OPERATOR: _____

RO ____ SRO ____ DATE:_____

JPM NUMBER: a

TASK NUMBER: U-085-AB-03

TASK TITLE: CRD Pump Trip at <900 psig Reactor Pressure

K/A NUMBER: 201001 A2.01 K/A RATING: RO 3.2 SRO 3.3

TASK STANDARD: Withdraws Control Rod, if withdrawn to position 48; performs a coupling check, ranges IRMs to prevent a full scram signal, and inserts a manual scram; when unable to restore CRD drive water pressure >940 psig.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 2-OI-85 and 2-AOI-85-3

VALIDATION TIME: 15 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are the Reactor Operator. Plant startup is in progress. Last completed Control Rod was 38-43 from 16 to 48, Sequence A2 Group 12. Other Operators are assigned heat up rate monitoring and Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to continue withdrawing controls rods for plant startup, the next control rod is 30-35. Rod Out Notch Override is authorized, complete the withdrawal of group 12 and then continue with group 13.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are the Reactor Operator. Plant startup is in progress. Last completed Control Rod was 38-43 from 16 to 48, Sequence A2 Group 12. Other Operators are assigned heat up rate monitoring and Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to continue withdrawing controls rods for plant startup, the next control rod is 30-35. Rod Out Notch Override is authorized, complete the withdrawal of group 12 and then continue with group 13.

NRC Examiner Steps 1 through 9 are for Continuous withdrawal, steps 10 through 14 are for Notch withdrawal.

START TIME_____

****

Performance Step 1: Critical X Not Critical

6.6.4 Continuous Rod Withdrawal

[1] **SELECT** the desired control rod by depressing the appropriate CRD ROD SELECT pushbutton, 2-XS-85-40.

Standard:

Selects Control Rod 30-35 by depressing 30-35 pushbutton.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical _ Not Critical X

[2] **OBSERVE** the following for selected control rod:

- CRD ROD SELECT pushbutton is brightly ILLUMINATED.
- White light on the Full Core Display ILLUMINATED.
- Rod Out Permit light ILLUMINATED.

Standard:

Observes the above indications.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical _ Not Critical X

[3] **VERIFY** ROD WORTH MINIMIZER operable and LATCHED in to correct ROD GROUP, when Rod Worth Minimizer is enforcing.

Standard:

Verifies Rod Worth Minimizer responded correctly.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical _ Not Critical X

[4] **VERIFY** Control Rod is being withdrawn to a position greater than three notches.

Standard:

Verifies Control Rod 30-35 is going from position 16 to 48.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

NOTE

When continuously withdrawing a control rod to position 48, the control rod coupling integrity check can be performed by one of the two following methods:

1) Coupling integrity check while maintaining the CRD Notch Override Switch in the Override position and the CRD Control Switch in the Rod Out Notch position. If this method is selected, perform Step 6.6.4[6] and N/A Step 6.6.4[7].
2) Coupling integrity check after releasing the CRD Notch Override Switch and the CRD Control Switch. If this method is selected, perform Step 6.6.4[7] and N/A Step 6.6.4[6].

[6] **IF** continuously withdrawing the control rod to position 48 and performing the control rod coupling integrity check in conjunction with withdrawal, **THEN PERFORM** the following: (Otherwise N/A)

[6.1] **PLACE** and **HOLD** CRD NOTCH OVERRIDE, 2-HS-85-47, in NOTCH OVERRRIDE.

[6.2] **PLACE** and **HOLD** CRD CONTROL SWITCH, 2-HS-85-48, in ROD OUT NOTCH.

Standard:

Continuously withdraws Control Rod 30-35 by holding switch, 2-HS-85-47, in Notch Override and, 2-HS-85-48, in Rod Out Notch.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

Driver: When coupling check complete for control rod 30-35, trip operating CRD Pump.

****

Performance Step 6: *Critical X Not Critical

*[6.3] **MAINTAIN** the CRD Notch Override Switch in the Override position and the CRD Control Switch in the Rod Out Notch position, with the control rod at position 48.

[6.4] **CHECK** control rod coupled by observing the following:
- Four rod display digital readout **AND** the full core display digital readout **AND** background light remain illuminated.
- CONTROL ROD OVERTRAVEL annunciator, 2-XA-55-5A, Window 14, does **NOT** alarm.

[6.5] **RELEASE** both CRD NOTCH OVERRIDE, 2-HS-85-47, and CRD CONTROL SWITCH, 2-HS-85-48.

[6.6] **CHECK** control rod settles into position 48 and ROD SETTLE light extinguishes.

Standard:

If control rod is withdrawn to position 48, performs a coupling check.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

Driver: When coupling check complete for control rod 30-35, trip operating CRD Pump.

NRC NOTE these are Contingency Coupling Check

****

Performance Step 7: Critical X Not Critical

[7] **IF** continuously withdrawing the control rod to position 48, the control rod coupling integrity check will be performed after the CRD NOTCH OVERRIDE, 2-HS-85-47, and CRD CONTROL SWITCH, 2-HS-85-48 are to be released. **THEN PERFORM** control rod coupling integrity check as follows (otherwise N/A):

[7.1] **PLACE AND HOLD** CRD NOTCH OVERRIDE, 2-HS-85-47, in NOTCH OVERRRIDE.

[7.2] **PLACE AND HOLD** CRD CONTROL SWITCH, 2-HS-85-48, in ROD OUT NOTCH.

Standard:

Continuously withdraws Control Rod 30-35 by holding switch, 2-HS-85-47, in Notch Override and, 2-HS-85-48, in Rod Out Notch.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: *Critical X Not Critical

[7.3] **WHEN** position 48 is reached, **THEN RELEASE** CRD NOTCH OVERRIDE, 2-HS-85-47, and CRD CONTROL SWITCH, 2-HS-85-48.

*[7.4] **VERIFY** control rod settles into position 48.

Standard:

Stops withdraw of Control Rod 30-35 at position 48 by releasing hand switches and verifies rod settles at position 48.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: *Critical X Not Critical

*[7.5] **PLACE** CRD CONTROL SWITCH, 2-HS-85-48, in ROD OUT NOTCH, and **RELEASE**.

[7.6] **CHECK** control rod coupled by observing the following:
- Four rod display digital readout **AND** full core display digital readout **AND** background light will remain illuminated.
- CONTROL ROD OVERTRAVEL annunciator (2-XA-55-5A, Window 14) does **NOT** alarm.

[7.7] **CHECK** control rod settles into position 48 and ROD SETTLE light extinguishes.

Standard:

If control rod is withdrawn to position 48, performs a coupling check.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

Driver: When coupling check complete for control rod 30-35, trip operating CRD Pump.

NRC NOTE Single Notch Withdrawal Steps

****

Performance Step 10: Critical _ Not Critical X

6.6.3 Control Rod Notch Withdrawal

[1] **SELECT** the desired control rod by depressing the appropriate CRD ROD SELECT pushbutton, 2-XS-85-40.

Standard:

Selects Control Rod 38-43 by depressing 38-43 pushbutton.

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 11: Critical _ Not Critical X

[2] **OBSERVE** the following for selected control rod:

- CRD ROD SELECT pushbutton is brightly ILLUMINATED.
- White light on the Full Core Display ILLUMINATED.
- Rod Out Permit light ILLUMINATED.

Standard:

Observes the above indications.

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 12: Critical _ Not Critical X

[3] **VERIFY** ROD WORTH MINIMIZER operable and LATCHED in to correct ROD GROUP, when Rod Worth Minimizer is enforcing.

Standard:

Verifies Rod Worth Minimizer responded correctly and verified Control Rod 38-43 is going from position 16 to 48.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 13: *Critical X Not Critical

*[4] **PLACE** CRD CONTROL SWITCH, 2-HS-85-48, in ROD OUT NOTCH, and **RELEASE**.

[5] **OBSERVE** the control rod settles into the desired position and the ROD SETTLE light extinguishes.

Standard:

Withdraws control rod 38-43.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 14: *Critical X Not Critical

[6] **IF** control rod is notch withdrawn to rod notch Position 48, **THEN PERFORM** control rod coupling integrity check as follows:

*[6.1] **PLACE** CRD CONTROL SWITCH, 2-HS-85-48, in ROD OUT NOTCH, and **RELEASE**.

[6.2] **CHECK** control rod coupled by observing the following:

- Four rod display digital readout **AND** the full cores display digital readout **AND** background light remain illuminated.
- CONTROL ROD OVERTRAVEL annunciator, 2-XA-55-5A, Window 14, does **NOT** alarm.

[6.3] **CHECK** the control rod settles into Position 48 and the ROD SETTLE light extinguishes.

Standard:

If Control Rod is withdrawn to position 48, performs a coupling check.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

Driver: When coupling check complete for control rod 30-35, trip operating CRD Pump.

****

Performance Step 15: Critical X Not Critical

Operator Ranges IRMs as necessary; to maintain greater than the downscale reading of 7.5/125 and less than the upscale reading of 90/125.

Note: the High-High of 116.4/125 will produce a scram signal.

Standard:

Ranges IRMs to clear or prevent a Rod Block signal.
Note: A Full Scram signal from IRMs while withdrawing control rods will be a failure.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 16: Critical _ Not Critical X

4.1 Immediate Actions

[1] **IF** operating CRD PUMP has failed **AND** the standby CRD Pump is available, **THEN PERFORM** the following at Panel 2-9-5:

[1.1] **PLACE** CRD SYSTEM FLOW CONTROL, 2-FIC-85-11, in MAN at minimum setting.

Standard:

Places CRD System Flow Control in Manual and at Minimum setting.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 17: Critical _ Not Critical X

[1.2] **START** associated standby CRD Pump using one of the following:

- CRD Pump 1B, using 2-HS-85-2A
- CRD Pump 2A, using 2-HS-85-1A

Standard:

Attempts to start standby CRD Pump and may also attempt to start tripped CRD Pump.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 18: Critical X Not Critical

[2] **IF** Reactor Pressure is less than 900 PSIG and either of the following conditions exists:

- In-service CRD Pump tripped and neither CRD Pump can be started, **OR**
- Charging Water Pressure can **NOT** be restored and maintained above 940 PSIG, **THEN PERFORM** the following:

[2.1] **MANUALLY SCRAM** Reactor, **IMMEDIATELY PLACE** the reactor mode switch in the SHUTDOWN position.

Standard:

Insert a Manual Scram and places Mode Switch in Shutdown.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE:	After Scram report another operator will continue in 2-AOI-100-1.

END OF TASK

STOP TIME ___

OPERATOR: _____

RO ____ SRO ____ DATE:_____

JPM NUMBER: a

TASK NUMBER: U-085-AB-03

TASK TITLE: CRD Pump Trip at <900 psig Reactor Pressure

K/A NUMBER: 201001 A2.01 K/A RATING: RO 3.2 SRO 3.3

TASK STANDARD: Withdraws Control Rod, if withdrawn to position 48; performs a coupling check, ranges IRMs to prevent a full scram signal, and inserts a manual scram; when unable to restore CRD drive water pressure >940 psig.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 3-OI-85 and 3-AOI-85-3

VALIDATION TIME: 15 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are the Reactor Operator. Plant startup is in progress. Last completed Control Rod was 38-43 from 16 to 48, Sequence A2 Group 12. Other Operators are assigned heat up rate monitoring and Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to continue withdrawing controls rods for plant startup, the next control rod is 30-35. Rod Out Notch Override is authorized, complete the withdrawal of group 12 and then continue with group 13.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are the Reactor Operator. Plant startup is in progress. Last completed Control Rod was 38-43 from 16 to 48, Sequence A2 Group 12. Other Operators are assigned heat up rate monitoring and Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to continue withdrawing controls rods for plant startup, the next control rod is 30-35. Rod Out Notch Override is authorized, complete the withdrawal of group 12 and then continue with group 13.

NRC Examiner Steps 1 through 9 are for Continuous withdrawal, steps 10 through 14 are for Notch withdrawal.

START TIME_____

****

Performance Step 1: Critical X Not Critical

6.6.4 Continuous Rod Withdrawal

[1] **SELECT** the desired control rod by depressing the appropriate CRD ROD SELECT pushbutton, 3-XS-85-40.

Standard:

Selects Control Rod 30-35 by depressing 30-35 pushbutton.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical _ Not Critical X

[2] **OBSERVE** the following for selected control rod:

- CRD ROD SELECT pushbutton is brightly ILLUMINATED.
- White light on the Full Core Display ILLUMINATED.
- Rod Out Permit light ILLUMINATED.

Standard:

Observes the above indications.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical _ Not Critical X

[3] **VERIFY** ROD WORTH MINIMIZER operable and LATCHED in to correct ROD GROUP, when Rod Worth Minimizer is enforcing.

Standard:

Verifies Rod Worth Minimizer responded correctly.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical _ Not Critical X

[4] **VERIFY** Control Rod is being withdrawn to a position greater than three notches.

Standard:

Verifies Control Rod 30-35 is going from position 16 to 48.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

NOTE

When continuously withdrawing a control rod to position 48, the control rod coupling integrity check can be performed by one of the two following methods:

1) Coupling integrity check while maintaining the CRD Notch Override Switch in the Override position and the CRD Control Switch in the Rod Out Notch position. If this method is selected, perform Step 6.6.4[6] and N/A Step 6.6.4[7].
2) Coupling integrity check after releasing the CRD Notch Override Switch and the CRD Control Switch. If this method is selected, perform Step 6.6.4[7] and N/A Step 6.6.4[6].

[6] **IF** continuously withdrawing the control rod to position 48 and performing the control rod coupling integrity check in conjunction with withdrawal, **THEN PERFORM** the following: (Otherwise N/A)

[6.1] **PLACE** and **HOLD** CRD NOTCH OVERRIDE, 3-HS-85-47, in NOTCH OVERRRIDE.

[6.2] **PLACE** and **HOLD** CRD CONTROL SWITCH, 3-HS-85-48, in ROD OUT NOTCH.

Standard:

Continuously withdraws Control Rod 30-35 by holding switch, 3-HS-85-47, in Notch Override and, 3-HS-85-48, in Rod Out Notch.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

Driver: When coupling check complete for control rod 30-35, trip operating CRD Pump.

****

Performance Step 6: Critical X Not Critical

[6.3] **MAINTAIN** the CRD Notch Override Switch in the Override position and the CRD Control Switch in the Rod Out Notch position, with the control rod at position 48.

*[6.4] **CHECK** control rod coupled by observing the following:
- Four rod display digital readout **AND** the full core display digital readout **AND** background light remain illuminated.
- CONTROL ROD OVERTRAVEL annunciator, 3-XA-55-5A, Window 14, does **NOT** alarm.

[6.5] **RELEASE** both CRD NOTCH OVERRIDE, 3-HS-85-47, and CRD CONTROL SWITCH, 3-HS-85-48.

*[6.6] **CHECK** control rod settles into position 48 and ROD SETTLE light extinguishes.

Standard:

If control rod is withdrawn to position 48, performs a coupling check.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

NRC NOTE these are Contingency Coupling Check

****

Performance Step 7: Critical X Not Critical

[7] **IF** continuously withdrawing the control rod to position 48, the control rod coupling integrity check will be performed after the CRD NOTCH OVERRIDE, 3-HS-85-47, and CRD CONTROL SWITCH, 3-HS-85-48 are to be released. **THEN PERFORM** control rod coupling integrity check as follows (otherwise N/A):

[7.1] **PLACE AND HOLD** CRD NOTCH OVERRIDE, 3-HS-85-47, in NOTCH OVERRRIDE.

[7.2] **PLACE AND HOLD** CRD CONTROL SWITCH, 3-HS-85-48, in ROD OUT NOTCH.

Standard:

Continuously withdraws Control Rod 30-35 by holding switch, 3-HS-85-47, in Notch Override and 3-HS-85-48, in Rod Out Notch.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: *Critical _ Not Critical X

*[7.3] **WHEN** position 48 is reached, **THEN RELEASE** CRD NOTCH OVERRIDE, 3-HS-85-47, and CRD CONTROL SWITCH, 3-HS-85-48.

[7.4] **VERIFY** control rod settles into position 48.

Standard:

Stops withdraw of Control Rod 30-35 at position 48 by releasing hand switches and verifies rod settles at position 48.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: *Critical X Not Critical

*[7.5] **PLACE** CRD CONTROL SWITCH, 3-HS-85-48, in ROD OUT NOTCH, and **RELEASE**.

[7.6] **CHECK** control rod coupled by observing the following:
- Four rod display digital readout **AND** full core display digital readout **AND** background light will remain illuminated.
- CONTROL ROD OVERTRAVEL annunciator (3-XA-55-5A, Window 14) does **NOT** alarm.

[7.7] **CHECK** control rod settles into position 48 and ROD SETTLE light extinguishes.

Standard:

If control rod is withdrawn to position 48, performs a coupling check.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

Driver: When coupling check complete for control rod 30-35, trip operating CRD Pump.

NRC NOTE Single Notch Withdrawal Steps

****

Performance Step 10: Critical X Not Critical

6.6.3 Control Rod Notch Withdrawal

[1] **SELECT** the desired control rod by depressing the appropriate CRD ROD SELECT pushbutton, 3-XS-85-40.

Standard:

Selects Control Rod 30-35 by depressing 30-35 pushbutton.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 11: Critical _ Not Critical X

[2] **OBSERVE** the following for selected control rod:

- CRD ROD SELECT pushbutton is brightly ILLUMINATED.
- White light on the Full Core Display ILLUMINATED.
- Rod Out Permit light ILLUMINATED.

Standard:

Observes the above indications.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 12: Critical _ Not Critical X

[3] **VERIFY** ROD WORTH MINIMIZER operable and LATCHED in to correct ROD GROUP, when Rod Worth Minimizer is enforcing.

Standard:

Verifies Rod Worth Minimizer responded correctly and verified Control Rod 30-35 is going from position 16 to 48.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 13: *Critical X Not Critical

*[4] **PLACE** CRD CONTROL SWITCH, 3-HS-85-48, in ROD OUT NOTCH, and **RELEASE**.

[5] **OBSERVE** the control rod settles into the desired position and the ROD SETTLE light extinguishes.

Standard:

Withdraws control rod 30-35.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 14: *Critical X Not Critical

[6] **IF** control rod is notch withdrawn to rod notch Position 48, **THEN PERFORM** control rod coupling integrity check as follows:

*[6.1] **PLACE** CRD CONTROL SWITCH, 3-HS-85-48, in ROD OUT NOTCH, and **RELEASE**.

[6.2] **CHECK** control rod coupled by observing the following:

- Four rod display digital readout **AND** the full cores display digital readout **AND** background light remain illuminated.
- CONTROL ROD OVERTRAVEL annunciator, 3-XA-55-5A, Window 14, does **NOT** alarm.

[6.3] **CHECK** the control rod settles into Position 48 and the ROD SETTLE light extinguishes.

Standard:

If Control Rod is withdrawn to position 48, performs a coupling check.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

Driver: When coupling check complete for control rod 30-35, trip operating CRD Pump.

****

Performance Step 15: Critical X Not Critical

Operator Ranges IRMs as necessary; to maintain greater than the downscale reading of 7.5/125 and less than the upscale reading of 104.6/125.

Note: the High-High of 116.4/125 will produce a scram signal.

Standard:

Ranges IRMs to clear or prevent a Rod Block signal.
Note: A Full Scram signal from IRMs while withdrawing control rods will be a failure.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 16: Critical _ Not Critical X

4.1 Immediate Actions

[1] **IF** operating CRD PUMP has failed **AND** the standby CRD Pump is available, **THEN PERFORM** the following at Panel 3-9-5:

[1.1] **PLACE** CRD SYSTEM FLOW CONTROL, 3-FIC-85-11, in MAN at minimum setting.

Standard:

Places CRD System Flow Control in Manual and at Minimum setting.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 17: Critical _ Not Critical X

[1.2] **START** associated standby CRD Pump using one of the following:

- CRD Pump 3B, using 3-HS-85-2A
- CRD Pump 3A, using 3-HS-85-1A

Standard:

Attempts to start standby CRD Pump and may also attempt to start tripped CRD Pump.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 18: Critical X Not Critical

[2] **IF** Reactor Pressure is less than 900 PSIG and either of the following conditions exists:

- In-service CRD Pump tripped and neither CRD Pump can be started, **OR**
- Charging Water Pressure can **NOT** be restored and maintained above 940 PSIG, **THEN PERFORM** the following:

[2.1] **MANUALLY SCRAM** Reactor, **IMMEDIATELY PLACE** the reactor mode switch in the SHUTDOWN position.

Standard:

Insert a Manual Scram and places Mode Switch in Shutdown.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

CUE:	After Scram report another operator will continue in 3-AOI-100-1.

END OF TASK

STOP TIME ___

OPERATOR: _____

RO ____ SRO ____ DATE:_____

JPM NUMBER: b

TASK NUMBER: U-003-AL-16

TASK TITLE: RFPT Trip recovery

K/A NUMBER: 259001 A2.01 K/A RATING: RO 3.7 SRO 3.7

TASK STANDARD: RFPT Recovered and restoring Reactor Level prior to an automatic Reactor Scram on Level.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 2-AOI-3-1

VALIDATION TIME: 15 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____

_____

_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are a Reactor Operator. Plant startup is in progress. RFPT C has tripped and it is needed to maintain level.

INITIATING CUE:

The Unit Supervisor directs you to restore RFPT C for level control using Manual Governor Control in accordance with 2-AOI-3-1, Loss of Reactor Feedwater or Reactor Water Level High/Low starting at step 8. Level band is the normal operating band.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are a Reactor Operator. Plant startup is in progress. RFPT C has tripped and it is needed to maintain level.

INITIATING CUE:

The Unit Supervisor directs you to restore RFPT C for level control using Manual Governor Control in accordance with 2-AOI-3-1, Loss of Reactor Feedwater or Reactor Water Level High/Low starting at step 8. Level band is the normal operating band.

START TIME_____

****

Performance Step 1: *Critical X Not Critical

[8] **IF** RFPT has tripped and needed to maintain level, **THEN PERFORM** the following:

[8.1] **OBTAIN SRO** permission to restart RFPT.

*[8.2] **RESET** trip by using pushbutton.

Standard:

Resets trip by depressing reset pushbutton for RFPT C

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical X Not Critical

[8.3] **DEPRESS** RFPT Speed Control Raise/Lower switch to MANUAL GOVERNOR position.

Standard:

Depresses RFPT C Speed Control Raise/Lower switch to Manual Governor position.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical X Not Critical

[8.4] **PLACE** RFPT Start/Local enable switch to START.

Standard:

Places RFPT C Start/Local enable switch to Start.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical _ Not Critical X

[8.5] **VERIFY** RFPT accelerates to approximately 600 rpm.

Standard:

Verifies RFPT C accelerates

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

[8.7] For Slow Recovery of RFPT in MANUAL GOVERNOR, **RAISE** RFPT speed using RFPT Speed Control Raise/Lower switch until desired flow is obtained.

Standard:

Raises speed of RFPT C using RFPT Speed Control switch and restores and maintains Reactor Level

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

END OF TASK

STOP TIME ___

OPERATOR: _____

RO ____ SRO ____ DATE:_____

JPM NUMBER: b

TASK NUMBER: U-003-AL-16

TASK TITLE: RFPT Trip recovery

K/A NUMBER: 259001 A2.01 K/A RATING: RO 3.7 SRO 3.7

TASK STANDARD: RFPT Recovered and restoring Reactor Level prior to an automatic Reactor Scram on Level.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 3-AOI-3-1

VALIDATION TIME: 15 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____

_____

_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are a Reactor Operator. Plant startup is in progress. RFPT C has tripped and it is needed to maintain level.

INITIATING CUE:

The Unit Supervisor directs you to restore RFPT C for level control using Manual Governor Control in accordance with 3-AOI-3-1, Loss of Reactor Feedwater or Reactor Water Level High/Low starting at step 11. Level Band is the normal operating band.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are a Reactor Operator. Plant startup is in progress. RFPT C has tripped and it is needed to maintain level.

INITIATING CUE:

The Unit Supervisor directs you to restore RFPT C for level control using Manual Governor Control in accordance with 3-AOI-3-1, Loss of Reactor Feedwater or Reactor Water Level High/Low starting at step 11. Level Band is the normal operating band.

START TIME_____

****

Performance Step 1: * Critical X Not Critical

[11] **IF** RFPT has tripped and it is needed to maintain level, **THEN PERFORM** the following:

[11.1] **OBTAIN** Unit Supervisor permission to restart RFPT.

*[11.2] **RESET** trip by using pushbutton.

Standard:

Resets trip by depressing reset pushbutton for RFPT C

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical X Not Critical

[11.3] **DEPRESS** RFPT Speed Control Raise/Lower switch to MANUAL GOVERNOR position.

Standard:

Depresses RFPT C Speed Control Raise/Lower switch to Manual Governor position.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical X Not Critical

[11.4] **PLACE** RFPT Start/Local enable switch to START.

Standard:

Places RFPT C Start/Local enable switch to Start.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical _ Not Critical X

[11.5] **VERIFY** RFPT accelerates to approximately 600 rpm.

Standard:

Verifies RFPT C accelerates

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

[11.7] **IF** Slow Recovery of RFPT in MANUAL GOVERNOR is desired, **THEN RAISE** RFPT speed using RFPT Speed Control Raise/Lower switch until desired flow is obtained.

Standard:

Raises speed of RFPT C using RFPT Speed Control switch and restores and maintains Reactor Level

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

END OF TASK

STOP TIME ___

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: c

TASK NUMBER: U-000-EM-50

TASK TITLE: 2-EOI APPENDIX-11D Alternate RPV Pressure control Systems-Main Steamline Drains and/or Turbine and RFPT Drains

K/A NUMBER: 239001 A1.08 K/A RATING: RO 3.8 SRO 3.8

TASK STANDARD: Establish alternate pressure control with Main Steamline drains, Turbine and RFPT drains

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 2-EOI APPENDIX-11D

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are a Unit 2 Operator. Unit 2 reactor has scrammed. Emergency depressurization is not required but alternate means of pressure control is required. Turbine Bypass valves are NOT available. EOI-1 has been followed to RC/P-11. Another Operator is assigned Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to establish alternate pressure control as directed by 2-EOI Appendix 11D Alternate RPV Pressure control Systems-Main Steamline Drains and/or Turbine and RFPT Drains and maintain Reactor Pressure 700 to 900 psig.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect, if applicable). When you have completed your assigned task, you will say "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are a Unit 2 Operator. Unit 2 reactor has scrammed. Emergency depressurization is not required but alternate means of pressure control is required. Turbine Bypass valves are NOT available. EOI-1 has been followed to RC/P-11. Another Operator is assigned Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to establish alternate pressure control as directed by 2-EOI Appendix 11D Alternate RPV Pressure control Systems-Main Steamline Drains and/or Turbine and RFPT Drains and maintain Reactor Pressure 700 to 900 psig.

START TIME_____

****

Performance Step 1: Critical _ Not Critical X

1. IF BOTH of the following exist:

   - Emergency RPV Depressurization is required,
     AND
   - Group 1 Isolation Signal exists,

   THEN **EXIT** this procedure and **ENTER** EOI Appendix 11H.

Standard:

Given in initial conditions, does not exit procedure

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical _ Not Critical X

2. **VERIFY** hotwell pressure below -7 in. Hg.

Standard:

Verifies hotwell pressure less than -7 in. Hg.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical _ Not Critical X

3. **CONTROL** RPV pressure with Main Steam line drains as follows:

a. **VERIFY** PCIS reset.

Standard:

Verifies PCIS Reset

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical X Not Critical

b. **OPEN** the following valves (Panel 9-3):

- 2-FCV-1-55, MN STM LINE DRAIN INBD ISOLATION VLV
- 2-FCV-1-56, MN STM LINE DRAIN OUTBD ISOLATION VLV
- 2-FCV-1-58, UPSTREAM MSL DRAIN TO CONDENSER

Standard:

Opens 2-FCV-1-55, 2-FCV-1-56, and 2-FCV-1-58

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

4. **THROTTLE** 2-FCV-1-59, DOWNSTREAM MSL DRAIN TO CONDENSER, as necessary to control cooldown rate.

Standard:

Throttles 2-FCV-1-59 open and control cooldown rate

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: If necessary when 2-FCV-1-59 is full open, Direct Operator that "Additional RPV Pressure Control is necessary"

****

Performance Step 6: Critical X Not Critical

5. IF At least one main steam line is open AND
EITHER of the following exist:

Turbine bypass valves are NOT available,
OR
Additional RPV pressure control is necessary,

THEN **CONTROL** RPV pressure with Main Turbine and RFPT drains as follows:

a. **OPEN** the following Main Turbine Drain valves (Panel 9-7):

- 2-FCV-6-100, STOP VALVE 1 BEFORE SEAT DR VLV
- 2-FCV-6-101, STOP VALVE 2 BEFORE SEAT DR VLV
- 2-FCV-6-102, STOP VALVE 3 BEFORE SEAT DR VLV
- 2-FCV-6-103, STOP VALVE 4 BEFORE SEAT DR VLV

Standard:

Opens 2-FCV-6-100, 2-FCV-6-101, 2-FCV-6-102, and 2-FCV-6-103

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical X Not Critical

b. **OPEN** the following RFPT drain valves (Panel 9-6):

- 2-FCV-6-122, RFPT 2A HP STOP VLV ABOVE SEAT DR
- 2-FCV-6-127, RFPT 2B HP STOP VLV ABOVE SEAT DR
- 2-FCV-6-132, RFPT 2C HP STOP VLV ABOVE SEAT DR

Standard:

Opens 2-FCV-6-122, 2-FCV-6-127, and 2-FCV-6-132

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE:	Another Operator is working on other means of Pressure Control

END OF TASK

STOP TIME_____

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: c

TASK NUMBER: U-000-EM-50

TASK TITLE: 3-EOI APPENDIX-11D Alternate RPV Pressure control Systems-Main Steamline Drains and/or Turbine and RFPT Drains

K/A NUMBER: 239001 A1.08 K/A RATING: RO 3.8 SRO 3.8

TASK STANDARD: Establish alternate pressure control with Main Steamline drains, Turbine and RFPT drains

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 3-EOI APPENDIX-11D

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are a Unit 3 Operator. Unit 3 reactor has scrammed. Emergency depressurization is not required but alternate means of pressure control is required. Turbine Bypass valves are NOT available. EOI-1 has been followed to RC/P-11. Another Operator is assigned Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to establish alternate pressure control as directed by 3-EOI Appendix-11D Alternate RPV Pressure Control Systems Main Steam Line Drains and/or Turbine and RFPT Drains and maintain Reactor Pressure 700 to 900 psig.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect, if applicable). When you have completed your assigned task, you will say "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are a Unit 3 Operator. Unit 3 reactor has scrammed. Emergency depressurization is not required but alternate means of pressure control is required. Turbine Bypass valves are NOT available. EOI-1 has been followed to RC/P-11. Another Operator is assigned Reactor Level Control.

INITIATING CUE:

The Unit Supervisor directs you to establish alternate pressure control as directed by 3-EOI Appendix-11D Alternate RPV Pressure Control Systems Main Steam Line Drains and/or Turbine and RFPT Drains and maintain Reactor Pressure 700 to 900 psig.

START TIME_____

****

Performance Step 1: Critical _ Not Critical X

1. IF BOTH of the following exist:

   - Emergency RPV Depressurization is required,
     AND
   - Group 1 Isolation Signal exists,

   THEN **EXIT** this procedure and **ENTER** EOI Appendix 11H.

Standard:

Given in initial conditions, does not exit procedure

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 2: Critical _ Not Critical X

2. **VERIFY** hotwell pressure below -7 in. Hg.

Standard:

Verifies hotwell pressure less than -7 in. Hg.

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 3: Critical _ Not Critical X

3. **CONTROL** RPV pressure with Main Steam line drains as follows:

a. **VERIFY** PCIS reset.

Standard:

Verifies PCIS Reset

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 4: Critical X Not Critical

b. **OPEN** the following valves (Panel 3-9-3):

- 3-FCV-1-55, MN STM LINE DRAIN INBD ISOLATION VLV
- 3-FCV-1-56, MN STM LINE DRAIN OUTBD ISOLATION VLV
- 3-FCV-1-58, UPSTREAM MSL DRAIN TO CONDENSER

Standard:

Opens 3-FCV-1-55, 3-FCV-1-56, and 3-FCV-1-58

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

4. **THROTTLE** 3-FCV-1-59, DOWNSTREAM MSL DRAIN TO CONDENSER, as necessary to control cooldown rate.

Standard:

Throttles 3-FCV-1-59 open and control cooldown rate

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: If necessary when 3-FCV-1-59 is full open, Direct Operator that "Additional RPV Pressure Control is necessary"

****

Performance Step 6: Critical X Not Critical

5. IF At least one main steam line is open AND
EITHER of the following exist:

Turbine bypass valves are NOT available,
OR
Additional RPV pressure control is necessary,

THEN **CONTROL** RPV pressure with Main Turbine and RFPT drains as follows:

a. **OPEN** the following Main Turbine Drain valves (Panel 3-9-7):

- 3-FCV-6-100, STOP VALVE 1 BEFORE SEAT DR VLV
- 3-FCV-6-101, STOP VALVE 2 BEFORE SEAT DR VLV
- 3-FCV-6-102, STOP VALVE 3 BEFORE SEAT DR VLV
- 3-FCV-6-103, STOP VALVE 4 BEFORE SEAT DR VLV

Standard:

Opens 3-FCV-6-100, 3-FCV-6-101, 3-FCV-6-102, and 3-FCV-6-103

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical X Not Critical

b. **OPEN** the following RFPT drain valves (Panel 3-9-6):

- 3-FCV-6-122, RFPT 3A HP STOP VLV ABOVE SEAT DR
- 3-FCV-6-127, RFPT 3B HP STOP VLV ABOVE SEAT DR
- 3-FCV-6-132, RFPT 3C HP STOP VLV ABOVE SEAT DR

Standard:

Opens 3-FCV-6-122, 3-FCV-6-127, and 3-FCV-6-132

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE:	Another Operator is working on other means of Pressure Control

END OF TASK

STOP TIME_____

OPERATOR: _____

RO ____ SRO ____ DATE:_____

JPM NUMBER: d

TASK NUMBER: U-000-EM-50

TASK TITLE: 2-EOI-APPENDIX-8F – Restore Reactor and Refuel Zone Ventilation Fans following a Group 6 Isolation

K/A NUMBER: 295032 EA1 .03 K/A RATING: RO 3.7 SRO 3.7

TASK STANDARD: Restore Reactor and Refuel Zone Ventilation Fans following a Group 6 Isolation

PERFORMANCE LOCATION: Simulator

REFERENCES/PROCEDURES NEEDED: 2-EOI-Appendix-8F

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED:

PERFORMANCE TIME:

COMMENTS: _____

_____

_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are an Operator. Unit 2 reactor has scrammed and a Group 6 isolation has occurred from RPV low level. EOI-1 has been entered and followed to RC/P-8. The US wants the reactor and refueling zone ventilation systems restored. No other Group 6 isolation signals exist. Appendix 8E, Bypassing Group 6 RPV Low Level and High Drywell Pressure Isolation Interlocks, has been completed.

INITIATING CUE:

The Unit Supervisor directs you to restore reactor and refuel zone ventilation as directed by 2-EOI Appendix-8F. SGTS is required for Operation and fast speed operation is desired for Reactor and Refuel Zone Ventilation.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are an Operator. Unit 2 reactor has scrammed and a Group 6 isolation has occurred from RPV low level. EOI-1 has been entered and followed to RC/P-8. The US wants the reactor and refueling zone ventilation systems restored. No other Group 6 isolation signals exist. Appendix 8E, Bypassing Group 6 RPV Low Level and High Drywell Pressure Isolation Interlocks, has been completed.

INITIATING CUE:

The Unit Supervisor directs you to restore reactor and refuel zone ventilation as directed by 2-EOI Appendix-8F. SGTS is required for Operation and fast speed operation is desired for Reactor and Refuel Zone Ventilation.

START TIME_____

****

Performance Step 1: Critical X Not Critical

1. **VERIFY** PCIS Reset.

Standard:

Resets PCIS

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical X Not Critical

2. **PLACE** Refuel Zone Ventilation in service as follows (Panel 2-9-25):

   a. **VERIFY** 2-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch is in OFF.

Standard:

Places 2-HS-64-3A in the Off position.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical X Not Critical

   b. **PLACE** 2-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch to SLOW A (SLOW B).

Standard:

Places 2-HS-64-3A to SLOW A or SLOW B position.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical _ Not Critical X

c. **CHECK** two SPLY/EXH A(B) green lights above 2-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch extinguish and two SPLY/EXH A(B) red lights illuminate.

Standard:

Verifies proper combination of lights On and Off above 2-HS-64-3A.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical _ Not Critical X

d. **VERIFY OPEN** the following dampers:

- 2-FCO-64-5, REFUEL ZONE SPLY OUTBD ISOL DMPR
- 2-FCO-64-6, REFUEL ZONE SPLY INBD ISOL DMPR
- 2-FCO-64-9, REFUEL ZONE EXH OUTBD ISOL DMPR
- 2-FCO-64-10, REFUEL ZONE EXH INBD ISOL DMPR

Standard:

Verifies Red position indicating lamps On for dampers listed above

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical X Not Critical

3. **PLACE** Reactor Zone Ventilation in service as follows (Panel 2-9-25):

   a. **VERIFY** 2-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch is in OFF.

Standard:

Places 2-HS-64-11A in the Off position.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical X Not Critical

   b. **PLACE** 2-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch in SLOW A (SLOW B).

Standard:

Places 2-HS-64-11A to SLOW A or SLOW B position.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: Critical _ Not Critical X

c. **CHECK** two SPLY/EXH A(B) green lights above 2-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch extinguish and two SPLY/EXH A(B) red lights illuminate.

Standard:

Verifies proper combination of lights On and Off above 2-HS-64-3A.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: Critical _ Not Critical X

d. **VERIFY OPEN** the following dampers:

- 2-FCO-64-13, REACTOR ZONE SPLY OUTBD ISOL DMPR
- 2-FCO-64-14, REACTOR ZONE SPLY INBD ISOL DMPR
- 2-FCO-64-42, REACTOR ZONE EXH INBD ISOL DMPR
- 2-FCO-64-43, REACTOR ZONE EXH OUTBD ISOL DMPR

Standard:

Verifies Red position indicating lamps On for dampers listed above

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 10: Critical _ Not Critical X

4. IF SGTS is NOT required for operation, THEN **SECURE** SGTS as follows:

Standard:

Given in Initial conditions that SGTS is required.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 11: Critical _ Not Critical X

5. IF Reactor Zone Fan fast speed is desired following 5 minutes of slow speed operation, THEN **PLACE** 2-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch in FAST A (FAST B).

Standard:

Places 2-HS-64-11A in either FAST A or FAST B position in accordance with which set of fans were started in slow

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Five Minutes has elapsed

****

Performance Step 12: Critical _ Not Critical X

6. IF Refuel Zone Fan fast speed is desired following 5 minutes of slow speed operation, THEN **PLACE** 2-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch in FAST A (FAST B).

Standard:

Places 2-HS-64-3A in either FAST A or FAST B position in accordance with which set of fans were started in slow.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Five Minutes has elapsed

END OF TASK

STOP TIME: _____

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: d

TASK NUMBER: U-000-EM-50

TASK TITLE: 3-EOI APPENDIX-8F – Restore Reactor and Refuel Zone Ventilation Fans following a Group 6 Isolation

K/A NUMBER: 295032 EA1 .03 K/A RATING: RO 3.7 SRO 3.7

TASK STANDARD: Restore Reactor and Refuel Zone Ventilation Fans following a Group 6 Isolation

PERFORMANCE LOCATION: Simulator

REFERENCES/PROCEDURES NEEDED: 3-EOI Appendix-8F

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED:

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are an Operator. Unit 3 reactor has scrammed and a Group 6 isolation has occurred from RPV low level. EOI-1 has been entered and followed to RC/P-8. The US wants the reactor and refueling zone ventilation systems restored. No other Group 6 isolation signals exist. Appendix 8E, Bypassing Group 6 RPV Low Level and High Drywell Pressure Isolation Interlocks, has been completed.

INITIATING CUE:

The Unit Supervisor directs you to restore reactor and refuel zone ventilation as directed by 3-EOI Appendix-8F. SGTS is required for Operation and fast speed operation is desired for Reactor and Refuel Zone Ventilation.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are an Operator. Unit 3 reactor has scrammed and a Group 6 isolation has occurred from RPV low level. EOI-1 has been entered and followed to RC/P-8. The US wants the reactor and refueling zone ventilation systems restored. No other Group 6 isolation signals exist. Appendix 8E, Bypassing Group 6 RPV Low Level and High Drywell Pressure Isolation Interlocks, has been completed.

INITIATING CUE:

The Unit Supervisor directs you to restore reactor and refuel zone ventilation as directed by 3-EOI Appendix-8F. SGTS is required for Operation and fast speed operation is desired for Reactor and Refuel Zone Ventilation.

START TIME_____

****

Performance Step 1: Critical X Not Critical

1. **VERIFY** PCIS Reset.

Standard:

Resets PCIS

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 2: Critical X Not Critical

2. **PLACE** Refuel Zone Ventilation in service as follows (Panel 3-9-25):

   a. **VERIFY** 3-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch is in OFF.

Standard:

Places 3-HS-64-3A in the Off position.

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 3: Critical X Not Critical

   b. **PLACE** 3-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch to SLOW A (SLOW B).

Standard:

Places 3-HS-64-3A to SLOW A or SLOW B position.

SAT__ UNSAT__ N/A __COMMENTS:_____

_____

****

Performance Step 4: Critical _ Not Critical X

c. **CHECK** two SPLY/EXH A(B) green lights above 3-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch extinguish and two SPLY/EXH A(B) red lights illuminate.

Standard:

Verifies proper combination of lights On and Off above 3-HS-64-3A.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical _ Not Critical X

d. **VERIFY OPEN** the following dampers:

- 3-FCO-64-5, REFUEL ZONE SPLY OUTBD ISOL DMPR
- 3-FCO-64-6, REFUEL ZONE SPLY INBD ISOL DMPR
- 3-FCO-64-9, REFUEL ZONE EXH OUTBD ISOL DMPR
- 3-FCO-64-10, REFUEL ZONE EXH INBD ISOL DMPR

Standard:

Verifies Red position indicating lamps On for dampers listed above

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical X Not Critical

3. **PLACE** Reactor Zone Ventilation in service as follows (Panel 3-9-25):

   a. **VERIFY** 3-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch is in OFF.

Standard:

Places 3-HS-64-11A in the Off position.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical X Not Critical

   b. **PLACE** 3-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch in SLOW A (SLOW B).

Standard:

Places 3-HS-64-11A to SLOW A or SLOW B position.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: Critical _ Not Critical X

c. **CHECK** two SPLY/EXH A(B) green lights above 3-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch extinguish and two SPLY/EXH A(B) red lights illuminate.

Standard:

Verifies proper combination of lights On and Off above 3-HS-64-3A.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: Critical _ Not Critical X

d. **VERIFY OPEN** the following dampers:

- 3-FCO-64-13, REACTOR ZONE SPLY OUTBD ISOL DMPR
- 3-FCO-64-14, REACTOR ZONE SPLY INBD ISOL DMPR
- 3-FCO-64-42, REACTOR ZONE EXH INBD ISOL DMPR
- 3-FCO-64-43, REACTOR ZONE EXH OUTBD ISOL DMPR

Standard:

Verifies Red position indicating lamps On for dampers listed above

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 10: Critical _ Not Critical X

4. IF SGTS is NOT required for operation, THEN **SECURE** SGTS as follows:

Standard:

Given in Initial conditions that SGTS is required.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 11: Critical _ Not Critical X

5. IF Reactor Zone Fan fast speed is desired following 5 minutes of slow speed operation, THEN **PLACE** 3-HS-64-11A, REACTOR ZONE FANS AND DAMPERS, control switch in FAST A (FAST B).

Standard:

Places 3-HS-64-11A in either FAST A or FAST B position in accordance with which set of fans were started in slow

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Five Minutes has elapsed

****

Performance Step 12: Critical _ Not Critical X

6. IF Refuel Zone Fan fast speed is desired following 5 minutes of slow speed operation, THEN **PLACE** 3-HS-64-3A, REFUEL ZONE FANS AND DAMPERS, control switch in FAST A (FAST B).

Standard:

Places 3-HS-64-3A in either FAST A or FAST B position in accordance with which set of fans were started in slow.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Five Minutes has elapsed

END OF TASK

STOP TIME: _____

OPERATOR: _____

RO ____ SRO ____ DATE:_____

JPM NUMBER: e

TASK NUMBER: U-000-SS-25

TASK TITLE: Energize 4 KV SD BDs A, C, and D from Unit 3 DGs

K/A NUMBER: 264000 A4.04 K/A RATING: RO 3.7 SRO 3.7

TASK STANDARD: 4 KV SD BDs A and C energized from Unit 3 DGs during a Unit 1 and 2 Diesel Generator Building Fire. DG D Emergency Shutdown due to Low Lube Oil Pressure

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 0-SSI-20

VALIDATION TIME: 15 minutes

MAX. TIME ALLOWED: NOT TIME CRITICAL Alternate Path

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are an Operator on Unit 3, the plant is operating in 0-SSI-20 Unit 1 and 2 Diesel Generator Building fire. All three units have been scrammed. An Assistant Unit Operator has been dispatched to the DGs.

INITIATING CUE:

The Unit Supervisor directs you to complete attachment 6, Unit 3 Panel 9-23 Actions of 0-SSI-20.

Time Critical

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are an Operator on Unit 3, the plant is operating in 0-SSI-20 Unit 1 and 2 Diesel Generator Building fire. All three units have been scrammed. An Assistant Unit Operator has been dispatched to the DGs.

INITIATING CUE:

The Unit Supervisor directs you to complete attachment 6, Unit 3 Panel 9-23 Actions of 0-SSI-20.

Time Critical

START TIME_____

****

Performance Step 1: Critical X Not Critical

1.0 ENERGIZING 4KV SHUTDOWN BOARDS A, C, AND D FROM UNIT 3 DIESEL GENERATORS 3A, 3C, AND 3D USING UNIT INTERTIE

(20 Min)

NOTE

The following steps will energize 4KV Shutdown Boards A, C, and D from Unit 3 Diesel Generators as the only source.

[1] Notification has been received from the Unit 2 Unit Supervisor to perform this section.

[2] **PROCEED TO** Panel 3-9-23, AND **PERFORM** the following to align Shutdown Board 3EA:

[2.1] **VERIFY** DG 3A CONTROL switch, 3-HS-82-3A/1A, in START.

Standard:

Starts DG 3A

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical X Not Critical

[2.2] **VERIFY** 4KV SD BD 3EA AUTO TO MANUAL TRIP pushbutton, 3-HS-211-3EA, in MANUAL.

Standard:

Depresses 3-HS-211-3EA

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

NRC NOTE: Trip to Manual allows the Normal Feeder Breaker to Open, if not in Manual Normal Feeder Breaker will NOT Open in next step

****

Performance Step 3: Critical X Not Critical

[2.3] **VERIFY** 4KV SD BD 3EA NORM FDR BKR 1334, 3-HS-211-3EA/7A, in TRIP.

Standard:

Trips Normal Feeder Breaker 1334

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical _ Not Critical X

[2.4] **VERIFY** DG 3A BKR 1838 CLOSED.

Standard:

Verifies DG Breaker 1838 closes

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

[2.5] **PLACE** 4KV SD BD 3EA EMER FDR BKR 1844, 3-HS-211-3EA/1A, in CLOSE.

Standard:

Closes Emergency Feeder Breaker 1844

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical X Not Critical

[3] **PERFORM** the following to align 4KV Shutdown Board 3EC:

[3.1] **VERIFY** DG 3C CONTROL switch, 3-HS-82-3C/1A, in START.

Standard:

Starts DG 3C

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical X Not Critical

[3.2] **VERIFY** 4KV SD BD 3EC AUTO TO MANUAL TRIP pushbutton, 3-HS-211-3EC, in MANUAL.

Standard:

Depresses 3-HS-211-3EC

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: Critical X Not Critical

[3.3] **VERIFY** 4KV SD BD 3EC NORM FDR BKR 1338, 3-HS-211-3EC/12A, in TRIP.

Standard:

Trips Normal Feeder Breaker 1338

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: Critical _ Not Critical X

[3.4] **VERIFY** DG 3C BKR 1832 CLOSED.

Standard:

Verifies DG Breaker 1832 closes

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 10: Critical X Not Critical

[3.5] **PLACE** 4KV SD BD 3EC EMER FDR BKR 1834, 3-HS-211-3EC/6A, in CLOSE.

Standard:

Closes Emergency Feeder Breaker 1834

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 11: Critical X Not Critical

[4] **PERFORM** the following to align 4KV Shutdown Board 3ED:

[4.1] **VERIFY** DG 3D CONTROL switch, 3-HS-82-3D/1A, in START.

Standard:

Starts DG 3D

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

DRIVER: after DG is started enter trigger 1 for Low Lube Oil Pressure

****

Performance Step 12: Critical _ Not Critical X

RESPONDS to the Alarm 9-23D WIN 4 (DIESEL GEN D LUBE OIL ABNORMAL) and notices the AMBER LIGHT (LOW LOW OIL PRESSURE)

Standard:

Responds per the ARP and Verifies the AMBER LIGHT is lit.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: If Assistant Unit Operator is called, After Lube oil pressure alarm is received on 9-23, report lube oil pressure low at 5 psig and Lube Oil is spraying out of a damaged coupling

****

Performance Step 13: Critical X Not Critical

DIESEL GEN 3D LUBE OIL ABNORMAL Window 4

SHUT DOWN the DG by Emergency Stop Pushbutton

Standard:

Shuts Down the DG with the Emergency Stop Pushbutton.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: If asked, continued operation of DG D is not absolutely necessary.

Examiner note: ALARM on 9-23D win 4 DG D LUBE OIL ABNORMAL will alarm and LOW LOW OIL PRESSURE LIGHT for D DG will illuminate, the operator should respond per the ARP.

****

Performance Step 15: Critical _ Not Critical X

[5] **NOTIFY** Unit 2 Unit Supervisor of the completion of this section.

[6] **PROCEED TO** 480V RMOV Board 3C in preparation of performing Section 2.0.

Standard:

Notifies Unit Supervisor

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Remain in Control Room another Operator has been dispatched to 480V RMOV Board 3C. JPM Complete

END OF TASK

STOP TIME ___

OPERATOR:_____

RO ____ SRO ____ DATE:_____

JPM NUMBER: f

TASK NUMBER: 0-74-AB-01

TASK TITLE: Loss of Shutdown Cooling

K/A NUMBER: 295021 AA1.02 K/A RATING: RO 3.5 SRO 3.5

TASK STANDARD: Restores shutdown cooling following an inadvertent RPS actuation, will restore shutdown cooling with RHR Pump 2A and establish a cooldown IAW 2-AOI-74-1.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 2-AOI-74-1

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ___ UNSATISFACTORY ___

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS: You are a Unit 2 operator. Unit 2 is in Mode 3 (Recirc Loop B temp > 212°F) heading towards cold conditions for a refueling outage. RHR Loop I using 2A RHR Pump was in shutdown cooling. Unit 1 is carrying 2000 gpm for RHRSW Pumps 'A2' and 'C2'. An inadvertent loss of 2B RPS bus resulted in a partial isolation of RHR shutdown cooling. RPS 2B has been restored on the alternate supply. Another operator is assisting with recovery from the loss of 2B RPS. An Auxiliary Operator is standing by for 2A RHR Pump start.

INITIATING CUES: The Unit Supervisor directs you to restore shutdown cooling using 2A RHR pump in accordance with 2-AOI-74-1 starting at step 12.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS: You are a Unit 2 operator. Unit 2 is in Mode 3 (Recirc Loop B temp > 212°F) heading towards cold conditions for a refueling outage. RHR Loop I using 2A RHR Pump was in shutdown cooling. Unit 1 is carrying 2000 gpm for RHRSW Pumps 'A2' and 'C2'. An inadvertent loss of 2B RPS bus resulted in a partial isolation of RHR shutdown cooling. RPS 2B has been restored on the alternate supply. Another operator is assisting with recovery from the loss of 2B RPS. An Auxiliary Operator is standing by for 2A RHR Pump start.

INITIATING CUES: The Unit Supervisor directs you to restore shutdown cooling using 2A RHR pump in accordance with 2-AOI-74-1 starting at step 12.

START TIME _____

****

Performance Step 1: Critical Not Critical X

[12] **IF** the loss of Shutdown Cooling is due to Group 2 PCIS isolation, **THEN** (Otherwise **N/A**)

WHEN conditions permit resetting Group 2 PCIS isolation are met, **PERFORM** the following:

[12.1] **RESET** Group 2 isolation by momentarily PLACING PCIS DIV I RESET, 2-HS-64-16A-S32, and PCIS DIV II RESET, 2-HS-64-16A-S33, in reset.

Standard:

On Panel 2-9-4, RESETS Group 2 isolation by momentarily PLACING PCIS DIV I RESET, 2-HS-64-16A-S32, in reset and PCIS Div II RESET, 2-HS-64-16A-S33 to reset.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical Not Critical X

[12.2] **MOMENTARILY DEPRESS** RHR SYS I(II) SD CLG INBD INJECT ISOL RESET, 2-XS-74-126 and 2-XS-74-132. **VERIFY 2**-IL-74-126 and 2-IL-74-132 extinguished.

Standard:

Momentarily Depresses RHR SYS I SD CLG INBD INJECT ISOL RESET, 2-XS-74-132 and verifies 2-IL-74-132 extinguished.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical Not Critical X

[13] **IF** the loss of Shutdown Cooling is due to Group 2 PCIS **AND** the isolation signal fails to reset, or remain reset due to invalid and/or sporadic signals, **THEN** (Otherwise **N/A**)

Standard:

N/As all Step 4.2[13], the PCIS signal is reset in step 12.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical X Not Critical

[14] **IF** the Group 2 PCIS Isolation has been reset, **THEN** (otherwise **N/A**)

RETURN the affected loop of RHR to Shutdown Cooling as follows:

[14.1] **CLOSE** RHR SYS I LPCI OUTBD INJECT VALVE, 2-FCV-74-52.

Standard:

Closes 2-FCV-74-52

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical Not Critical X

[14.2] **OPEN** RHR SYS I LPCI INBD INJECT VALVE, 2-FCV-74-53.

Standard:

Opens 2-FCV-74-53

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical Not Critical X

[14.3] **VERIFY** RHR SYSTEM I MIN FLOW INHIBIT switch, 2-HS-74-148 in INHIBIT

Standard:

Verifies 2-HS-74-148 in INHIBIT.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical Not Critical X

[14.4] **VERIFY CLOSED** RHR SYSTEM I MIN FLOW VALVE, 2-FCV-74-7.

Standard:

Verifies 2-FCV-74-7 is closed.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: Critical Not Critical X

[14.5] **VERIFY CLOSED** RHR PUMP 2A and 2C SUPPR POOL SUCT VLVs, 2-FCV-74-1 and 2-FCV-74-12.

Standard:

Verifies 2-FCV-74-1 & 12 are closed.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: Critical Not Critical X

[14.6] **VERIFY OPEN** RHR PUMP 2A and 2C SD COOLING SUCT VLVs, 2-FCV-74-2 and 2-FCV-74-13.

Standard:

Verifies 2-FCV-74-2 & 13 are open.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 10: *Critical X Not Critical

[14.7] **OPEN** RHR SHUTDOWN COOLING SUCT OUTBD and INBD ISOL VLVs, 2-FCV-74-47 and 2-FCV-74-48.

Standard:

Opens *2-HS-74-47 and verifies 2-FCV-74-48 open.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 11: Critical X Not Critical

[14.8] **IF** the tripped pump has been determined to be in operating condition and with Unit Supervisor permission,
THEN: RESTART tripped RHR pump(s) RHR PUMP 2A using 2-HS-74-5A

Standard:

Starts 2A RHR Pump

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

Cue: The Auxiliary Operator has determined the pump to be in operating condition.

RHR Pump Start Time _____

****

Performance Step 12: Critical X Not Critical

[14.9] **THROTTLE** RHR SYS I LPCI OUTBD INJECT VALVE, 2-FCV-74-52, to establish and maintain RHR flow as indicated by 2-FI-74-50, RHR SYS I FLOW, as follows:

RHR Pumps in Operation	**1**	**2**
Loop Flow	7,000 to 10,000 gpm	14,000 to 20,000 gpm
Loop Flow (1 or more fuel bundles removed from core)	6,000 to 6,500 gpm	N/A

Standard:

Manipulates 2-HS-74-52 to obtain RHR System I Loop flow between 7,000 and 10,000 gpm on 2-FI-74-50.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

RHR Flow Established Time _____

RHR SYSTEM Minimum Flow Guidance:
To minimize system vibration, RHR pump operation should be minimized below 7,000 gpm or above 10,000 gpm, for more than 3 minutes at minimum flow.

****

Performance Step 13: Critical Not Critical X

[14.10] **WHEN** time permits after RHR pump is started, **THEN**

VERIFY RHR Pump Breaker charging spring recharged by observing amber breaker spring charged light is on and closing spring target indicates charged.

Standard:

Dispatched personnel to verify RHR Pump 2A breaker closing spring recharged.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: If requested, Acknowledge and state Operator in route

****

Performance Step 14: Critical X Not Critical

[14.11] **SLOWLY THROTTLE** RHR HX 2A RHRSW OUTLET VALVE, 2-FCV-23-34, to obtain desired cooldown rate.

Standard:

Throttles 2-FCV-23-34 open to commence cooldown

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: That completes this task.

END OF TASK

STOP TIME: _____

OPERATOR: _____

RO ____ SRO ____ DATE:_____

JPM NUMBER: f

TASK NUMBER: 0-74-AB-01

TASK TITLE: Loss of Shutdown Cooling

K/A NUMBER: 295021 AA1.02 K/A RATING: RO 3.5 SRO 3.5

TASK STANDARD: Restores shutdown cooling following an inadvertent RPS actuation, will restore shutdown cooling with RHR Pump 3A and establish a cooldown IAW 3-AOI-74-1.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 3-AOI-74-1

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ___ UNSATISFACTORY ___

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS: You are a Unit 3 operator. Unit 3 is in Mode 3 (Recirc Loop B temp > 212°F) heading towards cold conditions for a refueling outage. RHR Loop I using 3A RHR Pump was in shutdown cooling. Unit 1 is carrying 2000 gpm for RHRSW Pumps 'A2' and 'C2'. An inadvertent loss of 3B RPS bus resulted in a partial isolation of RHR shutdown cooling. RPS 3B has been restored on the alternate supply. Another operator is assisting with recovery from the loss of 3B RPS. An Auxiliary Operator is standing by for 3A RHR Pump start.

INITIATING CUES: The Unit Supervisor directs you to restore shutdown cooling using 3A RHR pump in accordance with 3-AOI-74-1 starting at step 9.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS: You are a Unit 3 operator. Unit 3 is in Mode 3 (Recirc Loop B temp > 212°F) heading towards cold conditions for a refueling outage. RHR Loop I using 3A RHR Pump was in shutdown cooling. Unit 1 is carrying 2000 gpm for RHRSW Pumps 'A2' and 'C2'. An inadvertent loss of 3B RPS bus resulted in a partial isolation of RHR shutdown cooling. RPS 3B has been restored on the alternate supply. Another operator is assisting with recovery from the loss of 3B RPS. An Auxiliary Operator is standing by for 3A RHR Pump start.

INITIATING CUES: The Unit Supervisor directs you to restore shutdown cooling using 3A RHR pump in accordance with 3-AOI-74-1 starting at step 9.

START TIME _____

****

Performance Step 1: Critical Not Critical X

[9] **IF** the loss of Shutdown Cooling is due to Group 2 PCIS isolation, **THEN** (Otherwise **N/A**)

WHEN conditions permit resetting Group 2 PCIS isolation are met, **PERFORM** the following:

[9.1] **RESET** Group 2 isolation by momentarily PLACING PCIS DIV I RESET, 3-HS-64-16A-S32, and PCIS DIV II RESET, 3-HS-64-16A-S33, in reset.

Standard:

On Panel 3-9-4, RESETS Group 2 isolation by momentarily PLACING PCIS DIV I RESET, 3-HS-64-16A-S32, in reset and PCIS Div II RESET, 3-HS-64-16A-S33 to reset.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical Not Critical X

[9.2] **MOMENTARILY DEPRESS** RHR SYS I(II) SD CLG INBD INJECT ISOL RESET, 3-XS-74-126 and 3-XS-74-132. **VERIFY** 3-IL-74-126 and 3-IL-74-132 extinguished.

Standard:

Momentarily Depresses RHR SYS I SD CLG INBD INJECT ISOL RESET, 3-XS-74-132 and verifies 3-IL-74-132 extinguished.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical Not Critical X

[10] **IF** the loss of Shutdown Cooling is due to Group 2 PCIS **AND** the isolation signal fails to reset, or remain reset due to invalid and/or sporadic signals, **THEN** (Otherwise **N/A**)

Standard:

N/As all Step 4.2[10], the PCIS signal is reset in step 9.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical X Not Critical

[11] **IF** the Group 2 PCIS Isolation has been reset, **THEN** (otherwise **N/A**)

RETURN the affected loop of RHR to Shutdown Cooling as follows:

[11.1] **CLOSE** RHR SYS I LPCI OUTBD INJECT VALVE, 3-FCV-74-52.

Standard:

Closes 3-FCV-74-52

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical Not Critical X

[11.2] **OPEN** RHR SYS I LPCI INBD INJECT VALVE, 3-FCV-74-53.

Standard:

Opens 3-FCV-74-53

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical Not Critical X

[11.3] **VERIFY** RHR SYSTEM I MIN FLOW INHIBIT switch, 3-HS-74-148 in INHIBIT

Standard:

Verifies 3-HS-74-148 in INHIBIT.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical Not Critical X

[11.4] **VERIFY CLOSED** RHR SYSTEM I MIN FLOW VALVE, 3-FCV-74-7.

Standard:

Verifies 3-FCV-74-7 is closed.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: Critical Not Critical X

[11.5] **VERIFY CLOSED** RHR PUMP 3A and 3C SUPPR POOL SUCT VLVs, 3-FCV-74-1 and 3-FCV-74-12.

Standard:

Verifies 3-FCV-74-1 & 12 are closed.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: Critical Not Critical X

[11.6] **VERIFY OPEN** RHR PUMP 3A and 3C SD COOLING SUCT VLVs, 3-FCV-74-2 and 3-FCV-74-13.

Standard:

Verifies 3-FCV-74-2 & 13 are open.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 10: *Critical X Not Critical

[11.7] **OPEN** RHR SHUTDOWN COOLING SUCT OUTBD and INBD ISOL VLVs, 3-FCV-74-47 and 3-FCV-74-48.

Standard:

Opens *3-HS-74-47 and verifies 3-FCV-74-48 open.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 11: Critical X Not Critical

[11.8] **RESTART** RHR PUMP 3A using 3-HS-74-5A.

Standard:

Starts 3A RHR Pump

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

RHR Pump Start Time _____

****

Performance Step 12: Critical X Not Critical

[11.9] **THROTTLE** RHR SYS I LPCI OUTBD INJECT VALVE, 3-FCV-74-52, to establish and maintain RHR flow as indicated by 3-FI-74-50, RHR SYS I FLOW, as follows:

RHR Pumps in Operation	**1**	**2**
Loop Flow	7,000 to 10,000 gpm	14,000 to 20,000 gpm
Loop Flow (1 or more fuel bundles removed from core)	6,000 to 6,500 gpm	N/A

Standard:

Manipulates 3-HS-74-52 to obtain RHR System I Loop flow between 7,000 and 10,000 gpm on 3-FI-74-50.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

RHR Flow Established Time _____

RHR SYSTEM Minimum Flow Guidance:
To minimize system vibration, RHR pump operation should be minimized below 7,000 gpm or above 10,000 gpm, for more than 3 minutes at minimum flow.

****

Performance Step 13: Critical Not Critical X

[11.10] **WHEN** time permits after RHR pump is started, **THEN**

VERIFY RHR Pump Breaker charging spring recharged by observing amber breaker spring charged light is on and closing spring target indicates charged.

Standard:

Dispatched personnel to verify RHR Pump 3A breaker closing spring recharged.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: If requested, Acknowledge and state Operator in route

****

Performance Step 14: Critical X Not Critical

[11.11] **SLOWLY THROTTLE** RHR HX 3A RHRSW OUTLET VALVE, 3-FCV-23-34, to obtain desired cooldown rate.

Standard:

Throttles 3-FCV-23-34 open to commence cooldown

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: That completes this task.

END OF TASK

STOP TIME: _____

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: g

TASK NUMBER: U-000-EM-74

TASK TITLE: Crosstie CAD to Drywell Control Air

K/A NUMBER: 218000 A2.03 K/A RATING: RO 3.4 SRO: 3.6

TASK STANDARD: Align Containment Air Dilution systems A and B to the Drywell Air System and then isolates CAD System B.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 2-EOI Appendix-8G

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ___ UNSATISFACTORY ___

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS: You are an Operator. The Unit 2 reactor has scrammed. EOI-1 has been followed to RC/P-8.

INITIATING CUE: The Unit Supervisor has directed you to perform 2-EOI Appendix-8G, Crosstie CAD to Drywell Control Air.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS: You are an Operator. The Unit 2 reactor has scrammed. EOI-1 has been followed to RC/P-8.

INITIATING CUE: The Unit Supervisor has directed you to perform 2-EOI Appendix-8G, Crosstie CAD to Drywell Control Air.

START TIME_____

****

Performance Step 1: Critical X Not Critical

1. **OPEN** the following valves:

   - 0-FCV-84-5, CAD SYSTEM A N2 SHUTOFF VALVE (Unit 1, Panel 9-54)
   - 0-FCV-84-16, CAD SYSTEM B N2 SHUTOFF VALVE (Unit 1, Panel 9-55)

Standard:

Opens 0-FCV-84-5 and 16

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical _ Not Critical X

2. **VERIFY** 0-PI-84-6, N2 VAPORIZER A OUTLET PRESSURE, and 0-PI-84-17, N2 VAPORIZER B OUTLET PRESSURE, indicate approximately 100 psig (Unit 1, Panel 9-54 and 9-55)

Standard:

Verifies 0-PI-84-6 and 0-PI-84-17 (Located on back of Unit 2 Panel 9-54 in simulator) indicating approximately 100 psig.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: *Critical X Not Critical

*3. **PLACE** keylock switch 2-HS-84-48, CAD A CROSS TIE TO DW CONTROL AIR, in OPEN (Unit 2, Panel 9-54)

4. **CHECK OPEN** 2-FSV-84-48, CAD A CROSS TIE TO DW CONTROL AIR, (Unit 2, Panel 9-54)

Standard:

Places keylock switch 2-HS-84-48 in Open and verifies 2-FSV-84-48 is open

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: *Critical X Not Critical

*5. **PLACE** keylock switch 2-HS-84-49, CAD B CROSS TIE TO DW CONTROL AIR, in OPEN (Unit 2, Panel 9-55)

6. **CHECK OPEN** 2-FSV-84-49, CAD B CROSS TIE TO DW CONTROL AIR (Unit 2, Panel 9-55)

Standard:

Places keylock switch 2-HS-84-49 in Open and verifies 2-FSV-84-49 open

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

7. **CHECK** MAIN STEAM RELIEF VLV AIR ACCUM PRESS LOW, 2-PA-32-31, alarm cleared (2-XA-55-3D, Window 18)

Standard:

Recognizes MAIN STEAM RELIEF VLV AIR ACCUM PRESS LOW (2-XA-55-3D, Win. 18) still in Alarm (would Not clear) and continues with procedure.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical _ Not Critical X

8. IF MAIN STEAM RELIEF VLV AIR ACCUM PRESS LOW, 2-PA-32-31, annunciator is or remains in alarm (2-XA-55-3D, Window 18), THEN **DETERMINE** which Drywell Control Air header is depressurized as follows:

   a. **DISPATCH** personnel to Unit 2, RB, El 565 ft, to **MONITOR** the following indications for low pressure:

      - 2-PI-84-51, CAD N2 PRESSURE TO DWCA indicator, for CAD A (R-10 S-line, by Drywell Access Door)

      - 2-PI-84-50, DW CONT AIR N2 SUPPLY PRESS indicator, for CAD B (R-12 U-line, behind 480V RB Vent Board 2B)

Standard:

Dispatches personnel to Reactor Building to monitor 2-PI-84-51 and 2-PI-84-50 for low pressure.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: DO NOT Report Unless **directed by NRC** [report] 2-PI-84-51, CAD N_2 Pressure to DWCA indicator, for CAD A is reading 110 psig. 2-PI-84-50 for CAD B is reading 5 psig.

****

Performance Step 7: Critical X Not Critical

b. **MONITOR** 0-FI-84-7(18), CAD LINE A(B) N2 FLOW, on Unit 1, Panel 1-9-54(55) for high flow.

Standard:

Recognizes 0-FI-84-7 flow 0 scfm and 0-FI-84-18 flow 90 scfm

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

NOTE

CAD System A to Drywell Control Air supplies the following MSIVs:

- 2-FCV-1-14, MSIV LINE A INBOARD
- 2-FCV-1-26, MSIV LINE B INBOARD

NOTE

CAD System B to Drywell Control Air supplies the following MSIVs:

- 2-FCV-1-37, MSIV LINE C INBOARD
- 2-FCV-1-51, MSIV LINE D INBOARD

****

Performance Step 8: Critical _ Not Critical X

c. **MONITOR** inboard MSIV indication status for valves drifting closed.

Standard:

Recognizes 2-FCV-1-37 and 51 closed

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: Critical _ Not Critical X

9. IF Drywell Control Air header supplied from CAD System A shows indications of being depressurized, THEN **CLOSE** the following valves:

- 0-FCV-84-5, CAD SYSTEM A N2 SHUTOFF VALVE (Unit 1, Panel 9-54)
- 2-FSV-84-48, CAD A CROSS TIE TO DW CONTROL AIR (Unit 2, Panel 9-54)

Standard:

N/A – No indications of being depressurized

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 10: Critical X Not Critical

10. IF Drywell Control Air header supplied from CAD B shows indications of being depressurized, THEN **CLOSE** the following valves:

- 0-FCV-84-16, CAD SYSTEM B N2 SHUTOFF VALVE (Unit 1, Panel 9-55)
- 2-FSV-84-49, CAD B CROSS TIE TO DW CONTROL AIR (Unit 2, Panel 9-55)

Standard:

Closes 0-FCV-84-16 and 2-FSV-84-49

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

STOP TIME_____

END OF TASK

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: g

TASK NUMBER: U-000-EM-74

TASK TITLE: Crosstie CAD to Drywell Control Air

K/A NUMBER: 218000 A2.03 K/A RATING: RO 3.4 SRO: 3.6

TASK STANDARD: Align Containment Air Dilution systems A and B to the Drywell Air System and then isolates CAD System B.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 3-EOI Appendix-8G

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ___ UNSATISFACTORY ___

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS: You are an Operator. The Unit 3 reactor has scrammed. EOI-1 has been followed to RC/P-8.

INITIATING CUE: The Unit Supervisor has directed you to perform 3-EOI Appendix-8G, Crosstie CAD to Drywell Control Air.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS: You are an Operator. The Unit 3 reactor has scrammed. EOI-1 has been followed to RC/P-8.

INITIATING CUE: The Unit Supervisor has directed you to perform 3-EOI Appendix-8G, Crosstie CAD to Drywell Control Air.

START TIME_____

****

Performance Step 1: Critical X Not Critical

1. **OPEN** the following valves:

   - 0-FCV-84-5, CAD SYSTEM A N2 SHUTOFF VALVE (Panel 3-9-54)
   - 0-FCV-84-16, CAD SYSTEM B N2 SHUTOFF VALVE (Panel 3-9-55)

Standard:

Opens 0-FCV-84-5 and 16

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical _ Not Critical X

2. **VERIFY** 0-PI-84-6/3, VAPOR A OUTLET PRESS, and 0-PI-84-17/3, VAPOR B OUTLET PRESS, indicate approximately 100 psig (Unit 3, Panel 3-9-54 and 3-9-55)

Standard:

Verified 0-PI-84-6/3 and 0-PI-84-17/3 (Located on Unit 3, Panel 3-9-54 and 3-9-55) indicating approximately 100 psig.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: *Critical X Not Critical

*3. **PLACE** keylock switch 3-HS-84-48, CAD A CROSS TIE TO DW CONTROL AIR, in OPEN (Unit 3, Panel 3-9-54)

4. **CHECK OPEN** 3-FSV-84-48, CAD A CROSS TIE TO DW CONTROL AIR, (Unit 3, Panel 3-9-54)

Standard:

Places keylock switch 3-HS-84-48 in Open and verifies 3-FSV-84-48 open

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: *Critical X Not Critical

*5. **PLACE** keylock switch 3-HS-84-49, CAD B CROSS TIE TO DW CONTROL AIR, in OPEN (Unit 3, Panel 3-9-55)

6. **CHECK OPEN** 3-FSV-84-49, CAD B CROSS TIE TO DW CONTROL AIR (Unit 3, Panel 3-9-55)

Standard:

Places keylock switch 3-HS-84-49 in Open and verifies 3-FSV-84-49

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

7. **CHECK** MAIN STEAM RELIEF VLV AIR ACCUM PRESS LOW, 3-PA-32-31, alarm cleared (3-XA-55-3D, Window 18)

Standard:

Recognizes MAIN STEAM RELIEF VLV AIR ACCUM PRESS LOW (3-XA-55-3D, Win. 18) still in Alarm (would NOT clear) and continues with procedure.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical _ Not Critical X

8. IF MAIN STEAM RELIEF VLV AIR ACCUM PRESS LOW, 3-PA-32-31, annunciator is or remains in alarm (3-XA-55-3D, Window 18), THEN **DETERMINE** which Drywell Control Air header is depressurized as follows:

   a. **DISPATCH** personnel to Unit 3, RB, El 565 ft, to **MONITOR** the following indications for low pressure:

      - 3-PI-84-51, CAD A CROSSTIE TO DWCA PRESS INDR, for CAD A (R-17 S-line, by Drywell Access Door)
      - 3-PI-84-50, DW CONT AIR N2 SUPPLY PRESS indicator, for CAD B ((R-19 U-line, behind 480V RB Vent Board 3B)

Standard:

Dispatches personnel to Reactor Building to monitor 3-PI-84-51 and 3-PI-84-50 for low pressure.

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: **DO NOT** Report Unless **directed by NRC** [report] 3-PI-84-51, CAD N_2 Pressure to DWCA indicator, for CAD A is reading 110 psig and 3-PI-84-50 reading 5 psig.

****

Performance Step 7: Critical X Not Critical

b. **MONITOR** 0-FI-84-7/3(18/3), CAD A(B) N2 SYSTEM FLOW, on Panel 3-9-54(55) for high flow.

Standard:

Recognizes 0-FI-84-7/3 flow is 0 scfm and that 0-FI-84-18 flow is 50 scfm

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

NOTE

CAD System A to Drywell Control Air supplies the following MSIVs:

- 3-FCV-1-14, MSIV LINE A INBOARD
- 3-FCV-1-26, MSIV LINE B INBOARD

NOTE

CAD System B to Drywell Control Air supplies the following MSIVs:

- 3-FCV-1-37, MSIV LINE C INBOARD
- 3-FCV-1-51, MSIV LINE D INBOARD

****

Performance Step 8: Critical _ Not Critical X

c. **MONITOR** inboard MSIV indication status for valves drifting closed.

Standard:

Recognizes 3-FCV-1-37 and 51 closed

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 9: Critical _ Not Critical X

9. IF Drywell Control Air header supplied from CAD System A shows indications of being depressurized, THEN **CLOSE** the following valves:

   - 0-FCV-84-5, CAD SYSTEM A N2 SHUTOFF VALVE (Unit 3, Panel 3-9-54)
   - 3-FSV-84-48, CAD A CROSS TIE TO DW CONTROL AIR (Unit 3, Panel 3-9-54)

Standard:

N/A - No indications of being depressurized

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 10: Critical X Not Critical

10. IF Drywell Control Air header supplied from CAD B shows indications of being depressurized, THEN **CLOSE** the following valves:

    - 0-FCV-84-16, CAD SYSTEM B N2 SHUTOFF VALVE (Unit 3, Panel 3-9-55)
    - 3-FSV-84-49, CAD B CROSS TIE TO DW CONTROL AIR (Unit 3, Panel 3-9-55)

Standard:

Closes 0-FCV-84-16 and 3-FSV-84-49

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

STOP TIME_____

END OF TASK

OPERATOR: _____

RO ___ SRO ___ DATE: _____

JPM NUMBER: h

TASK NUMBER: U-090-NO-03

TASK TITLE: Bypassing Radiation Monitors on Workstation Touch Screen

K/A NUMBER: 272000 A4.02 K/A RATING: RO 3.0 SRO 3.0

TASK STANDARD: Radiation Monitors 3-RM-90-59 and 3-RM-90-51 bypassed IAW 3-OI-90 section 6.3.10.

LOCATION OF PERFORMANCE: Simulator

REFERENCES/PROCEDURES NEEDED: 3-OI-90

VALIDATION TIME: 5 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ___ UNSATISFACTORY ___

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS:

You are a Unit Operator. The condition of alarms and indications on Radiation Monitors on the 3-MON-90-50 Workstation are being addressed by the Unit Supervisor.

INITIATING CUE:

The Unit Supervisor directs you to bypass Radiation Monitors 3-RM-90-59 and 3-RM-90-51, in accordance with 3-OI-90 Radiation Monitoring System section 6.3.10.

****

IN-SIMULATOR: I will explain the initial conditions and state the task to be performed. I will provide initiating cues and reports on other actions when directed by you. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's Correct". (OR "That's Incorrect", if applicable). When you have completed your assigned task, you will say, "my task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS:

You are a Unit Operator. The condition of alarms and indications on Radiation Monitors on the 3-MON-90-50 Workstation are being addressed by the Unit Supervisor.

INITIATING CUE:

The Unit Supervisor directs you to bypass Radiation Monitors 3-RM-90-59 and 3-RM-90-51, in accordance with 3-OI-90 Radiation Monitoring System section 6.3.10.

START TIME_____

****

Performance Step 1: Critical _ Not Critical X

6.3.10 Bypassing Radiation Monitors on Workstation Touch Screen

[1] **NOTIFY** Unit Supervisor of the radiation monitor(s) to be bypassed.

Standard:

Notifies the Unit Supervisor which radiation monitors will be bypassed.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Acknowledge Notification

****

Performance Step 2: Critical _ Not Critical X

[2] **REVIEW** Precautions and Limitations listed in Section 3.0

Standard:

Reviews Precautions and Limitations

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical _ Not Critical X

[3] **IF** 3-RM-90-256, Drywell Air Monitor, is being bypassed, THEN REFER to Technical Specifications 3.4.5, 3.4.4 and 3.6.1.3.

Standard:

Step is NA, 3-RM-90-256 is not being bypassed.

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 4: Critical X Not Critical

[4] Using Air Particulate Monitor Controller, 3-MON-90-50, **SELECT** "Bypass CAM(s)".

Standard:

Selects Bypass Cams on 3-MON-90-50

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical X Not Critical

[5] **WHEN** the "Channel Bypass" window appears, THEN use the toggle switches to place the desired CAM in BYPASS (red indicator will change to green).

Standard:

Selects radiation monitors 3-RM-90-59 and 3-RM-90-51 for Bypass

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: Critical X Not Critical

[6] **WHEN** desired CAMS have been toggled to bypass, then **SELECT** "Set Bypass Config".

Standard:

Selects Set Bypass Configuration

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 7: Critical _ Not Critical X

[7] **VERIFY** the CAMs selected for bypass now have a beige border around the CAM on the main display screen.

Standard:

Verifies radiation monitors 3-RM-90-59 and 3-RM-90-51 are bypassed

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 8: Critical _ Not Critical X

[8] **NOTIFY** Chemistry and/or RADCON to begin sampling affected systems at the required frequency.

Standard:

Notifies Radcon

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Acknowledge Notification

END OF TASK

STOP TIME ___

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: i

TASK NUMBER: U-000-EM-19

TASK TITLE: 2-EOI Appendix-1A Removal of RPS SCRAM Fuses

K/A NUMBER: 212000 A2.20 K/A RATING: RO 4.1 SRO 4.2

TASK STANDARD: Simulate removal of SCRAM Fuses IAW 2-EOI Appendix-1A

LOCATION OF PERFORMANCE: Plant

REFERENCES/PROCEDURES NEEDED: 2-EOI Appendix-1A

VALIDATION TIME: 10 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____

_____

_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS: You are the Extra Operator. The Unit 2 reactor has scrammed and all control rods did not fully insert. All eight scram solenoid lights on Panel 9-5 are still illuminated. EOI-1 has been entered and followed to RC/Q-23. The Scram Discharge Volume Vent/Drain Valves indicate closed on panel 2-9-5.

INITIATING CUE: The Unit Supervisor directs you to remove the RPS scram solenoid fuses in accordance with 2-EOI Appendix 1A, Removal and Replacement of RPS Scram Solenoid Fuses.

CAUTION: DO NOT OPERATE ANY PLANT EQUIPMENT!

****

IN-PLANT: I will explain the initial conditions and state the task to be performed. ALL STEPS WILL BE SIMULATED. Do NOT operate any plant equipment. Touch STAAR may be carried out to the point of touching a label. If it becomes necessary to physically touch a control switch, use a non-conductive pointing device. I will provide initiating cues and indicate any steps to be discussed. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's correct" (or That's incorrect", if applicable). When you have completed your assigned task, you will say, "My task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS: You are the Extra Operator. The Unit 2 reactor has scrammed and all control rods did not fully insert. All eight scram solenoid lights on Panel 9-5 are still illuminated. EOI-1 has been entered and followed to RC/Q-23. The Scram Discharge Volume Vent/Drain Valves indicate closed on panel 2-9-5.

INITIATING CUE: The Unit Supervisor directs you to remove the RPS scram solenoid fuses in accordance with 2-EOI Appendix 1A, Removal and Replacement of RPS Scram Solenoid Fuses.

CAUTION: DO NOT OPERATE ANY PLANT EQUIPMENT!

START TIME_____

****

Performance Step 1: Critical _ Not Critical X

1. **VERIFY CLOSED** Scram Discharge Volume Vent and Drain Valves at the SCRAM DISCHARGE VOLUME VENT/DRAIN VLVS display on panel 9-5.

Standard:

Given in initial conditions

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: Critical _ Not Critical X

2. **DISPATCH** personnel to Unit 2 Auxiliary Instrument Room to perform the following:

   a. **REFER** to Attachment 1 and OBTAIN fuse pullers from EOI Equipment Storage box.

Standard:

Simulate unlocking EOI Equipment storage and obtaining fuse pullers

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE:	When location of EOI Storage Box identified, Operator has the fuse pullers

****

Performance Step 3: Critical X Not Critical

b. **LOCATE** Terminal Strip CC inside Panel 9-15, Bay 2, Rear.

c. **REMOVE** the following fuses (located at bottom of terminal strip CC, Panel 9-15):

RPS BUS "A"

BLOCK	NUMBER	FUSE ID
CC	FOUR (4)	2-FU1-085-0037AA
CC	FIVE (5)	2-FU1-085-0039A/2
CC	SIX (6)	2-FU1-085-0039A/3
CC	SEVEN (7)	2-FU1-085-0039A/4

Standard:

Identifies terminal strip and simulates removing listed fuses

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: When location of proper Fuse is indicated the Fuse has been removed

****

Performance Step 4: Critical X Not Critical

d. **LOCATE** Terminal Strip CC inside Panel 9-17, Bay 2, Rear.

e. **REMOVE** the following fuses (located at bottom of terminal strip CC, Panel 9-17):

RPS BUS "B"

BLOCK	NUMBER	FUSE ID
CC	FOUR (4)	2-FU1-085-0037BA
CC	FIVE (5)	2-FU1-085-0039B/2
CC	SIX (6)	2-FU1-085-0039B/3
CC	SEVEN (7)	2-FU1-085-0039B/4

Standard:

Identifies terminal strip and simulates removing listed fuses

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: When location of proper Fuse is indicated the Fuse has been removed

****

Performance Step 5: Critical _ Not Critical X

f. WHEN ALL fuses are removed, THEN **NOTIFY** Unit Operator.

Standard:

Notifies Unit 2 Operator All RPS Fuse removed

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Acknowledge Notification, SRO Does not direct replacement of fuses

END OF TASK

STOP TIME_____

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: j

TASK NUMBER: U-001-AL-06

TASK TITLE: Field actions for stuck open SRV

K/A NUMBER: 239002 A2.03 K/A RATING: RO 4.1 SRO 4.2

TASK STANDARD: Stuck Open SRV is closed when power is removed from the SRV by opening the breakers

LOCATION OF PERFORMANCE: Plant

REFERENCES/PROCEDURES NEEDED: 2-AOI-1-1

VALIDATION TIME: 25 minutes

MAX. TIME ALLOWED: (Completed for Time Critical JPMs only)

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS: You are an Operator, the Unit Supervisor has entered 2-AOI-1-1 Relief Valve Stuck Open. Control Room actions to close SRV 2-PCV-1-22 have been unsuccessful. Reactor Power is 85%.

INITIATING CUE: The Unit Supervisor directs you to attempt to close SRV 2-PCV-1-22 from outside the Control Room in accordance with 2-AOI-1-1 step 4.2.3[2].

CAUTION: DO NOT OPERATE ANY PLANT EQUIPMENT!

****

IN-PLANT: I will explain the initial conditions and state the task to be performed. ALL STEPS WILL BE SIMULATED. Do NOT operate any plant equipment. Touch STAAR may be carried out to the point of touching a label. If it becomes necessary to physically touch a control switch, use a non-conductive pointing device. I will provide initiating cues and indicate any steps to be discussed. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's correct" (or That's incorrect", if applicable). When you have completed your assigned task, you will say, "My task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS: You are an Operator, the Unit Supervisor has entered 2-AOI-1-1 Relief Valve Stuck Open. Control Room actions to close SRV 2-PCV-1-22 have been unsuccessful. Reactor Power is 85%.

INITIATING CUE: The Unit Supervisor directs you to attempt to close SRV 2-PCV-1-22 from outside the Control Room in accordance with 2-AOI-1-1 step 4.2.3[2].

CAUTION: DO NOT OPERATE ANY PLANT EQUIPMENT!

START TIME_____

****

Performance Step 1: Critical _ Not Critical X

NOTES

1) 2-PCV-1-22 is an ADS Valve
2) 2-PCV-1-22 has two power supplies, it will auto transfer on loss of power and is Normal Seeking.
3) Attachment 1 may be addressed for fuse and breaker information.

[2] **IF** 2-PCV-1-22 is NOT closed, **THEN PERFORM** the following:

[2.1] On Panel 2-25-32 **PLACE** the associated transfer switch MAIN STM LINE B RELIEF VALVE XFR, 2-XS-1-22 in EMERG position.

Standard:

Simulate placing 2-XS-1-22 in emergency

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: When simulated 2-XS-1-22 is in Emergency. When Control Room called SRV remains OPEN.

****

Performance Step 2: Critical _ Not Critical X

[2.2] **IF** the SRV does **NOT** close, **THEN PERFORM** the following while **OBSERVING** the indications for the 2-PCV-1-22 on the Acoustic Monitor:

- **CYCLE** the MAIN STM LINE B RELIEF VALVE, 2-HS-1-22C to the following positions several times.

  CLOSE/AUTO to OPEN to CLOSE/AUTO

Standard:

Simulates cycling 2-HS-1-22C from CLOSE/AUTO to OPEN to CLOSE/AUTO

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: The SRV remains open

****

Performance Step 3: Critical _ Not Critical X

[2.3] **IF** the SRV does **NOT** close, **THEN PERFORM** the following:

A. **VERIFY** the MAIN STM LINE B RELIEF VALVE, 2-HS-1-22C, in the CLOSE/AUTO position.

B. **PLACE** the associated transfer switch MAIN STM LINE B RELIEF VALVE XFR, 2-XS-1-22 in NORM position .

Standard:

Simulates verifying 2-HS-1-22C is in Close/Auto and simulates placing 2-XS-1-22 in Norm

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: 2-XS-1-22 is in Norm

NRC NOTE IF BREAKERS are USED

****

Performance Step 4: Critical X Not Critical

[2.4] **IF** the SRV does **NOT** close, **THEN REMOVE** the power from 2-PCV-1-22 by performing one of the following: (Opening breakers are the preferred method)

A. **OPEN** the following breakers: (Preferred method)

• 2A 250V RMOV, Compartment 11C2

CUE: 11C2 at 2A 250V RMOV is open.

• 2B 250V RMOV, Compartment 1C1

CUE: 1C1 at 2B 250V RMOV is open.
SRV 1-22 is Closed.

If Operator simulates closing breakers, breakers are closed SRV is Open. JPM Failure

Standard:

Simulates opening Compartment 11C2 at 2A 250V RMOV and Compartment 1C1 at 2B 250V RMOV

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 5: Critical _ Not Critical X

[2.5] **IF** the valve does **NOT** close, **THEN CLOSE** the breakers or **REINSTALL** fuses removed in Step 4.2.3[2.4].

CUE:	**If Operator simulates closing breakers, breakers are closed. SRV 1-22 is Open. JPM Failure**

Standard:

SRV Closed Operator does NOT close breaker, Step is NA

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

IF BREAKERS ARE OPENED THAN THE JPM IS COMPLETE

STOP TIME_____

END OF TASK

NRC NOTE IF FUSES are USED

****

Performance Step 6: Critical X Not Critical

B. In Panel 2-25-32 **PULL** the following fuses as necessary
- Fuse 2E-F6E (Block EE, F15)
- Fuse 2E-F4E (Block EE, F7)

CUE: Fuse 2E-F6E is PULLED
Fuse 2E-F4E is PULLED

If Operator simulates installing fuses, fuses are installed SRV 1-22 is Open. JPM Failure

Standard:

Simulates pulling fuses: Fuse 2E-F6E and Fuse 2E-F4E

SAT___ UNSAT___ N/A ___COMMENTS:_____

****

Performance Step 7: Critical _ Not Critical X

[2.5] **IF** the valve does **NOT** close, **THEN CLOSE** the breakers or **REINSTALL** fuses removed in Step 4.2.3[2.4].

CUE:	**If Operator simulates installing fuses, fuses are installed. SRV 1-22 is Open. JPM Failure**

Standard:

SRV Closed Operator does NOT install fuses, Step is NA

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

IF FUSES ARE REMOVED THAN THE JPM IS COMPLETE

STOP TIME_____

END OF TASK

OPERATOR: _____

RO ____ SRO ____ DATE: _____

JPM NUMBER: k (16 op6)

TASK NUMBER: U-000-SS-08

TASK TITLE: Align 480V RMOV BD 3B for a fire and Start RHR Pump 3A

K/A NUMBER: 600000 AA2.16 K/A RATING: RO 3.0 SRO: 3.5

TASK STANDARD: Operator 6 Manual Actions 0-SSI-16 section 2.0 and 3.0 completed

LOCATION OF PERFORMANCE: Plant

REFERENCES/PROCEDURES NEEDED: 0-SSI-16

VALIDATION TIME: 15 minutes

MAX. TIME ALLOWED: 20 minutes for section 2.0 and 120 minutes for section 3.0.

PERFORMANCE TIME:

COMMENTS: _____
_____
_____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ____ UNSATISFACTORY ____

SIGNATURE: _____ DATE: _____
EXAMINER

INITIAL CONDITIONS: You are Operator 6, the plant is operating in 0-SSI-16 Control Building Fire EL 593 Through EL 617. Operator 6 Manual Actions Section 1.0 is complete.

INITIATING CUE: The Unit Supervisor directs you as Operator 6 to continue Attachment 6 at section 2.0 of 0-SSI-16.

Time Critical

CAUTION: DO NOT OPERATE ANY PLANT EQUIPMENT!

****

IN-PLANT: I will explain the initial conditions and state the task to be performed. ALL STEPS WILL BE SIMULATED. Do NOT operate any plant equipment. Touch STAAR may be carried out to the point of touching a label. If it becomes necessary to physically touch a control switch, use a non-conductive pointing device. I will provide initiating cues and indicate any steps to be discussed. When you complete the task successfully, the objective for this job performance measure will be satisfied. When your task is given, you will repeat the task and I will acknowledge "That's correct" (or That's incorrect", if applicable). When you have completed your assigned task, you will say, "My task is complete" and I will acknowledge that your task is complete.

****

INITIAL CONDITIONS: You are Operator 6, the plant is operating in 0-SSI-16 Control Building Fire EL 593 Through EL 617. Operator 6 Manual Actions Section 1.0 is complete.

INITIATING CUE: The Unit Supervisor directs you as Operator 6 to continue Attachment 6 at section 2.0 of 0-SSI-16.

Time Critical

CAUTION: DO NOT OPERATE ANY PLANT EQUIPMENT!

START TIME_____

****

Performance Step 1: Critical X Not Critical

2.0 480V REACTOR MOV BOARD 3B ALIGNMENT

(20 Min)

[1] Notification has been received from the Unit 3 Unit Supervisor to perform this section.

[2] **PERFORM** the following to align 480V Reactor MOV Board 3B:

[2.1] **PROCEED TO** Compt 2A, AND **PLACE** NORMAL FEEDER CONTROL SWITCH, 3-HS-268B/2A-A, in TRIP.

CUE: 3-HS-268B/2A-A is in Trip, Green light On Red light Off.

[2.2] **PROCEED TO** Compt 16A, AND **PLACE** EMERGENCY FEEDER CONTROL SWITCH, 3-HS-268-B/16A-A, in CLOSE.

CUE: 3-HS-268-B/16A-A is in Close, Red light On Green Light Off

Standard:

Simulates placing 3-HS-268B/2A-A in Trip and 3-HS-268-B/16A-A in Close

SAT__ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 2: * Critical X Not Critical

[2.3] **PROCEED TO** Compt 1C, AND **PERFORM** the following:

*[2.3.1] **PLACE** RCIC STM LINE EMER TRANS SWITCH 3-XS-071-0002, in EMERG.

[2.3.2] **VERIFY OPEN** RCIC STM LINE INBD ISOL VALVE, 3-HS-071-0002B.

CUE: 3-XS-071-0002 is in Emergency and RCIC Steam Line Inboard Isolation Valve has Red Light On, Green Light Off

Standard:

Simulates placing 3-XS-071-0002 in Emergency and verifies RCIC STM LINE INBD ISOL VALVE Open

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 3: Critical X Not Critical

[2.4] **PROCEED TO** Compt 4C, AND **PLACE** 0-BKR-084-0016A CONTAINMENT ATMOSPHERE DILUTION SYSTEM B HEATER, breaker in OFF.

CUE: 0-BKR-084-0016A is in Off

Standard:

Simulates placing 0-BKR-084-0016A in Off

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

STOP TIME_____

****

Performance Step 4: Critical _ Not Critical X

[3] **NOTIFY** Unit 3 Unit Supervisor of completion of this section.

[4] **PROCEED TO** 4160V Shutdown Board 3EA in preparation of performing Section 3.0.

Standard:

Notifies Unit 3 Unit Supervisor and proceeds to 4160 SD BD 3EA

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Acknowledge notification and Notify Operator to perform section 3.0

START TIME_____

****

Performance Step 5: * Critical X Not Critical

3.0 RHR PUMP 3A LOCAL START

(120 Min)

[1] Notification has been received from the Unit 3 Unit Supervisor to perform this section.

NOTE

If RHR pump fails to start, pushbutton on breaker must be used.

[2] **PROCEED TO** 4160V Shutdown Board 3EA, Compt 12, 3-BKR-074-0005 RHR PUMP 3A, AND **PERFORM** the following:

*[2.1] **PLACE** RHR PUMP 3A TRANSFER, 3-43-074-0005, in EMERG.

CUE:	3-43-074-0005 is in Emergency

[2.2] **PLACE** RHR PUMP 3A, 3-HS-074-0005C, in CLOSE.

[2.3] **VERIFY** RHR Pump 3A has started by observing breaker AMMETER indications.

CUE:	3-HS-074-0005C is in Close, No AMPS are indicated, Red light OFF, Green Light On, Yellow light remained On. If asked No breaker trips are indicated.

Standard:

Simulates placing 3-43-074-0005 in Emergency and 3-HS-074-0005C in Close

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

****

Performance Step 6: * Critical X Not Critical

3.0 RHR PUMP 3A LOCAL START

(120 Min)

***NOTE**

*If RHR pump fails to start, pushbutton on breaker must be used.

CUE:	Breaker 3-BKR-074-0005 pushbutton is depressed

[2] **PROCEED TO** 4160V Shutdown Board 3EA, Compt 12, 3-BKR-074-0005 RHR PUMP 3A, AND **PERFORM** the following:

[2.3] **VERIFY** RHR Pump 3A has started by observing breaker AMMETER indications.

CUE:	AMPS pegged high, Red light ON and Green Light OFF Breaker CLOSED, current AMP reading is 180 AMPS

Standard:

Simulates depressing pushbutton on 3-BKR-074-0005 and verifies Amps

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

STOP TIME_____

****

Performance Step 7: Critical _ Not Critical X

[3] **NOTIFY** Unit 3 Unit Supervisor of the completion of this section.

[4] **PROCEED TO** 4160 Shutdown Board A in preparation of performing Section 4.0.

Standard:

Notifies Unit 3 Unit Supervisor

SAT___ UNSAT___ N/A ___COMMENTS:_____

_____

CUE: Another Operator will continue with section 4.0

END OF TASK