[116] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is in ALARM _____

B. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is in ALARM _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is in ALARM. _____

D. Unit 2 Event Display Monitor indicates 79-D RT-RCP BOARD UNDERVOLTAGE is in ALARM (Red) _____

[117] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[118] **VERIFY** Computer Point V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates TRIP. _____

[119] **POSITION** 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL. _____

[120] **VERIFY** the following:

A. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR. _____

C. Unit 2 Event Display Monitor indicates 79-D RT-RCP BOARD UNDERVOLTAGE is in NORMAL (Blue) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[121] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[122] **VERIFY** Computer Point V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR. _____

[123] **POSITION** 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST. _____

[124] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is in ALARM _____

[125] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[126] **POSITION** 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL. _____

[127] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[128] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[129] **POSITION** 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST. _____

[130] **VERIFY** the following:

A. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is in ALARM _____

[131] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[132] **POSITION** the following:

A. 2-HS-68-343, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

B. 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

[133] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is CLEAR _____

B. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is CLEAR _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[134] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[135] **POSITION** the following:

A. 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

B. 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

[136] **VERIFY** the following:

A. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is in ALARM _____

B. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is in ALARM _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is in ALARM _____

[137] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[138] **POSITION** 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL. _____

[139] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[140] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[141] **POSITION** 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST. _____

[142] **VERIFY** the following:

A. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is in ALARM _____

[143] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[144] **POSITION** 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL. _____

[145] **VERIFY** the following:

A. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is CLEAR _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

[146] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[147] **POSITION** 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST. _____

[148] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is in ALARM _____

B. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is in ALARM _____

[149] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[150] **POSITION** the following:

A. 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

B. 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

[151] **VERIFY** the following:

A. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is CLEAR _____

B. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is CLEAR _____

C. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

D. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[152] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[153] **POSITION** the following:

A. 2-HS-68-343, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

B. 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm) RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

C. 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm) RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

D. 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in TEST _____

[154] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is in ALARM _____

B. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is in ALARM _____

C. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is in ALARM _____

D. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is in ALARM _____

E. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is in ALARM _____

F. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[155] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[156] **POSITION** PS/505A, Hi Press to P-7, at 2-R-4 to the left (NORMAL). _____

[157] **VERIFY** the following:

A. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

B. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM. _____

[158] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[159] **POSITION** PS/505A, Hi Press to P-7, at 2-R-4 to the right (TRIP). _____

[160] **VERIFY** the following:

A. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

B. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

[161] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[162] **POSITION** PS/505A, Hi Press to P-7, at 2-R-4 to the left (NORMAL). _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[163] **VERIFY** the following:

A. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

B. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM. _____

[164] **POSITION** the following:

A. 2-HS-68-343, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

B. 2-HS-68-345, at 2-JB-290-3405-E (Aux Inst. Rm) RCP 2 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

C. 2-HS-68-347, at 2-JB-290-3406-F (Aux Inst. Rm) RCP 3 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

D. 2-HS-68-349, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERVOLTAGE REACTOR TRIP TEST SW, in NORMAL _____

[165] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is CLEAR _____

B. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is CLEAR _____

C. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is CLEAR _____

D. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is CLEAR _____

E. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

F. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

NOTE

Steps 6.19[166] through 6.19[339] verify the Underfrequency Trip Logic.

[166] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[167] **POSITION** PS/505A, Hi Press to P-7, at 2-R-4 to the right (TRIP). _____

[168] **VERIFY** the following:

A. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

B. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

[169] **POSITION** 2-HS-68-344, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[170] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[171] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[172] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[173] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[174] **VERIFY** the following:

A. Trip Status Light 2 (2-XX-55-6A, 2-M-6), RCP 1 UNDER FREQUENCY, is in ALARM _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 122-E RCP BOARD UNDERFREQUENCY is in ALARM (Red) _____

[175] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[176] **VERIFY** the following computer points:

A. Y0320D, RCP BUS 1 UNDER FREQ PART RE, indicates TRIP _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

[177] **POSITION** 2-HS-68-344, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

[178] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[179] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[180] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[181] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[182] **VERIFY** the following:

A. Trip Status Light 2 (2-XX-55-6A, 2-M-6), RCP 1 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

D. Unit 2 Event Display Monitor indicates 122-E RCP BOARD UNDERFREQUENCY is in NORMAL (Blue) _____

[183] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[184] **VERIFY** the following computer points:

A. Y0320D, RCP BUS 1 UNDER FREQ PART RE, indicates NOT TR _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[185] **POSITION** 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[186] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[187] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[188] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[189] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[190] **VERIFY** the following:

A. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is in ALARM _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[191] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[192] **VERIFY** the following computer points:

A. Y0321D, RCP BUS 2 UNDER FREQ PART RE, indicates TRIP _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

[193] **POSITION** 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

[194] **VERIFY** the following:

A. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[195] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[196] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[197] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[198] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[199] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[200] **VERIFY** the following computer points:

A. Y0321D, RCP BUS 2 UNDER FREQ PART RE, indicates NOT TR _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

[201] **POSITION** 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[202] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[203] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[204] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[205] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[206] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is in ALARM. _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM. _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[207] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[208] **VERIFY** the following computer points:

A. Y0322D, RCP BUS 3 UNDER FREQ PART RE, indicates TRIP _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

[209] **POSITION** 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

[210] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[211] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[212] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[213] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[214] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[215] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[216] **VERIFY** the following computer points:

A. Y0322D, RCP BUS 3 UNDER FREQ PART RE, indicates NOT TR _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

[217] **POSITION** 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[218] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[219] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[220] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[221] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[222] **VERIFY** the following:

A. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is in ALARM _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[223] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[224] **VERIFY** the following computer points:

A. Y0323D, RCP BUS 4 UNDER FREQ PARTIAL RX TRIP, indicates TRIP. _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

[225] **POSITION** 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[226] **VERIFY** the following:

A. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[227] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[228] **VERIFY** the following computer points:

A. Y0323D, RCP BUS 4 UNDER FREQ PARTIAL RX TRIP, indicates NOT TR. _____

B. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

[229] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[230] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[231] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[232] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[233] **POSITION** the following:

A. 2-HS-68-344, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST _____

B. 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST _____

[234] **VERIFY** the contact state for 2-RLY-099-K627 (Train A/2-R-48)

A. TB636 - 1, 2 CLOSED _____

B. TB636 - 3, 4 CLOSED _____

C. TB636 - 5, 6 CLOSED _____

D. TB636 - 7, 8 CLOSED _____

M&TE _____ Cal Due Date _____ _____

[235] **VERIFY** the contact state for 2-RLY-099-K641 (Train A/2-R-48)

A. TB647 - 5, 6 CLOSED _____

B. TB647 - 7, 8 CLOSED _____

C. TB647 - 9, 10 CLOSED _____

D. TB647 - 11,12 CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[236] **VERIFY** the contact state for 2-RLY-099-K627 (Train B/2-R-51)

A. TB636 - 1, 2 CLOSED _____

B. TB636 - 3, 4 CLOSED _____

C. TB636 - 5, 6 CLOSED _____

D. TB636 - 7, 8 CLOSED _____

M&TE _____ Cal Due Date _____ _____

[237] **VERIFY** the contact state for 2-RLY-099-K641 (Train B/2-R-51)

A. TB647 - 5, 6 CLOSED _____

B. TB647 - 7, 8 CLOSED _____

C. TB647 - 9, 10 CLOSED _____

D. TB647 - 11,12 CLOSED _____

M&TE _____ Cal Due Date _____ _____

[238] **VERIFY** the following:

A. Trip Status Light 2 (2-XX-55-6A, 2-M-6), RCP 1 UNDER FREQUENCY, is in ALARM _____

B. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is in ALARM _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is in ALARM. _____

D. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

E. Unit 2 Event Display Monitor indicates 79-E RT-RCP BOARD UNDERFREQUENCY is in ALARM (Red) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[239] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[240] **VERIFY** the following:

A. Computer Point Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates TRIP. _____

B. Computer Point Y0400D, REACTOR COOLANT PUMP 1 BREAKER, indicates OPEN. _____

C. Computer Point Y0420D, REACTOR COOLANT PUMP 2 BREAKER, indicates OPEN. _____

D. Computer Point Y0440D, REACTOR COOLANT PUMP 3 BREAKER, indicates OPEN. _____

E. Computer Point Y0460D, REACTOR COOLANT PUMP 4 BREAKER, indicates OPEN. _____

[241] **POSITION** 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

[242] **VERIFY** the contact state for 2-RLY-099-K627 (Train A/2-R-48)

A. TB636 - 1, 2 OPEN _____

B. TB636 - 3, 4 OPEN _____

C. TB636 - 5, 6 OPEN _____

D. TB636 - 7, 8 OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[243] **VERIFY** the contact state for 2-RLY-099-K641 (Train A/2-R-48)

A. TB647 - 5, 6 OPEN _____

B. TB647 - 7, 8 OPEN _____

C. TB647 - 9, 10 OPEN _____

D. TB647 - 11,12 OPEN _____

M&TE _____ Cal Due Date _____ _____

[244] **VERIFY** the contact state for 2-RLY-099-K627 (Train B/2-R-51)

A. TB636 - 1, 2 OPEN _____

B. TB636 - 3, 4 OPEN _____

C. TB636 - 5, 6 OPEN _____

D. TB636 - 7,8 OPEN _____

M&TE _____ Cal Due Date _____ _____

[245] **VERIFY** the contact state for 2-RLY-099-K641 (Train B/2-R-51)

A. TB647 - 5, 6 OPEN _____

B. TB647 - 7, 8 OPEN _____

C. TB647 - 9, 10 OPEN _____

D. TB647 - 11,12 OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[246] **VERIFY** the following:

A. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

C. Unit 2 Event Display Monitor indicates 79-E RT-RCP BOARD UNDERFREQUENCY is in NORMAL (Blue) _____

[247] **VERIFY** the following:

A. Computer Point Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR. _____

B. Computer Point Y0400D, REACTOR COOLANT PUMP 1 BREAKER, indicates CLOSED. _____

C. Computer Point Y0420D, REACTOR COOLANT PUMP 2 BREAKER, indicates CLOSED. _____

D. Computer Point Y0440D, REACTOR COOLANT PUMP 3 BREAKER, indicates CLOSED. _____

E. Computer Point Y0460D, REACTOR COOLANT PUMP 4 BREAKER, indicates CLOSED. _____

[248] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[249] **POSITION** 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[250] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is in ALARM _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is in ALARM _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[251] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[252] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[253] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[254] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[255] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[256] **POSITION** 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

[257] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[258] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[259] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[260] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[261] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[262] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[263] **POSITION** 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[264] **VERIFY** the following:

A. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is in ALARM _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is in ALARM _____

[265] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[266] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[267] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[268] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[269] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[270] **POSITION** the following:

A. 2-HS-68-344, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

B. 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[271] **VERIFY** the following:

A. Trip Status Light 2 (2-XX-55-6A, 2-M-6), RCP 1 UNDER FREQUENCY, is CLEAR _____

B. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is CLEAR _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

D. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

[272] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[273] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[274] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[275] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[276] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[277] **POSITION** the following:

A. 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

B. 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[278] **VERIFY** the following:

A. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is in ALARM _____

B. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is in ALARM _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is in ALARM _____

D. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

[279] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[280] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[281] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[282] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[283] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[284] **POSITION** 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

[285] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[286] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[287] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[288] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[289] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[290] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

B. UV COIL VOLTAGE Meter (2-R-50) _____

[291] **POSITION** 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST. _____

[292] **VERIFY** the following:

A. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is in ALARM _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is in ALARM _____

[293] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[294] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[295] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[296] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[297] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[298] **POSITION** 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL. _____

[299] **VERIFY** the following:

A. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is CLEAR _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

[300] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[301] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[302] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[303] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[304] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[305] **POSITION** 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in TRIPPED. _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[306] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is in ALARM _____

B. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is in ALARM _____

[307] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[308] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[309] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[310] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[311] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[312] **POSITION** the following:

A. 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

B. 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

[313] **VERIFY** the following:

A. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is CLEAR _____

B. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is CLEAR _____

C. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

D. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

[314] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[315] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[316] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[317] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[318] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

B. UV COIL VOLTAGE Meter (2-R-50) _____

[319] **POSITION** the following:

A. 2-HS-68-344, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST _____

B. 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST _____

C. 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST _____

D. 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in TEST _____

[320] **VERIFY** the following:

A. Trip Status Light 2 (2-XX-55-6A, 2-M-6), RCP 1 UNDER FREQUENCY, is in ALARM _____

B. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is in ALARM _____

C. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is in ALARM _____

D. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is in ALARM _____

E. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is in ALARM _____

F. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is in ALARM _____

[321] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[322] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[323] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[324] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is CLOSED _____

M&TE _____ Cal Due Date _____ _____

[325] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) **[Acc Crit]** _____

B. UV COIL VOLTAGE Meter (2-R-50) **[Acc Crit]** _____

[326] **POSITION** PS/505A, Hi Press to P-7, at 2-R-4 to the left (NORMAL) _____

[327] **VERIFY** the following:

A. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is in ALARM _____

B. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM. _____

[328] **VERIFY** the contact state of 2-RLY-099-K627 (Train A/2-R-48) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[329] **VERIFY** the contact state of 2-RLY-099-K641 (Train A/2-R-48) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[330] **VERIFY** the contact state of 2-RLY-099-K627 (Train B/2-R-51) TB636 - 1, 2, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[331] **VERIFY** the contact state of 2-RLY-099-K641 (Train B/2-R-51) TB647 - 5, 6, is OPEN _____

M&TE _____ Cal Due Date _____ _____

[332] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[333] **POSITION** PS/505A, Hi Press to P-7, at 2-R-4 to the right (TRIP). _____

[334] **VERIFY** the following:

A. Annunciator 70E (2-XA-55-4A, 2-M-4), P-13 LO TURBINE IMPULSE PRESS, is CLEAR _____

B. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is CLEAR _____

[335] **VERIFY** voltage on the following Logic Panel Meters (approximately 0 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

[336] **POSITION** the following:

A. 2-HS-68-344, at 2-JB-290-3404-D (Aux Inst. Rm), RCP 1 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

B. 2-HS-68-346, at 2-JB-290-3405-E (Aux Inst. Rm), RCP 2 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

C. 2-HS-68-348, at 2-JB-290-3406-F (Aux Inst. Rm), RCP 3 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

D. 2-HS-68-350, at 2-JB-290-3407-G (Aux Inst. Rm), RCP 4 UNDERFREQUENCY REACTOR TRIP TEST SW, in NORMAL _____

E. PS/505A, Hi Press to P-7, at 2-R-4 to the left (NORMAL) _____

[337] **VERIFY** the following:

A. Trip Status Light 1 (2-XX-55-6A, 2-M-6), RCP 1 UNDER VOLTAGE, is CLEAR _____

B. Trip Status Light 21 (2-XX-55-6A, 2-M-6), RCP 2 UNDER VOLTAGE, is CLEAR _____

C. Trip Status Light 41 (2-XX-55-6A, 2-M-6), RCP 3 UNDER VOLTAGE, is CLEAR _____

D. Trip Status Light 61 (2-XX-55-6A, 2-M-6), RCP 4 UNDER VOLTAGE, is CLEAR _____

E. Trip Status Light 2 (2-XX-55-6A, 2-M-6), RCP 1 UNDER FREQUENCY, is CLEAR _____

F. Trip Status Light 22 (2-XX-55-6A, 2-M-6), RCP 2 UNDER FREQUENCY, is CLEAR _____

G. Trip Status Light 42 (2-XX-55-6A, 2-M-6), RCP 3 UNDER FREQUENCY, is CLEAR _____

H. Trip Status Light 62 (2-XX-55-6A, 2-M-6), RCP 4 UNDER FREQUENCY, is CLEAR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

I. Annunciator 122E (2-XA-55-6B, 2-M-6), RCP BOARD UNDERFREQ/UNDERVOLTAGE, is CLEAR _____

J. Annunciator 79D (2-XA-55-4D, 2-M-4), RCP BOARD UNDERVOLTAGE, is CLEAR _____

K. Annunciator 79E (2-XA-55-4D, 2-M-4), RCP BOARD UNDER FREQUENCY, is CLEAR _____

L. Annunciator 70D (2-XA-55-4A, 2-M-4), P-7 LO POWER TRIPS BLOCKED, is in ALARM _____

[338] **VERIFY** voltage on the following Logic Panel Meters (approximately 42 VDC):

A. UV COIL VOLTAGE Meter (2-R-47) _____

B. UV COIL VOLTAGE Meter (2-R-50) _____

[339] **VERIFY** the following computer points:

A. V0320D, RCP BUS 1 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

B. V0321D, RCP BUS 2 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

C. V0322D, RCP BUS 3 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

D. V0323D, RCP BUS 4 UNDER VOLT PARTIAL RX TRIP, indicates NOT TR _____

E. V0324D, RCP BUS UNDER VOLT & P7 CAUSES RX TR, indicates NOT TR _____

F. Y0320D, RCP BUS 1 UNDER FREQ PART RE, indicates NOT TR _____

G. Y0321D, RCP BUS 2 UNDER FREQ PART RE, indicates NOT TR _____

H. Y0322D, RCP BUS 3 UNDER FREQ PART RE, indicates NOT TR _____

Date _____

6.19 Undervoltage and Underfrequency Reactor Trip (continued)

I. Y0323D, RCP BUS 4 UNDER FREQ PARTIAL RX TRIP, indicates NOT TR. _____

J. Y0324D, RCP BUS UNDER FREQ & P7 CAUSES RX TR, indicates NOT TR _____

K. Y0400D, REACTOR COOLANT PUMP 1 BREAKER, indicates CLOSED _____

L. Y0420D, REACTOR COOLANT PUMP 2 BREAKER, indicates CLOSED _____

M. Y0440D, REACTOR COOLANT PUMP 3 BREAKER, indicates CLOSED _____

N. Y0460D, REACTOR COOLANT PUMP 4 BREAKER, indicates CLOSED _____

Date _____

7.0 POST PERFORMANCE ACTIVITIES

CAUTION

120 volts AC is present during the following step.

[1] **ENSURE** the SSPS alignment in Table 2 is complete. _____

[2] **ENSURE** the NIS alignment in Table 3 is complete. _____

[3] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-1 in NORMAL:

A. F-414 RCS FLOW LP1 _____

B. F-424 RCS FLOW LP2 _____

C. F-434 RCS FLOW LP3 _____

D. F-444 RCS FLOW LP4 _____

E. P-455 PZR PRESSURE _____

F. L-459 PZR LEVEL _____

[4] **ENSURE** Eagle 21 Protection Channel T-411/412 DTTA LP1, at 2-R-2, in NORMAL. _____

[5] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-3, in NORMAL:

A. P-514 STM PRESS LP1 _____

B. P-524 STM PRESS LP2 _____

C. P-937 CONTNMT PRESS _____

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

[6] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-4 in NORMAL:

A. P-505 TURB IMP PR _____

B. P-534 STM PRESS LP3 _____

C. P-544 STM PRESS LP4 _____

[7] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-5 in NORMAL:

A. F-415 RCS FLOW LP1 _____

B. F-425 RCS FLOW LP2 _____

C. F-435 RCS FLOW LP3 _____

D. F-445 RCS FLOW LP4 _____

E. L-519-549 TTD _____

F. L-519 SG LEVEL LP1 _____

G. L-529 SG LEVEL LP2 _____

H. L-539 SG LEVEL LP3 _____

I. L-549 SG LEVEL LP4 _____

J. P-456 PZR PRESSURE _____

K. L-460 PZR LEVEL _____

[8] **ENSURE** Eagle 21 Protection Channel, T-421/422 DTTA LP2, at 2-R-6, in NORMAL. _____

[9] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-7, in NORMAL:

A. P-515 STM PRESS LP1 _____

B. P-535 STM PRESS LP3 _____

C. P-936 CONTNMT PRESS _____

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

[10] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-8, in NORMAL:

A. P-506 TURB IMP PR _____

B. P-525 STM PRESS LP2 _____

C. P-545 STM PRESS LP4 _____

[11] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-9 in NORMAL:

A. F-416 RCS FLOW LP1 _____

B. F-426 RCS FLOW LP2 _____

C. F-436 RCS FLOW LP3 _____

D. F-446 RCS FLOW LP4 _____

E. P-457 PZR PRESSURE _____

F. L-461 PZR-LEVEL _____

[12] **ENSURE** Eagle 21 Protection Channel T-431/432 DTTA LP3, at 2-R-10 in NORMAL. _____

[13] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-11, in NORMAL:

A. L-518, 528, 538, and 548 TTD _____

B. L-518 SG LEVEL LP1 _____

C. L-528 SG LEVEL LP2 _____

D. L-538 SG LEVEL LP3 _____

E. L-548 SG LEVEL LP4 _____

F. P-526 STM PRESS LP2 _____

G. P-536 STM PRESS LP3 _____

H. P-935 CONTNMT PRESS _____

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

[14] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-12, in NORMAL:

A. L-517-547 TTD _____

B. L-517 SG LEVEL LP1 _____

C. L-527 SG LEVEL LP2 _____

D. L-537 SG LEVEL LP3 _____

E. L-547 SG LEVEL LP4 _____

F. P-516 STM PRESS LP1 _____

G. P-546 STM PRESS LP4 _____

[15] **ENSURE** Eagle 21 Protection Channel T-441/442 DTTA LP4, at 2-R-13 to the left (NORMAL). _____

[16] **ENSURE** the following Eagle 21 Protection Channels, at 2-R-28, in NORMAL.

A. P-458 PZR PRESSURE _____

B. P-934 CONTNMT PRESS _____

[17] **REMOVE** switched jumpers at Train A (Input cabinet 2-R-46):

A. 2-ZS-47-28, TB109 Terminals 3 and 4 _____

_____ CV

B. 2-ZS-47-30, TB209 Terminals 3 and 4 _____

_____ CV

C. 2-ZS-47-32, TB308 Terminals 3 and 4 _____

_____ CV

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

D. 2-ZS-47-34, TB407 Terminals 3 and 4 _____

_____ CV

[18] **REMOVE** switched jumpers at Train B (Input Cabinet 2-R-49):

A. 2-ZS-47-28, TB109 Terminals 3 and 4 _____

_____ CV

B. 2-ZS-47-30, TB209 Terminals 3 and 4 _____

_____ CV

C. 2-ZS-47-32, TB308 Terminals 3 and 4 _____

_____ CV

D. 2-ZS-47-34, TB407 Terminals 3 and 4 _____

_____ CV

[19] **INSTALL** the following fuses at Train A (Input Cabinet 2-R-46) Field side:

A. 2-ZS-47-28, 2-FU-99-R46/D4 _____

_____ CV

B. 2-ZS-47-30, 2-FU-99-R46/E3 _____

_____ CV

C. 2-ZS-47-32, 2-FU-99-R46/F3 _____

_____ CV

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

D. 2-ZS-47-34, 2-FU-99-R46/G4 _____

_____ CV

[20] **INSTALL** the following fuses at Train B (Input Cabinet 2-R-49) Field side:

A. 2-ZS-47-28, 2-FU-99-R49/D4 _____

_____ CV

B. 2-ZS-47-30, 2-FU-99-R49/E3 _____

_____ CV

C. 2-ZS-47-32, 2-FU-99-R49/F3 _____

_____ CV

D. 2-ZS-47-34, 2-FU-99-R49/G4 _____

_____ CV

[21] **REMOVE** the jumper from Terminal Points 10A and 10902A in 2-JB-290-1666-D. _____

_____ CV

[22] **REMOVE** the jumper from Terminal Points 10B and 10902B in 2-JB-290-1666-D. _____

_____ CV

[23] **REMOVE** the jumper from Terminal Points 20A and 20902A in 2-JB-290-1669E. _____

_____ CV

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

[24] **REMOVE** the jumper from Terminal Points 20B and 20902B in 2-JB-290-1669-E. _____

_____ CV

[25] **REMOVE** the jumper from Terminal Points 30A and 30802A in 2-JB-290-1668-F. _____

_____ CV

[26] **REMOVE** the jumper from Terminal Points 30B and 30802B in 2-JB-290-1668-F. _____

_____ CV

[27] **REMOVE** the jumper from Terminal Points 10907A1 and 10908A in 2-JB-290-3404-D (Aux Inst. Rm). _____

_____ CV

[28] **REMOVE** the jumper from Terminal Points 10907B1 and 10908B in 2-JB-290-3404-D (Aux Inst. Rm). _____

_____ CV

[29] **REMOVE** the jumper from Terminal Points 20907A1 and 20908A in 2-JB-290-3405-E (Aux Inst. Rm). _____

_____ CV

[30] **REMOVE** the jumper from Terminal Points 20907B1 and 20908B in 2-JB-290-3405-E (Aux Inst. Rm). _____

_____ CV

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

[31] **REMOVE** the jumper from Terminal Points 30807A1 and 30808A in 2-JB-290-3406-F (Aux Inst. Rm). _____

_____ CV

[32] **REMOVE** the jumper from Terminal Points 30807B1 and 30808B in 2-JB-290-3406-F (Aux Inst. Rm). _____

_____ CV

[33] **REMOVE** the jumper from Terminal Points 40707A1 and 40708A in 2-JB-290-3407-G (Aux Inst. Rm). _____

_____ CV

[34] **REMOVE** the jumper from Terminal Points 40707B1 and 40708B in 2-JB-290-3407-G (Aux Inst. Rm). _____

_____ CV

[35] **REMOVE** the jumper from Terminal Points 10811A1 and 10812A in 2-JB-290-3404-D (Aux Inst. Rm). _____

_____ CV

[36] **REMOVE** the jumper from Terminal Points 10811B1 and 10812B in 2-JB-290-3404-D (Aux Inst. Rm). _____

_____ CV

[37] **REMOVE** the jumper from Terminal Points 20811A1 and 20812A in 2-JB-290-3405-E (Aux Inst. Rm). _____

_____ CV

Date _____

7.0 POST PERFORMANCE ACTIVITIES (continued)

[38] **REMOVE** the jumper from Terminal Points 20811B1 and 20812B in 2-JB-290-3405-E (Aux Inst. Rm). _____

_____ CV

[39] **REMOVE** the jumper from Terminal Points 30711A1 and 30712A in 2-JB-290-3406-F (Aux Inst. Rm). _____

_____ CV

[40] **REMOVE** the jumper from Terminal Points 30711B1 and 30712B in2-JB-290-3406-F (Aux Inst. Rm). _____

_____ CV

[41] **REMOVE** the jumper from Terminal Points 40903A1-and 40904A in 2-JB-290-3407-G (Aux Inst. Rm). _____

_____ CV

[42] **REMOVE** the jumper from Terminal Points 40903B1 and 40904B in 2-JB-290-3407-G (Aux Inst. Rm). _____

_____ CV

[43] **VERIFY** that Post test calibration of the M&TE used to record quantitative acceptance criteria has been satisfactorily performed and the results RECORDED on Measuring and Test Equipment (M&TE) Log, Appendix F in SMP 9.0. _____

[44] **NOTIFY** the Unit 2 US/SRO of the test completion and system alignment. _____

8.0 RECORDS

A. QA Records

Completed Test Package (PTI)

B. Non-QA Records

None

Appendix A
(Page 1 of 2)

TEST PROCEDURES / INSTRUCTIONS REFERENCE REVIEW

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)
Unit 2 FSAR Amendment 108 Section 7.2 "Reactor Trip System" Chapter 14 Table 14.2-1 Sheet 57 of 89.			
2-TSD-99-3, Reactor Protection System Operational Test, Rev 1			
SMP-4.0, Watts Bar Nuclear Plant Unit 2 System Turnover, Rev. 4			
SMP-8.0, Watts Bar Nuclear Plant Unit 2 Administration of Preoperational Test Instructions. Rev. 8			

Appendix A
(Page 2 of 2)

TEST PROCEDURES / INSTRUCTIONS REFERENCE REVIEW

PROCEDURE/ INSTRUCTION	REVISION/CHANGES	IMPACT Yes/No	INITIAL AND DATE. (N/A for no change)
WBN2-99-4003, System Description For Reactor Protection System, Rev. 0			

Appendix B
(Page 1 of 1)

TEMPORARY CONDITION LOG

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 1)

PERMANENT PLANT INSTRUMENTATION LOG

Date _____

NOTES

1) These items may be initiated 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 N/A if instrument was not used to verify/record quantitative acceptance criteria data

INSTRUMENT OR INSTRUMENT LOOP NO.	CAL DUE DATE	FILLED AND VENTED[1]	PLACED IN SERVICE[1]	USED FOR QUANTITATIVE ACC CRIT		POST-TEST CAL DATE[2]	POST-TEST CALIBRATION ACCEPTANCE INITIAL/DATE
		INITIAL/DATE	INITIAL/DATE	YES	NO		
M501 at Panel 2-R-47	N/A	N/A	N/A		NO	N/A	N/A
M501 at Panel 2-R-50	N/A	N/A	N/A		NO	N/A	N/A

Table 1
(Page 1 of 8)

BREAKER LINEUP

Date _____

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
12	2-BKR-235-1/12-D SSPS CONT RM DEMPX	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	
25	2-BKR-235-1/25-D VITAL AC SUPPLY 2-R-3 PROCESS PROTECTION SET I	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	
42	2-BKR-235-1/42-D RCP 1 UV & UF RELAYS	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	
43	2-BKR-235-1/43-D SSPS (A) CH I INPUT RELAYS	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	

Table 1
(Page 2 of 8)

BREAKER LINEUP

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
44	2-BKR-235-1/44-D SSPS (B) CH I INPUT RELAYS	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	
45	2-BKR-235-1/45-D NIS INSTR PWR CH I	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	
46	2-BKR-235-1/46-D NIS CONT PWR CH I	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	
47	2-BKR-235-1/47-D PROCESS PROTECTION SET I	2-BD-235-1-D 120V AC VITAL INSTR POWER BOARD 2-I (757, A5R)	ON	
25	2-BKR-235-2/25-E VITAL AC SUPPLY 2-R-7 PROCESS PROTECTION SET II	2-BD-235-2-E 120V AC VITAL INSTR POWER BOARD 2-II 757, A6R)	ON	

Table 1
(Page 3 of 8)

BREAKER LINEUP

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
42	2-BKR-235-2/42-E RCP 2 UV & UF RELAYS CH II	2-BD-235-2-E 120V AC VITAL INSTR POWER BOARD 2-II 757, A6R)	ON	
43	2-BKR-235-2/43-E SSPS (A) CH II INPUT RELAYS	2-BD-235-2-E 120V AC VITAL INSTR POWER BOARD 2-II (757, A6R)	ON	
44	2-BKR-235-2/44-E SSPS (B) CH II INPUT RELAYS	2-BD-235-2-E 120V AC VITAL INSTR POWER BOARD 2-II (757, A6R)	ON	
45	2-BKR-235-2/45-E NIS INSTR PWR CHL II	2-BD-235-2-E 120V AC VITAL INSTR POWER BOARD 2-II (757, A6R)	ON	
46	2-BKR-235-2/46-E NIS CONT PWR CHL II	2-BD-235-2-E 120V AC VITAL INSTR POWER BOARD 2-II (757, A6R)	ON	

Table 1
(Page 4 of 8)

BREAKER LINEUP

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
47	2-BKR-235-2/47-E PROCESS PROTECTION SET II	2-BD-235-2-E 120V AC VITAL INSTR POWER BOARD 2-II (757, A6R)	ON	
25	2-BKR-235-3/25-F XX-55-6C & XX-55-6E CNTL PWR (PX-55-6C-A)	2-BD-235-3-F 120V AC VITAL INSTR POWER BOARD 2-III (757 A11R)	ON	
27	2-BKR-235-3/27-F SSPS (A) CH III INPUT & TRAIN A OUTPUT RELAYS	2-BD-235-3-F 120 V AC VITAL INSTR POWER BOARD 2-III (757, A11R)	ON	
33	2-BKR-235-3/33-F RCP3 UV & UF RELAYS	2-BD-235-3-F 120 V AC VITAL INSTR POWER BOARD 2-III (757, A11R)	ON	
34	2-BKR-235-3/34-F SSPS (B) CH III INPUT RELAYS	2-BD-235-3-F 120 V AC VITAL INSTR POWER BOARD 2-III (757, A11R)	ON	

Table 1
(Page 5 of 8)

BREAKER LINEUP

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
35	2-BKR-235-3/35-F NIS INSTR PWR CHL III	2-BD-235-3-F 120 V AC VITAL INSTR POWER BOARD 2-III (757, A11R)	ON	
37	2-BKR-235-3/37-F PROCESS PROTECTION SET III	2-BD-235-3-F 120 V AC VITAL INSTR POWER BOARD 2-III (757, A11R)	ON	
43	2-BKR-235-3/43-F VITAL AC SUPPLY 2-R-11 PROCESS PROTECTION SET III	2-BD-235-3-F 120 V AC VITAL INSTR POWER BOARD 2-III (757, A11R)	ON	
25	2-BKR-235-4/25-G XX-55-6D & XX-55-6F CNTL PWR (PX-55-6D-B)	2-BD-235-4-G 120V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	
27	2-BKR-235-4/27-G SSPS (A) CH IV INPUT RELAYS	2-BD-235-4-G 120V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	

Table 1
(Page 6 of 8)

BREAKER LINEUP

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
28	2-BKR-235-4/28-G SSPS (B) CH IV INPUT & TRAIN B OUTPUT RELAYS	2-BD-235-4-G 120V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	
29	2-BKR-235-4/29-G NIS INST PWR CH IV	2-BD-235-4-G 120 V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	
30	2-BKR-235-4/30-G NIS CONT PWR CH IV	2-BD-235-4-G 120 V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	
31	2-BKR-235-4/31-G PROCESS PROTECTION SET IV	2-BD-235-4-G 120V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	
32	2-BKR-235-4/32-G RCP4 UV & UF RELAYS	2-BD-235-4-G 120V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	

Table 1
(Page 7 of 8)

BREAKER LINEUP

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
45	2-BKR-235-4/45-G VITAL AC SUPPLY 2-R-28 PROCESS PROTECTION SET IV	2-BD-235-4-G 120 V AC VITAL INSTR POWER BOARD 2-IV (757, A12R)	ON	
323	2-BKR-47-24A TURBINE TRIP BUS A UNIT 2	0-BD-239-1 250V BATTERY BOARD I, (692, C5)	ON	
323	2-BKR-47-24B TURBINE TRIP BUS B UNIT 2	0-BD-239-2 250V BATTERY BOARD II, (692, C5)	ON	
319	2-BKR-236-3/319-F REACTOR TRIP SWITCH GEAR TRAIN A 2-L-116	0-BD-236-3/3-F 125V DC VITAL BATTERY BOARD III (757, QA11)	ON	
319	2-BKR-236-4/319-G REACTOR TRIP SWITCH GEAR TRAIN B 2-L-116	0-BD-236-4/3-G 125-V DC VITAL BATTERY BOARD IV (757, QA12)	ON	
COMPT 1B	2-BKR-099-L116/1B-A REACTOR TRIP BKR TRAIN A	2-PNL-099-L116, C/1B, E786/A11U	DISCONNECT	

Table 1
(Page 8 of 8)

BREAKER LINEUP

BREAKER IDENTIFICATION	BREAKER NOMENCLATURE	BREAKER LOCATION	POSITION	VERIFIED BY INITIAL/DATE
COMPT 1C	2-BKR-099-L116/1C-B REACTOR TRIP BKR TRAIN B	2-PNL-099-L116, C/1C, E786/A11U	DISCONNECT	
COMPT 2B	2-BKR-099-L116/2B-A REACTOR TRIP BYPASS BKR TRAIN A	2-PNL-099-L116, C/2B, E786/A11U	DISCONNECT	
COMPT 2C	2-BKR-099-L116/2C-B REACTOR TRIP BYPASS BKR TRAIN B	2-PNL-099-L116, C/2C, E786/A11U	DISCONNECT	
COMPT 4D	2-BKR-085-A CRD MG SET 2A (2-GEN-85-A)	2-BD-203-A 480V UNIT BD 2A, C/4D, E708/T9-F	DISCONNECT	
COMPT 3B	2-BKR-085-B CRD MG SET 2B (2-GEN-85-B)	2-BD-203-B 480V UNIT BD 2B, C/3B, E729/T4-3	DISCONNECT	

Table 2
(Page 1 of 3)

SOLID STATE PROTECTION SYSTEM (SSPS) ALIGNMENT

Date _____

LOCATION	SWITCH	POSITION	INITIAL
Train A 2-R-47 Logic Test Panel	Input Error Inhibit	NORMAL	
	Multiplexer Test	A+B	
	Blocking Function Test	INHIBIT BLOCKS	
	Function Selector Logic A	OFF	
	Function Selector Logic B	24	
	Function Selector Logic C	24	
	Function Selector Logic D	24	
	Permissives	OFF	
	Memories	OFF	
	S521 TIMER TEST	1 (NORMAL)	
Train A 2-R-48 Output Relay Test Panel	Mode Selector	OPERATE	
	Master Relay Selector	OFF	
	S605 TIMER TEST	1 (OFF)	
Train B 2-R-50 Logic Test Panel	Input Error Inhibit	NORMAL	
	Multiplexer Test	NORMAL	
	Blocking Function Test	INHIBIT BLOCKS	
	Function Selector Logic A	OFF	
	Function Selector Logic B	24	
	Function Selector Logic C	24	
	Function Selector Logic D	24	
	Permissives	OFF	
	Memories	OFF	
	S521 TIMER TEST	1 (NORMAL)	
Train B 2-R-51 Output Relay Test Panel	Mode Selector	OPERATE	
	Master Relay Selector	OFF	
	S605 TIMER TEST	1 (OFF)	

Table 2
(Page 2 of 3)

SOLID STATE PROTECTION SYSTEM (SSPS) ALIGNMENT

LOCATION	SWITCH	POSITION	INITIAL
Train A 2-R-47 Logic Test Panel Automatic Input Function Test Lamps	Testing	OFF	
	Bad	ON	
	Good	BLINKING	
	Continuity	ON	
Function Logic Lamps	1/1	OFF	
	1/2	OFF	
	1/3	OFF	
	1/4	OFF	
	2/2	OFF	
	2/3	OFF	
	2/4	OFF	
Train A 2-R-48 Output Relay Test Panel Slaves Operated Lamps Logic Test Panel	Operate	ON	
	A1	OFF	
	A2	OFF	
	A3	OFF	
	A4	OFF	
	B1	OFF	
	B2	OFF	
	B3	OFF	
	B4	OFF	
Train A 2-R-47 Spray Test Panel General Warning Test Logic	This train	ON	
	Opposite Train	ON	
	General Warning	OFF	

Table 2
(Page 3 of 3)

SOLID STATE PROTECTION SYSTEM (SSPS) ALIGNMENT

LOCATION	SWITCH	POSITION	INITIAL
Train B 2-R-50 Logic Test Panel Automatic Input Function Test Lamps	Testing	OFF	
	Bad	ON	
	Good	OFF	
	Continuity	ON	
Function Logic Lamps	1/1	OFF	
	1/2	OFF	
	1/3	OFF	
	1/4	OFF	
	2/2	OFF	
	2/3	OFF	
	2/4	OFF	
Train B 2-R-51 Output Relay Test Panel Slaves Operated Lamps Logic Test Panel	Operate	ON	
	A1	OFF	
	A2	OFF	
	A3	OFF	
	A4	OFF	
	B1	OFF	
	B2	OFF	
	B3	OFF	
	B4	OFF	
Train B 2-R-51 Spray Test Panel General Warning	This train	ON	
	Opposite Train	ON	
	General Warning	OFF	

Table 3
(Page 1 of 6)

NUCLEAR INSTRUMENTATION SYSTEM (NIS) ALIGNMENT

Date _____

DRAWER	SWITCH/INDICATOR	POSITION	INITIAL
Source Range N31 2-NI-092-131-D (2-M-13)	LEVEL TRIP	NORMAL	
	LEVEL TEST (ADJUST)	FULLY CCW	
	HIGH FLUX AT SHUTDOWN	NORMAL	
	OUTPUT SELECTOR	OFF	
Source Range N32 2-NI-092-132-E (2-M-13)	LEVEL TRIP	NORMAL	
	LEVEL TEST (ADJUST)	FULLY CCW	
	HIGH FLUX AT SHUTDOWN	NORMAL	
	OUTPUT SELECTOR	OFF	
Intermediate Range N35 2-NI-092-135-D (2-M-13)	OPERATION SELECTOR	NORMAL	
	LEVEL TRIP	NORMAL	
	TEST SELECTOR	OPR	
	OUTPUT SELECTOR	OFF	
	LEVEL ADJUST	FULLY CCW	
Intermediate Range N36 2-NI-092-136-E (2-M-13)	OPERATION SELECTOR	NORMAL	
	LEVEL TRIP	NORMAL	
	TEST SELECTOR	OPR	
	OUTPUT SELECTOR	OFF	
	LEVEL ADJUST	FULLY CCW	
Power Range A N41 2-IDWR-92-N41A-I (2-M-13)	RATE MODE	NORMAL	
Power Range B N41 2-IDWR-92-N41B-I	OPERATION SELECTOR	NORMAL	
	DETECTOR A RANGE MILLI-AMPS	0.5	

Table 3
(Page 2 of 6)

NUCLEAR INSTRUMENTATION SYSTEM (NIS) ALIGNMENT

DRAWER	SWITCH/INDICATOR	POSITION	INITIAL
(2-M-13)	DETECTOR B RANGE MILLI-AMPS	0.5	
	TEST SIGNAL POTENTIOMETER (A + B)	FULLY CCW	
Power Range A N42 2-IDWR-92-N42A-II (2-M-13)	RATE MODE	NORMAL	
Power Range B N42 2-IDWR-92-N42B-II (2-M-13)	OPERATION SELECTOR	NORMAL	
	DETECTOR A RANGE MILLI-AMPS	0.5	
	DETECTOR B RANGE MILLI-AMPS	0.5	
	TEST SIGNAL POTENTIOMETER (A +B)	FULLY CCW	
Power Range A N43 2-IDWR-92-N43A-III (2-M-13)	RATE MODE	NORMAL	
Power Range B N43 2-IDWR-92-N43B-III (2-M-13)	OPERATION SELECTOR	NORMAL	
	DETECTOR A RANGE MILLI-AMPS	0.5	
	DETECTOR B RANGE MILLI-AMPS	0.5	
	TEST SIGNAL POTENTIOMETER (A + B)	FULLY CCW	
Power Range A N44 2-IDWR-92-N44A IV (2-M-13)	RATE MODE	NORMAL	
Power Range B N44 2-IDWR-92-N44B-IV (2-M-13)	OPERATION SELECTOR	NORMAL	
	DETECTOR A RANGE MILLI-AMPS	0.5	
	DETECTOR B RANGE MILLI-AMPS	0.5	
	TEST SIGNAL POTENTIOMETER (A + B)	FULLY CCW	

Table 3
(Page 3 of 6)

NUCLEAR INSTRUMENTATION SYSTEM (NIS) ALIGNMENT

DRAWER	SWITCH/INDICATOR	POSITION	INITIAL
Source Range N31 2-NI-92-131-D (2-M-13)	INSTRUMENT POWER ON	ON	
	CONTROL POWER ON	ON	
	CHANNEL ON TEST	OFF	
	SR NON-OPERATE	OFF	
	LEVEL TRIP	OFF	
	LEVEL TRIP BYPASS	OFF	
	HIGH FLUX AT SHUTDOWN	OFF	
	BISTABLE TRIP SPARE	OFF	
Source Range N32 2-NI-92-132-E (2-M-13)	INSTRUMENT POWER ON	ON	
	CONTROL POWER ON	ON	
	CHANNEL ON TEST	OFF	
	SR NON-OPERATE	OFF	
	LEVEL TRIP	OFF	
	LEVEL TRIP BYPASS	OFF	
	HIGH FLUX AT SHUTDOWN	OFF	
	BISTABLE TRIP SPARE	OFF	
Intermediate Range N35 2-NI-92-135-D (2-M-13)	INSTRUMENT POWER ON	ON	
	CONTROL POWER ON	ON	
	CHANNEL ON TEST	OFF	
	LEVEL TRIP BYPASS	OFF	
	HIGH LEVEL TRIP	OFF	
	HIGH LEVEL ROD STOP	OFF	
	POWER ABOVE PERMISSIVE P6	OFF	
	BISTABLE TRIP SPARE	OFF	

Table 3
(Page 4 of 6)

NUCLEAR INSTRUMENTATION SYSTEM (NIS) ALIGNMENT

DRAWER	SWITCH/INDICATOR	POSITION	INITIAL
	AMPLIFIER NON-OPERATE	OFF	
	IR/SR NON-OPERATE	OFF	
Intermediate Range N36 2-NI-92-136-E (2-M-13)	INSTRUMENT POWER ON	ON	
	CONTROL POWER ON	ON	
	CHANNEL ON TEST	OFF	
	LEVEL TRIP BYPASS	OFF	
	HIGH LEVEL TRIP	OFF	
	HIGH LEVEL ROD STOP	OFF	
	POWER ABOVE PERMISSIVE P6	OFF	
	BISTABLE TRIP SPARE	OFF	
	AMPLIFIER NON-OPERATE	OFF	
	IR/SR NON-OPERATE	OFF	
Power Range A N41 2-IDWR-92-N41A-I (2-M-13)	CONTROL POWER ON	ON	
	POWER ABOVE PERMISSIVE P9	OFF	
	OVERPOWER TRIP HIGH RANGE	OFF	
	OVERPOWER ROD STOP	OFF	
	OVERPOWER LOW RANGE	OFF	
	POWER ABOVE PERMISSIVE P10	OFF	
	POWER ABOVE PERMISSIVE P8	OFF	
	POSITIVE RATE TRIP	OFF	
	SPARE	OFF	
Power Range B N41 2-IDWR-92-N41B I (2-M-13)	INSTRUMENT POWER ON	ON	
	CHANNEL ON TEST	OFF	

Table 3
(Page 5 of 6)

NUCLEAR INSTRUMENTATION SYSTEM (NIS) ALIGNMENT

DRAWER	SWITCH/INDICATOR	POSITION	INITIAL
Power Range A N42 2-IDWR-92-N42B-II (2-M-13)	CONTROL POWER ON	ON	
	POWER ABOVE PERMISSIVE P9	OFF	
	OVERPOWER TRIP HIGH RANGE	OFF	
	OVERPOWER ROD STOP	OFF	
	OVERPOWER LOW RANGE	OFF	
	POWER ABOVE PERMISSIVE P10	OFF	
	POWER ABOVE PERMISSIVE P8	OFF	
	POSITIVE RATE TRIP	OFF	
	SPARE	OFF	
Power Range B N42 2-IDWR-92-N42B II (2-M-13)	INSTRUMENT POWER ON	ON	
	CHANNEL ON TEST	OFF	
Power Range A N43 2-IDWR-92-N43A-III (2-M-13)	CONTROL POWER ON	ON	
	POWER ABOVE PERMISSIVE P9	OFF	
	OVERPOWER TRIP HIGH RANGE	OFF	
	OVERPOWER ROD STOP	OFF	
	OVERPOWER LOW RANGE	OFF	
	POWER ABOVE PERMISSIVE P10	OFF	
	POWER ABOVE PERMISSIVE P8	OFF	
	POSITIVE RATE TRIP	OFF	
	SPARE	OFF	
Power Range B N43 2-IDWR-92-N43B-III (2-M-13)	INSTRUMENT POWER ON	ON	
	CHANNEL ON TEST	OFF	

Table 3
(Page 6 of 6)

NUCLEAR INSTRUMENTATION SYSTEM (NIS) ALIGNMENT

DRAWER	SWITCH/INDICATOR	POSITION	INITIAL
Power Range A N44 2-IDWR-92-N44A-IV (2-M-13)	CONTROL POWER ON	ON	
	POWER ABOVE PERMISSIVE P9	OFF	
	OVERPOWER TRIP HIGH RANGE	OFF	
	OVERPOWER ROD STOP	OFF	
	OVERPOWER LOW RANGE	OFF	
	POWER ABOVE PERMISSIVE P10	OFF	
	POWER ABOVE PERMISSIVE P8	OFF	
	POSITIVE RATE TRIP	OFF	
	SPARE	OFF	
Power Range B N44 2-IDWR-92-N44B-IV (2-M-13)	INSTRUMENT POWER ON	ON	
	CHANNEL ON TEST	OFF	

Table 4
(Page 1 of 10)

NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

NOTES

1) NIS trip signals are generated by rotating the appropriate NIS front panel drawer switches until the chosen NIS bistable trips (2-M-13). Trip indication is provided by labeled NIS front panel indicators. Following is a chart of NIS channels, and the appropriate front panel switches needed to cause bistable trips.
2) The "Device" names and "ID" identifications are as they are shown here used in the procedure.
3) For operation of SR/IR channels both SR/IR must be in LEVEL TRIP BYPASS and OPERATION SELECTOR on IR must be in TEST ENABLE. Additionally, if using ADJUST potentiometers then TEST SELECTOR on IR must be in ADJUST.

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC31D	Source Range, Drawer N31	LEVEL TEST ADJUST Potentiometer	Trip: ADJUST potentiometer CW UNTIL LEVEL TRIP lamp on front of drawer is in ALARM.
			Normal: ADJUST potentiometer CCW UNTIL LEVEL TRIP lamp on front of drawer is in CLEAR.
NC32D	Source Range, Drawer N32	LEVEL TEST ADJUST Potentiometer	Trip: ADJUST potentiometer CW UNTIL LEVEL TRIP lamp on front of drawer is in ALARM.
			Normal: ADJUST potentiometer CCW UNTIL LEVEL TRIP lamp on front of drawer is in CLEAR.

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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC35F	Source Range, Drawer N35	Test Selector Switch	Trip: Rotate to MSV 6 Position
			Normal: Rotate To OPR Position
NC36F	Source Range, Drawer N36	Test Selector Switch	Trip: Rotate to MSV 6 Position
			Normal: Rotate To OPR Position
NC35D	Source Range, Drawer N35	ADJUST Potentiometer	Trip: ADJUST potentiometer CW UNTIL POWER ABOVE PERMISSIVE P6 lamp on front of drawer is in ALARM.
			Normal: ADJUST potentiometer CCW UNTIL POWER ABOVE PERMISSIVE P6 lamp on front of drawer is in CLEAR.
NC36D	Source Range, Drawer N36	ADJUST Potentiometer	Trip: ADJUST potentiometer CW UNTIL POWER ABOVE PERMISSIVE P6 lamp on front of drawer is in ALARM.
			Normal: ADJUST potentiometer CCW UNTIL POWER ABOVE PERMISSIVE P6 lamp on front of drawer is in CLEAR.

Table 4
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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC41N	Power Range, Drawer N41	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P8 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P8 indicator just turns OFF.
NC42N	Power Range, Drawer N42	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P8 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P8 indicator just turns OFF.
NC43N	Power Range, Drawer N43	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P8 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P8 indicator just turns OFF.

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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC44N	Power Range, Drawer N44	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P8 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P8 indicator just turns OFF.
NC41S	Power Range, Drawer N41	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P9 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P9 indicator just turns OFF.
NC42S	Power Range, Drawer N42	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P9 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P9 indicator just turns OFF.

Table 4
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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC43S	Power Range, Drawer N43	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P9 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P9 indicator just turns OFF.
NC44S	Power Range, Drawer N44	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P9 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P10 indicator just turns OFF.
NC41M	Power Range, Drawer N41	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P10 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P10 indicator just turns OFF.

Table 4
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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC42M	Power Range, Drawer N42	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P10 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P10 indicator just turns OFF.
NC43M	Power Range, Drawer N43	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P10 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P10 indicator just turns OFF.
NC44M	Power Range, Drawer N44	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary, Detector B potentiometers CW until POWER ABOVE PERMISSIVE P10 indicator just turns ON.
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until POWER ABOVE PERMISSIVE P10 indicator just turns OFF.

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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC41P	Power Range, Drawer N41	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP LOW RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP LOW RANGE indicator just turns OFF
NC42P	Power Range, Drawer N42	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP LOW RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP LOW RANGE indicator just turns OFF
NC43P	Power Range, Drawer N43	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP LOW RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP LOW RANGE indicator just turns OFF

Table 4
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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC44P	Power Range, Drawer N44	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP LOW RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP LOW RANGE indicator just turns OFF
NC41R	Power Range, Drawer N41	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP HIGH RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP HIGH RANGE indicator just turns OFF
NC42R	Power Range, Drawer N42	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP HIGH RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP HIGH RANGE indicator just turns OFF

Table 4
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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC43R	Power Range, Drawer N43	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP HIGH RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP HIGH RANGE indicator just turns OFF
NC44R	Power Range, Drawer N44	Detector A and Detector B Test Signal Potentiometers	Trip: Rotate Detector A and, if necessary Detector B potentiometers CW until OVERPOWER TRIP HIGH RANGE indicator just turns ON
			Normal: Rotate Detector A and, if necessary Detector B potentiometers CCW until OVERPOWER TRIP HIGH RANGE indicator just turns OFF
NC41U	Power Range, Drawer N41	Detector A and Detector B Test Signal Potentiometers	Trip: POSITION Operation Selector switch to the DET B position; then ROTATE Detector B Test Signal potentiometer rapidly in the clockwise direction until Positive Rate Trip Lamp Lights.
			Normal: Wait approximately 5 seconds.

Table 4
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NUCLEAR INSTRUMENTATION (NIS) - CHANNEL TRIP/RETURN TO NORMAL

DEVICE	LOCATION	ACTUATING DEVICE	TRIP/NORMAL DIRECTIONS
NC42U	Power Range, Drawer N42	Detector A and Detector B Test Signal Potentiometers	Trip: POSITION Operation Selector switch to the DET B position; then ROTATE Detector B Test Signal potentiometer rapidly in the clockwise direction until Positive Rate Trip Lamp Lights.
			Normal: Wait approximately 5 seconds.
NC43U	Power Range, Drawer N43	Detector A and Detector B Test Signal Potentiometers	Trip: POSITION Operation Selector switch to the DET B position; then ROTATE Detector B Test Signal potentiometer rapidly in the clockwise direction until Positive Rate Trip Lamp Lights.
			Normal: Wait approximately 5 seconds.
NC44U	Power Range, Drawer N44	Detector A and Detector B Test Signal Potentiometers	Trip: POSITION Operation Selector switch to the DET B position; then ROTATE Detector B Test Signal potentiometer rapidly in the clockwise direction until Positive Rate Trip Lamp Lights.
			Normal: Wait approximately 5 seconds.

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COMPUTER POINT VERIFICATION LOG

Date _____

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
SUBSECTION 6.1				
Y0004D	REAC MANUAL TR 1 CAUSES RX TRIP	TRIP	NOT TR	
Y0005D	REAC MANUAL TR 2 CAUSES RX TRIP	TRIP	NOT TR	
Y0006D	REAC MAIN TR BKR A	CLOSED	OPEN	
Y0007D	REAC MAIN TR BKR B	CLOSED	OPEN	
Y0026D	REAC AUX TR BKR A	CLOSED	OPEN	
Y0027D	REAC AUX TR BKR B	CLOSED	OPEN	
Y2407D	SSPS TURBINE TRIP TRAIN A	TRIP	NOT TR	

Table 5
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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
Y2417D	SSPS TURBINE TRIP TRAIN B	TRIP	NOT TR	
SUBSECTION 6.2				
N0032D	INTERM RNG 1 RE TR P6 PERM	SET	RESET	
N0033D	INTERM RNG 2 RE TR P6 PERM	SET	RESET	
N0034D	SOURCE RNG HI Q TR A BLOCK	SET	RESET	
N0035D	SOURCE RNG HI Q TR B BLOCK	SET	RESET	
SUBSECTION 6.3				
Y0001D	TB PWR 1 RE TR P13 PERM	SET	RESET	
Y0002D	TB PWR 2 RE TR P13 PERM	SET	RESET	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
Y0003D	NUCLEAR & TB PWR RE TR P7 PERM	RESET	SET	
SUBSECTION 6.4				
F0495D	RCL LO FLOW LOOP TR P8 PART PERM 1	SET	RESET	
F0496D	RCL LO FLOW LOOP TR P8 PART PERM 2	SET	RESET	
F0497D	RCL LO FLOW LOOP TR P8 PART PERM 3	SET	RESET	
F0498D	RCL LO FLOW LOOP TR P8 PART PERM 4	SET	RESET	
F0499D	RCL LO FLOW LOOP TR P8 PERM	RESET	SET	
SUBSECTION 6.5				
Y2917D	NUC PWR 1 RE TR P9 PART PERM	SET	RESET	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
Y2918D	NUC PWR 2 RE TR P9 PART PERM	SET	RESET	
Y2919D	NUC PWR 3 RE TR P9 PART PERM	SET	RESET	
Y2920D	NUC PWR 4 RE TR P9 PART PERM	SET	RESET	
Y2921D	NUCLEAR POWER P9 PERMISSIVE	RESET	SET	
SUBSECTION 6.6				
N0020D	INTERM RNG 1 HI Q INITIATES RE	TRIP	NOT TR	
N0021D	INTERM RNG 2 HI Q INITIATES RE	TRIP	NOT TR	
N0022D	INTERN RNG HI Q RE TR A BLOCK	SET	RESET	
N0023D	INTERN RNG HI Q RE TR B BLOCK	SET	RESET	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
N0024D	INTERM RNG HI Q CAUSES RX TRIP	TRIP	NOT TR	
N0011D	NUCL PWR 1 RE TR P10 PART PERM	SET	RESET	
N0012D	NUCL PWR 2 RE TR P10 PART PERM	SET	RESET	
N0013D	NUCL PWR 3 RE TR P10 PART PERM	SET	RESET	
N0014D	NUCL PWR 4 RE TR P10 PART PERM	SET	RESET	
N0015D	PWR RNG CHAN LO Q RE TR A BLOCK	SET	RESET	
N0016D	PWR RNG CHAN LO Q RE TR B BLOCK	SET	RESET	
SUBSECTION 6.7				
N0030D	SOURCE RNG 1 HI Q INIT RE	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
N0031D	SOURCE RNG 2 HI Q INIT RE	TRIP	NOT TR	
N0036D	SOURCE RNG HI Q CAUSES RX TRIP	TRIP	NOT TR	
SUBSECTION 6.8				
N0006D	PWR RNG CH 1 HI Q LO SP PARTIAL RX T	TRIP	NOT TR	
N0007D	PWR RNG CH 2 HI Q LO SP PARTIAL RX T	TRIP	NOT TR	
N0008D	PWR RNG CH 3 HI Q LO SP PARTIAL RX T	TRIP	NOT TR	
N0009D	PWR RNG CH 4 HI Q LO SP PARTIAL RX T	TRIP	NOT TR	
N0010D	PWR RNG CH HI Q LO SP CAUSES RX TRIP	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
SUBSECTION 6.9				
N0001D	PWR RNG CH 1 HI Q HI SP PARTIAL RX T	TRIP	NOT TR	
N0002D	PWR RNG CH 2 HI Q HI SP PARTIAL RX T	TRIP	NOT TR	
N0003D	PWR RNG CH 3 HI Q HI SP PARTIAL RX T	TRIP	NOT TR	
N0004D	PWR RNG CH 4 HI Q HI SP PARTIAL RX T	TRIP	NOT TR	
N0005D	PWR RNG CH HI Q HI SP CAUSES RX TRIP	TRIP	NOT TR	
SUBSECTION 6.10				
N0025D	PWR RNG CH 1 HI Q RATE PARTIAL RX	TRIP	NOT TR	
N0026D	PWR RNG CH 2 HI Q RATE PARTIAL RX	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
N0027D	PWR RNG CH 3 HI Q RATE PARTIAL RX	TRIP	NOT TR	
N0028D	PWR RNG CH 4 HI Q RATE PARTIAL RX	TRIP	NOT TR	
N0029D	PWR RNG CH HI Q RATE CAUSES RX TRI	TRIP	NOT TR	
SUBSECTION 6.11				
T0403D	OVER TEMP DELTA T LP1 PARTIAL RX TRI	TRIP	NOT TR	
T0423D	OVER TEMP DELTA T LP2 PARTIAL RX TRI	TRIP	NOT TR	
T0443D	OVER TEMP DELTA T LP3 PARTIAL RX TRI	TRIP	NOT TR	
T0463D	OVER TEMP DELTA T LP4 PARTIAL RX TRI	TRIP	NOT TR	
T0498D	RCL OVERTEMP DT CAUSES RX TRIP	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
SUBSECTION 6.12				
T0400D	OVER PWR DELTA T LP1 PARTIAL RX TRIP	TRIP	NOT TR	
T0420D	OVER PWR DELTA T LP2 PARTIAL RX TRIP	TRIP	NOT TR	
T0440D	OVER PWR DELTA T LP3 PARTIAL RX TRIP	TRIP	NOT TR	
T0460D	OVER PWR DELTA T LP4 PARTIAL RX TRIP	TRIP	NOT TR	
T0499D	RCL OVERPWR DT CAUSES RX TRIP	TRIP	NOT TR	
SUBSECTION 6.13				
F0400D	RCL1 1 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0401D	RCL1 2 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
F0402D	RCL1 3 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0403D,	RCL LO FLOW ABOVE P-8 CAUSES RX TRIP	TRIP	NOT TR	
F0420D	RCL2 1 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0421D	RCL2 2 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0422D	RCL2 3 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0423D	RCL LO FLOW ABOVE P-7 CAUSES RX TRIP	TRIP	NOT TR	
F0440D	RCL3 1 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0441D	RCL3 2 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0442D	RCL3 3 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
F0460D	RCL4 1 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0461D	RCL4 2 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
F0462D	RCL4 3 LO FLOW PARTIAL RX TRIP	TRIP	NOT TR	
SUBSECTION 6.14				
P0480D	PZR HI PRESSURE 1 PARTIAL RX TRIP	TRIP	NOT TR	
P0481D	PZR HI PRESSURE 2 PARTIAL RX TRIP	TRIP	NOT TR	
P0482D	PZR HI PRESSURE 3 PARTIAL RX TRIP	TRIP	NOT TR	
P0483D	PZR HI PRESSURE CAUSES RX TRIP	TRIP	NOT TR	
P0497D	PZR HI PRESSURE 4 PARTIAL RX TRIP	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
SUBSECTION 6.15				
P0484D	PZR LO PRESSURE 1 PARTIAL RX TRIP	TRIP	NOT TR	
P0485D	PZR LO PRESSURE 2 PARTIAL RX TRIP	TRIP	NOT TR	
P0486D	PZR LO PRESSURE 3 PARTIAL RX TRIP	TRIP	NOT TR	
P0487D	PZR LO PRESSURE 4 PARTIAL RX TRIP	TRIP	NOT TR	
P0488D	PZR LO PRESSURE & P7 CAUSES RX TRIP	TRIP	NOT TR	
SUBSECTION 6.16				
L0480D	PZR HI LEVEL 1 PARTIAL RX TRIP	TRIP	NOT TR	
L0481D	PZR HI LEVEL 2 PARTIAL RX TRIP	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
L0482D	PZR HI LEVEL 3 PARTIAL RX TRIP	TRIP	NOT TR	
L0483D	PZR HI LEVEL & P7 CAUSES RX TRIP	TRIP	NOT TR	
SUBSECTION 6.17				
Y0390D	TURB TRIP & P9 CAUSES RX TRIP	TRIP	NOT TR	
Y0391D	TURB STOP VALVE 1 CL PARTIAL RX TRIP	TRIP	NOT TR	
Y0392D	TURB STOP VALVE 2 CL PARTIAL RX TRIP	TRIP	NOT TR	
Y0393D	TURB STOP VALVE 3 CL PARTIAL RX TRIP	TRIP	NOT TR	
Y0394D	TURB STOP VALVE 4 CL PARTIAL RX TRIP	TRIP	NOT TR	
P0396D	TURB HYD OIL LO PRESSURE 1 PARTIAL R	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
P0397D	TURB HYD OIL LO PRESSURE 2 PARTIAL R	TRIP	NOT TR	
P0398D	TURB HYD OIL LO PRESSURE 3 PARTIAL R	TRIP	NOT TR	
SUBSECTION 6.18				
L0403D	SG #1 LO LO LVL PARTIAL RX T PS II	TRIP	NOT TR	
L0404D	SG #1 LO LO LVL PARTIAL RX T PS III	TRIP	NOT TR	
L0405D	SG #1 LO LO LVL PARTIAL RX T PS IV	TRIP	NOT TR	
L0406D	STM GEN 1 LO LO LEVEL CAUSES RX TRIP	TRIP	NOT TR	
L0423D	SG #2 LO LO LVL PARTIAL RX T PS II	TRIP	NOT TR	
L0424D	SG #2 LO LO LVL PARTIAL RX T PS III	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
L0425D	SG #2 LO LO LVL PARTIAL RX T PS IV	TRIP	NOT TR	
L0426D	STM GEN 2 LO LO LEVEL CAUSES RX TRIP	TRIP	NOT TR	
L0443D	SG #3 LO LO LVL PARTIAL RX T PS II	TRIP	NOT TR	
L0444D	SG #3 LO LO LVL PARTIAL RX T PS III	TRIP	NOT TR	
L0445D	SG #3 LO LO LVL PARTIAL RX T PS IV	TRIP	NOT TR	
L0446D	STM GEN 3 LO LO LEVEL CAUSES RX TRIP	TRIP	NOT TR	
L0463D	SG #4 LO LO LVL PARTIAL RX T PS II	TRIP	NOT TR	
L0464D	SG #4 LO LO LVL PARTIAL RX T PS III	TRIP	NOT TR	
L0465D	SG #4 LO LO LVL PARTIAL RX T PS IV	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
L0466D	STM GEN 4 LO LO LEVEL CAUSES RX TRIP	TRIP	NOT TR	
SUBSECTION 6.19				
V0320D	RCP BUS 1 UNDER VOLT PARTIAL RX TRIP	TRIP	NOT TR	
V0321D	RCP BUS 2 UNDER VOLT PARTIAL RX TRIP	TRIP	NOT TR	
V0322D	RCP BUS 3 UNDER VOLT PARTIAL RX TRIP	TRIP	NOT TR	
V0323D	RCP BUS 4 UNDER VOLT PARTIAL RX TRIP	TRIP	NOT TR	
V0324D	RCP BUS UNDER VOLT & P7 CAUSES RX TR	TRIP	NOT TR	
Y0320D	RCP BUS 1 UNDER FREQ PARTIAL RX TRIP	TRIP	NOT TR	
Y0321D	RCP BUS 2 UNDER FREQ PARTIAL RX TRIP	TRIP	NOT TR	

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COMPUTER POINT VERIFICATION LOG

COMPUTER POINT	DESCRIPTION	STATUS		INITIAL
		SET	RESET	
Y0322D	RCP BUS 3 UNDER FREQ PARTIAL RX TRIP	TRIP	NOT TR	
Y0323D	RCP BUS 4 UNDER FREQ PARTIAL RX TRIP	TRIP	NOT TR	
Y0324D	RCP BUS UNDER FREQ & P7 CAUSES RX TR	TRIP	NOT TR	
Y0400D	REACTOR COOLANT PUMP 1 BREAKER	CLOSED	OPEN	
Y0420D	REACTOR COOLANT PUMP 2 BREAKER	CLOSED	OPEN	
Y0440D	REACTOR COOLANT PUMP 3 BREAKER	CLOSED	OPEN	
Y0460D	REACTOR COOLANT PUMP 4 BREAKER	CLOSED	OPEN	

Table 6
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SSPS K600 RELAYS ON PLASTIC

Date _____

Panel 2-R-48					
Terminal Points		**Initial/Date**	**Terminal Points**		**Initial/Date**
TB615	5, 6		TB618	1, 2	
	7, 8			3, 4	
	9, 10			5, 6	
	11, 12			7, 8	
TB602	1, 2			9, 10	
	5, 6			11, 12	
	7, 8		TB605	1, 2	
	9, 10			3, 4	
	11, 12			5, 6	
TB616	1, 2			7, 8	
	7, 8			9, 10	
	9, 10			11, 12	
	11, 12		TB619	3, 4	
NOT USED				5, 6	
				7, 8	
				9, 10	
			TB606	1, 2	
				5, 6	
TB617	1, 2			7, 8	
	3, 4			9, 10	
	7, 8			11, 12	
TB604	1, 2		TB620	1, 2	
	3, 4			3, 4	
	5, 6			5, 6	
	7, 8			9, 10	
				11, 12	

Table 6
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SSPS K600 RELAYS ON PLASTIC

Panel 2-R-48					
Terminal Points		Initial/Date	Terminal Points		Initial/Date
TB607	1, 2		TB624	1, 2	
	3, 4			3, 4	
	5, 6			5, 6	
	9, 10			7, 8	
	11, 12			9, 10	
TB621	1, 2			11, 12	
	3, 4		TB611	1, 2	
	5, 6			3, 4	
	7, 8			7, 8	
TB622	5, 6			9, 10	
	7, 8			11, 12	
TB609	1, 2		TB625	9, 10	
	3, 4			11, 12	
	5, 6		TB612	1, 2	
	7, 8			3, 4	
TB623	1, 2			5, 6	
	3, 4			7, 8	
	5, 6			11, 12	
	7, 8		TB626	1, 2	
	9, 10			3, 4	
	11, 12		TB613	1, 2	
TB610	1, 2			9, 10	
	3, 4			11, 12	
	5, 6		TB627	1, 2	
	7, 8		TB628	5, 6	
	9, 10		TB629	5, 6	
	11, 12			9, 10	

Table 6
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SSPS K600 RELAYS ON PLASTIC

Panel 2-R-48					
Terminal Points		Initial/Date	Terminal Points		Initial/Date
TB630	1, 2		TB635	1, 2	
	3, 4		TB649	1, 2	
	7, 8			9, 10	
	9, 10			11, 12	
TB631	1, 2		TB636	1, 2	
	5, 6			3, 4	
	11, 12			5, 6	
TB632	1, 2			7, 8	
	5, 6		TB650	1, 2	
	9, 10			3, 4	
	11, 12			5, 6	
TB646	5, 6		TB637	1, 2	
	7, 8			5, 6	
	9, 10			7, 8	
	11, 12			9, 10	
TB633	1, 2			11, 12	
	3, 4		TB638	1, 2	
TB647	3, 4			3, 4	
	5, 6			5, 6	
	7, 8		TB652	5, 6	
	9, 10			7, 8	
	11, 12		TB639	11, 12	
TB634	1, 2		TB640	1, 2	
	3, 4		TB641	1, 2	
	5, 6		TB655	1, 2	
	7, 8			9, 10	
TB648	1, 2				

Table 6
(Page 4 of 6)

SSPS K600 RELAYS ON PLASTIC

Panel 2-R-51					
Terminal Points		**Initial/Date**	**Terminal Points**		**Initial/Date**
TB615	5, 6		TB619	1, 2	
	7, 8			3, 4	
	9, 10			5, 6	
	11, 12			7, 8	
TB602	1, 2			9, 10	
	5, 6		TB606	1, 2	
	7, 8			5, 6	
	9, 10			7, 8	
	11, 12			9, 10	
TB616	1, 2			11, 12	
	9, 10		TB620	1, 2	
	11, 12			3, 4	
NOT USED				5, 6	
				9, 10	
				11, 12	
			TB607	1, 2	
				3, 4	
TB617	1, 2			5, 6	
	3, 4			9, 10	
	7, 8			11, 12	
	11, 12		TB621	1, 2	
TB604	1, 2			3, 4	
	3, 4			5, 6	
	5, 6			7, 8	
	7, 8				
TB605	3, 4				

Table 6
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SSPS K600 RELAYS ON PLASTIC

Panel 2-R-51					
Terminal Points		**Initial/Date**	**Terminal Points**		**Initial/Date**
TB622	5, 6		TB625	9, 10	
	7, 8			11, 12	
TB609	1, 2		TB612	3, 4	
	3, 4			5, 6	
	5, 6			7, 8	
	7, 8			11, 12	
TB623	1, 2		TB626	1, 2	
	3, 4			3, 4	
	5, 6		TB613	1, 2	
	7, 8			9, 10	
	9, 10			11 ,12	
	11, 12		TB627	1, 2	
TB610	1, 2		TB628	5, 6	
	3, 4		TB629	5, 6	
	5, 6			9, 10	
	7, 8		TB630	1, 2	
	11, 12			3, 4	
TB624	1, 2			7 ,8	
	3, 4			9, 10	
	5, 6		TB631	1, 2	
	7, 8			5, 6	
	9, 10		TB632	1, 2	
	11, 12			5, 6	
TB611	3, 4			9, 10	
	7, 8			11, 12	
	9, 10				

Table 6
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SSPS K600 RELAYS ON PLASTIC

Panel 2-R-51					
Terminal Points		**Initial/Date**	**Terminal Points**		**Initial/Date**
TB646	7, 8		TB650	1, 2	
	9, 10			3, 4	
TB633	1, 2			5, 6	
	3, 4		TB637	1, 2	
TB647	3, 4			5, 6	
	5, 6			7, 8	
	7, 8			9, 10	
	9, 10			11, 12	
	11, 12		TB638	1, 2	
TB634	1, 2			3, 4	
	3, 4			5, 6	
	5, 6		TB652	5, 6	
	7, 8			7, 8	
TB648	1, 2		TB639	11, 12	
TB 635	1, 2		TB640	1, 2	
	11, 12		TB641	1, 2	
TB649	1, 2		TB655	1, 2	
	3, 4				
	9, 10				
	11, 12				
TB636	1, 2				
	3, 4				
	5, 6				
	7, 8				

Table 7
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SSPS K600 SERIES RELAYS HARD LANDED

Panel 2-R-48			Panel 2-R-51		
Terminal Points		Initial/Date	Terminal Points		Initial/Date
TB607	7, 8		TB607	7, 8	
TB609	9, 10		TB609	9, 10	
TB614	1, 2		TB614	1, 2	
	3, 4			3, 4	
	5, 6			5, 6	
	9, 10			9, 10	
TB644	1, 2		TB644	1, 2	
	3, 4			3, 4	
	5, 6			5, 6	
	7, 8			7, 8	
	9, 10			9, 10	
	11, 12			11, 12	
TB631	9, 10		TB631	9, 10	
TB645	11, 12		TB645	11, 12	
TB634	9, 10		TB634	9, 10	
TB635	3, 4		TB635	3, 4	
TB638	7, 8		TB638	7, 8	
TB653	9, 10		TB653	9, 10	
	11, 12			11, 12	
TB640	3, 4		TB640	3, 4	
TB654	1, 12		TB654	1, 12	
	5, 6			5, 6	
TB641	3, 4		TB641	3, 4	
	5, 6			5, 6	
TB656	11, 12		TB656	11, 12	