

LaSALLE NRC EXAM 2006-301

Job Performance Measure Simulator a.

Candidate Name: _____

LASALLE COUNTY STATION

Simulator JPM a.

Facility: LaSalle County Station U1/U2

Date: November 13, 2006

Task Title: Respond to Loss of RPIS Display

Job Performance Measure No: Simulator a

K/A Reference: 214000K303

Method of testing:

Simulated Performance _____ Actual Performance ✘

Classroom _____ Simulator ✘ Plant _____

Read to the examinee:

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues.

Initial Conditions:

The plant was at power, NOP/NOT. No equipment is out of service. It was discovered that Control Rod 22-19 (check for correct rod #) is INOPERABLE due to a rupture in its accumulator. In order to comply with Technical Specification 3.1.3, the control rod was being inserted from the full out position when the CONT ROD POS INFO SYSTEM INOPERATIVE (1H13-P603-A-402) annunciator energized. The last observed position for the control rod was notch 24.

INITIATING CUE:

Respond to annunciator 1H13-P603-A-402.

Task Standard: Control Rod 22-19 fully inserted w/associated paperwork completed correctly.

Time Critical Task: Yes/No

SIMULATOR SETUP INSTRUCTIONS

Any rated power IC can be used for this JPM
Check rod 22-19 full out (Grant - this may be rod 14-39)
Insert 22-19 to notch 24.
"mf-mrd131_47"

Materials:

The following materials are required to be available to the examinee:

Simulator
LOR 603-A-402
LOA RM-101
LOA RD-101

The following materials are required to be provided to examinee:

None

JPM Start Time: _____

1. _____ Performance step:

Standard: Applicant proceeds to LOR 603-A-402, Step B.2, Notes CAUTION: Prior to notching control rods to verify position displays, a Qualified Nuclear Engineer shall be consulted for guidance. In order to verify control rod position, a rod shall initially be inserted only one notch from its assumed position (or withdrawn one notch if assumed to be at position 00). If there is a need to notch further, consult a QNE for additional guidance.

CUE: There is no need to notch further, the applicant is unable to verify rod position. QNE has been consulted.

2. _____ Performance step:

Standard: Applicant completes Attachment B and forwards a copy to IMD for troubleshooting.

CUE: Attachment B has been completed by another operator and forwarded to IMD. IMD is standing by observing the full-in limit switch.

3. _____ Performance step:

Standard: Applicant ensures compliance with Tech Spec 3.1.3 while continuing below. If a rod must be fully inserted, PERFORM Att. C.

CUE: It has been determined that the control rod must be fully inserted. The control rod's accumulator is INOPERABLE and the rod must be inserted. Applicant proceeds to Attachment C and executes Attachment C steps.

4. Performance step:

Standard: Applicant fills out Attachment C check list as follows (add additional pages as required):

Lists the control rod (22-19), to be inserted, in the order of insertion (#1).
Records the current position of the applicable control rod (notch 24).
Records the insert time, for the applicable control rod (47 seconds), from the current LOS-RD-SR5.
Records the insert stall flow, for the applicable control rod (2.2gpm) from the current LOS-RD-M2 (Attachment A).

CUE: Insert time = 47 seconds; Stall flow = 2.2 gpm.

5. Performance step:

Standard: Applicant reviews and prints PPC 'LPRM Status' Display for LPRM power readings before inserting the control rod.

CUE: Applicant must print LPRM Status before inserting the control rod for sat grade.

6. Performance step:

Standard: Applicant notifies IMD to be prepared to manually read the RPIS probe after the rod is inserted.

CUE: IMD is standing by to manually read the RPIS probe.

7. Performance step:

Standard: Applicant ensures the LPRM Status Display is entered into one of the Control Room Screens.

CUE: Not required, but highly desirable to monitor rod movement.

NOTE: While the rod is being continuously inserted, LPRM readings closest to the rod will be observed to verify power change until the full-in position. This change in LPRM reading and Rx Power will be relative to the rod worth of the control rod and some control rods may present more significant changes than others. The time required for the rod to move will also be recorded starting from when the continuous insert signal was applied and ending when the insert stall flow decreases. This insert time may differ from the previously recorded LOS-RDSR5 insert time relative to control rod starting position. See the Discussion section for further explanation. The rod position will be manually read by IMD after the rod is inserted by checking resistance at each reed switch for the rod.

NOTE: Examiner may act as additional control room operator and monitor LPRM reading while the applicant is observing control rod movement. The applicant should note that the values taken from the current surveillances (LOS-RD-M2 & LOS-RD-SR5) are for information only. The control rod speed and stall flow might have changed since last recording of these values.

8. Performance step:

Standard: Applicant begins inserting control rod 22-19 while timing and observing the following:
Expected LPRM power decay.
Expected DECREASE in Reactor Power.

CUE: After several seconds of control rod insertion, report to the applicant that there are no observable changes in LPRM readings. If asked, IMD reports full-in reed switch activation has not occurred.

9. Performance step:

Standard: Applicant attempts to insert the control rod for up to 90 seconds, releases the Control Rod Continuous Insert Push Button.

CUE: When asked, report no change in LPRM power, IMD reports full-in reed switch actuation has not occurred.

10. Performance step: **BEGIN ALTERNATE PATH**

Standard: Applicant enters LOA-RD-101 for Stuck Control Rod, raises rod drive pressure 50-100psi and re-attempts control rod movement from step 3 (JPM Step 9).

CUE: When applicant begins inserting control rod at elevated drive pressure, rod will begin to insert. Report lowering LPRM readings in the vicinity of the inserting control rod.

11. Performance step:

Standard: Applicant determines control rod is fully inserted when stall flow appears on control rod drive flow instrumentation.

CUE: Report that IMD has verified that the full-in reed switch has actuated.

12. Performance step:

Standard: Applicant validates the conclusions with the QNE.

CUE: As QNE, agree with applicant that the control rod is fully inserted.

13. Performance step:

Standard: Applicant reviews and prints PPC 'LPRM Status' Display power readings.

CUE: None

14. Performance step:

Standard: Attaches both PPC 'LPRM Status' Display prints to Attachment C and gives it to the SRO.

CUE: This concludes the JPM.

JPM End Time: _____

LaSALLE NRC EXAM 2006-301

Job Performance Measure Simulator JPM b.

Candidate Name: _____

LASALLE COUNTY STATION

Simulator JPM b.

Facility: LaSalle County Station U1/U2

Date: November 13, 2006

Task Title: Initiate HPCS with a Failure of the Manual Initiation Push-Button

Job Performance Measure No: Sim b.

K/A Reference: 295031 EA1.04

Method of testing:

Simulated Performance _____ Actual Performance ✘

Classroom _____ Simulator ✘ Plant _____

Read to the examinee:

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues.

Initial Conditions:

- You are an assist NSO.
- A loss of all feedwater has resulted in a scram of the unit.
- The LGAs have been entered.
- Reactor water level is -50".
- RCIC is OOS for mechanical maintenance.
- Grid voltage has been oscillating.

INITIATING CUE:

The Unit Supervisor directs you to manually initiate HPCS using the pushbutton.

Notify the Unit Supervisor when HPCS is injecting.

Task Standard: Initiate HPCS using the manual start switch and manually open the HPCS injection valve.

Time Critical Task: Yes/No

SIMULATOR SETUP INSTRUCTIONS

IC-26 is the preferred IC for this JPM with the following items performed:

NOTE: It is okay to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

Fail the HPCS manual initiation pushbutton
ior k1k04bnl false

Ensure the performance of this JPM does not interfere with the performance of any other JPMs.

When the above steps are completed for this and other JPMs to be run concurrently, validate the concurrently run JPMs using the noted steps on the Job Performance Measure Validation Checklist.

This completes the setup for this JPM.

The following materials are required to be provided to examinee:

None

JPM Start Time: _____

Note: All steps of this JPM are to be completed at control room panel 1H13-P601 unless otherwise noted.

1. _____ Performance step: Arm manual initiation logic.

Standard: Examinee turns HPCS MANUAL INITIATION pushbutton to ARM

COMMENT: None

2. _____ Performance step: Initiate HPCS.

Standard: Examinee depresses HPCS MANUAL INITIATION pushbutton.

COMMENT: None

3. _____ Performance step: Recognize failure to initiate and reports to SRO.

Standard: Examinee recognizes failure to initiate and reports to US.

CUE: As US, acknowledge report. If candidate asks for guidance, inform them to continue until HPCS is injecting.

COMMENT: None

4. ✓ Performance step: Manually start HPCS pump.

Standard: Examinee turns HPCS PMP control switch to START.

COMMENT: None

5. _____ Performance step: VERIFY HPCS pump start.

Standard: Examinee verifies pump start by observation of pump amp meter and discharge pressure.

COMMENT: If examinee immediately opens the injection valve after starting the HPCS pump, 1E22-F012 may not open.

6. _____ Performance step: VERIFY 1E22-F012, HPCS MIN FLOW VLV opens.

Standard: Examinee verifies 1E22-F012, HPCS MIN FLOW VLV opens

COMMENT: None

7. Performance step: Open 1E22-F004 HPCS INJECTION VLV.

Standard: Examinee turns 1E22-F004, HPCS INJECTION VLV control switch to OPEN.

COMMENT: None

8. _____ Performance step: Verify HPCS system injection.

Standard: Flow verified using system flow indications and/or reactor water level increasing.

COMMENT: None

9. _____ Performance step: INFORM Unit Supervisor that HPCS is injecting to the reactor.

Standard: Examinee informs the Unit Supervisor that HPCS is injecting to the reactor (task is complete).

COMMENT: As Unit Supervisor, acknowledge information - This JPM is complete.

JPM Stop Time: _____

LaSALLE NRC EXAM 2006-301

Job Performance Measure Simulator c.

Candidate Name: _____

LASALLE COUNTY STATION

Simulator JPM c.

Facility: LaSalle County Station U1/U2

Date: November 13, 2006

Task Title: Conduct LOS-TG-M4, Turbine Bypass Valve Surveillance

Job Performance Measure No: Sim c

K/A Reference: 241000, A1.07

Method of testing:

Simulated Performance _____ Actual Performance ✘

Classroom _____ Simulator ✘ Plant _____

Read to the examinee:

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues.

Initial Conditions:

Unit 1 is at 100% power.
LOS-TG-M4, "Turbine Bypass Valve Surveillance," is in progress on Unit 1.
LOS-TG-M4 has been completed through step E.1.

INITIATING CUE:

You are to perform LOS-TG-M4, "Turbine Bypass Valve Surveillance," on Unit 1 using Attachment 1A of LOS-TG-M4 starting at Step E.2.

Task Standard: Correctly complete LOS-TG-M4 on Unit 1 using Attachment 1A.

Time Critical Task: Yes/No

SIMULATOR SETUP INSTRUCTIONS

Any rated power IC can be used for this JPM

Materials:

The following materials are required to be available to the examinee:

LOS-TG-M4, completed through Step E.1

The following materials are required to be provided to examinee:

LOS-TG-M4, completed through Step E.1

JPM Start Time: _____

1. _____ Performance step: Applicant verifies bypass valves are not controlling Reactor Pressure.

Standard: Applicant observes bypass valves are shut.

CUE: None

2. _____ Performance step: CHECK the Bypass Valve READY TO SELECT light is energized.

Standard: Bypass Valve READY TO SELECT light is energized.

CUE: None

3. Performance step: PLACE the BYPASS VALVE TEST selector switch in position 1.

Standard: BYPASS VALVE TEST selector switch is in position 1.

CUE: None

4. Performance step: DEPRESS the TEST BYPASS VALVE button and OBSERVE:
- ACCEPTANCE CRITERIA:
1B21-MSBPV-1 to FULL OPEN.
- 1B21-MSBPV-1 exhibits Fast Open characteristics.

Standard: Verifies the following:
- 1B21-MSBPV-1 to FULL OPEN.
- 1B21-MSBPV-1 exhibits Fast Open characteristics.

CUE: None

5. Performance step: RELEASE the TEST BYPASS VALVE button and OBSERVE:
- ACCEPTANCE CRITERIA:
1B21-MSBPV-1 to FULL CLOSED.

Standard: RELEASE the TEST BYPASS VALVE button and observes 1B21-MSBPV-1 to FULL CLOSED.

CUE: None

6. Performance step: ALLOW the plant to stabilize for at least 2 minutes before testing the next bypass valve.

Standard: Allows 2 minutes for stabilization.

CUE: None

Cue: 2 minutes have elapsed.

7. Performance step: CHECK the Bypass Valve READY TO SELECT light is energized.

Standard: Bypass Valve READY TO SELECT light is energized.

CUE: None

8. Performance step: PLACE the BYPASS VALVE TEST selector switch in position 2.

Standard: BYPASS VALVE TEST selector switch is in position 2.

CUE: None

9. Performance step: DEPRESS the TEST BYPASS VALVE button and OBSERVE:
- ACCEPTANCE CRITERIA:
- 1B21-MSBPV-2 to FULL OPEN.
- 1B21-MSBPV-2 exhibits Fast Open characteristics.

Standard: Observes proper acceptance criteria.

COMMENT: None

10. Performance step: RELEASE the TEST BYPASS VALVE button and OBSERVE:
-ACCEPTANCE CRITERIA:
- 1B21-MSBPV-2 to FULL CLOSED.

Standard: Acceptance criteria met, 1B21-MSBPV-2 to FULL CLOSED.

COMMENT: None

11. Performance step: ALLOW the plant to stabilize for at least 2 minutes before testing the next bypass valve.

Standard: Allows 2 minutes for stabilization.

CUE: Terminate the JPM - "That completes this JPM."

JPM Stop Time: _____

LaSALLE NRC EXAM 2006-301

Job Performance Measure Simulator d.

Candidate Name: _____

LASALLE COUNTY STATION

Simulator JPM d.

Facility: LaSalle County Station U1/U2

Date: November 13, 2006

Task Title: Up-Shift Reactor Recirc Pumps

Job Performance Measure No: Sim d.

K/A Reference: 202001 A4.01

Method of testing:

Simulated Performance _____ Actual Performance ✘

Classroom _____ Simulator ✘ Plant _____

Read to the examinee:

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues.

Initial Conditions:

1. Unit 1 is starting up following an extended outage and the reactor is at 29% power.
2. LGP 1-1 has been completed up to the last step of E.6.4.
3. Reactor water level is about 37".
4. Both RR pumps are operating in slow speed.
5. OD-3 Flow Control Line < 66.7% has been verified.
6. Operators are standing by to assist you.

INITIATING CUE:

The Unit Supervisor has directed you to upshift the "A" and "B" reactor recirc pumps to fast speed IAW LOP-RR-05 Step E.1. Inform the Unit Supervisor when the Low Power/Low Flow interlocks are returned to normal.

Task Standard: Reactor Recirc pumps operating in fast speed.

Time Critical Task: Yes/No

SIMULATOR SETUP INSTRUCTIONS

Reset the simulator to IC 25.

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

- 1.) Run
- 2.) Reset FCV lockups.
- 3.) Hang a Blue information card Jet pump and core plate flow recorder with the message that core plate flow is to be used.
- 4.) Freeze the simulator until the candidate is ready to begin.

When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs using the noted steps on the Job Performance.

Materials:

The following materials are required to be available to the examinee:

LOP-RR-05 marked to Step E.1

The following materials are required to be provided to examinee:

LOP-RR-05 marked to Step E.1

JPM Start Time: _____

All steps of this JPM are to be completed at control room panel H13-P602 unless otherwise noted.

It is the candidates choice of which pump to upshift first.

Steps 1-8 of this JPM apply to both RR pumps. B RR pump upshift steps begin at step 14.

1. _____ Performance step: Verify both RR pumps in slow speed with Flow Control Valves full open.

Standard: Slow speed operation and flow control valve position verified by the following:

- LFMG SET GEN BRKR 2A and 2B are closed.
- LFMG SET DRIVE MOTOR BKR 1A and 1B are closed.
- "A" and "B" RR MOTOR BKR 3A and 3B are open.
- "A" and "B" RR motor speeds are 450 rpm.
- "A" and "B" RR Loop flow controllers indicate FCV position at 100%.

CUE None.

2. _____ Performance step: Verify reactor power between 25% and 35%.

Standard: Control room panel H13-P603 APRM recorders are verified to be indicating between 25% and 35% reactor power.

CUE: IF examinee questions whether the FCL < 66.7%, remind him that the initial conditions provided the FCL <66.7%.

3. _____ Performance step: Verify reactor operation is below the 66.7% flow control line.

Standard: Control room panel H13-P603 reactor power and core flow indications are compared and reactor is verified to be below the 66.7% flow control line using the graph on the rod sequence book,
-or-
Applicant may use initial conditions data.

CUE: None.

4. _____ Performance step: CHECK "A" and "B" RR Loop flow controllers are in manual.

Standard: "A" and "B" Loop flow controller "Manual" pushbutton are verified backlit.

CUE: None

5. _____ Performance step: CHECK RR MOTOR BKR 4A and 4B are closed.

Standard: "A" RR MOTOR BKR 4A and "B" RR MOTOR BKR 4B verified closed.

CUE: None.

6. _____ Performance step: CHECK feedwater flow is greater than 2.83 Mlbm/hr.

Standard: Feedwater flow verified to be >2.83 Mlbm/hr at control room panel H13-P603.

CUE: None

7. _____ Performance step: CHECK recirc loop suction to steam dome ΔT s are >10.1°F.

Standard: At 1DS001 Interlock panel, verifies that recirc loop suction to steam dome ΔT s are >10.1° F not solid blue.

CUE: None.

8. _____ Performance step: CHECK reactor water level is 31.5" to 40.5" (between the high and low level alarms).

Standard: Reactor water level is verified to be 31.5" to 40.5" at control room panel H13-P603.

CUE: None

9. Performance step: Bypass the A & B RR Interlocks.

Standard: At the 1DS001, examinee selects Loop A & B "Low Flow Bypass" and then PRESS the ACTIVATE button. LOOP A & B "Low Power Bypass" and then PRESS the ACTIVATE button.

CUE: None.

10. Performance step: Close A(B) RR flow control valve to minimum.

Standard: A(B) RR loop flow control station lower pushbutton depressed until the FCV indicates minimum position(<20% indicated).

CUE: None

11. Performance step:

Standard:

11. At the 1DS001, Operator Station Interlocks Screen, verify the following interlocks are RESET.

The following are RESET:

A & B RR Loop "Feedwater Flow Low"

A & B RR Loop "Suction Delta Temp Low"

12. Performance step: Verify high speed start permissive for A(B) RR pump.

Standard: 1A(1B) RR PMP START PERMISSIVE "HI SPEED" light verified to be lit.

CUE: None.

13. Performance step: INITIATE TADS data logger to collect data.

Standard: At the 1DS001, Examinee selects the TADS button.

Cue: Events list shows TADS initiated.

14. Performance step: Start the A(B) RR pump in fast speed.

Standard: Control switch for 1A(1B RR MOTOR BKR 3A(3B) taken to start.

CUE: None

15. Performance step: Verify proper shift to fast speed sequence.

Standard: Sequence monitored by observing the following:

- LFMG SET DRIVE MOTOR BKR 1A(1B) opens.
- LFMG SET GEN BKR 2A(2B) opens.
- 1A(1B) RR MOTOR BKR 3A(3B) closes when pump speed decreases to 350 rpm.
- 1A(1B) RR pump speed increase to ~1750 rpm.
- Reactor levels drops then returns to level controller setpoint.
- Reactor power increases and then stabilizes.

CUE: None

16. Performance step: Close B(A) RR flow control valve to minimum.

Standard: B(A) RR loop flow control station lower pushbutton depressed until the FCV indicates minimum position(<20% indicated).

CUE: None.

17. Performance step: At the 1DS001, Operator Station Interlocks Screen, verify the following interlocks are RESET.

Standard: The following are RESET:

- A & B RR Loop "Feedwater Flow Low"
- A & B RR Loop "Suction Delta Temp Low"

CUE: None

18. _____ Performance step: Verify high speed start permissive for B(A) RR pump.

Standard: 1B(1A) RR PMP START PERMISSIVE "HI SPEED" light verified to be lit.

CUE: None

19. _____ Performance step: INITIATE TADS data logger to collect data.

Standard: At the 1DS001, Examinee selects the TADS button.

CUE: None

Cue: Events list shows TADS initiated.

20. Performance step: Start the B(A) RR pump in fast speed.

Standard: Control switch for 1B (1A) RR MOTOR BKR 3B (3A) taken to start.

CUE: None

21. _____ Performance step: Verify proper shift to fast speed sequence.

Standard: Sequence monitored by observing the following:

- LFMG SET DRIVE MOTOR BKR 1A(1B) opens.
- LFMG SET GEN BKR 2A(2B) opens.
- 1A(1B) RR MOTOR BKR 3A(3B) closes when pump speed decreases to 350 rpm.
- 1A(1B) RR pump speed increase to ~1750 rpm.
- Reactor levels drops then returns to level controller setpoint.
- Reactor power increases and then stabilizes.

CUE: None

22. _____ Performance step: Close B(A) RR flow control valve to minimum.

Standard: B(A) RR loop flow control station lower pushbutton depressed until the FCV indicates minimum position(<20% indicated).

CUE: When applicant reports both recirc pumps are operating at fast speed, acknowledge.

JPM Stop Time: _____

LaSALLE NRC EXAM 2006-301

Job Performance Measure Simulator e.

Candidate Name: _____

LASALLE COUNTY STATION

Simulator JPM e.

Facility: LaSalle County Station U1/U2

Date: November 13, 2006

Task Title: Establish Max Suppression Pool Cooling with the Hard Card

Job Performance Measure No: C.R. e.

K/A Reference: 219000A301

Method of testing:

Simulated Performance _____ Actual Performance ✘

Classroom _____ Simulator ✘ Plant _____

Read to the examinee:

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues.

Initial Conditions:

- You are an extra SRO in the control room.
- A transient has occurred.
- Hard Card use is authorized.
- An operator is standing by to assist you.

INITIATING CUE:

You are to start a loop of RHR in Suppression Pool Cooling. Inform the Unit Supervisor when an RHR loop is running in suppression pool cooling.

Task Standard: RHR is running in suppression pool cooling mode.

Time Critical Task: Yes/No

SIMULATOR SETUP INSTRUCTIONS

Reset the simulator to IC that is compatible for JPMs to run.

NOTE: It is okay to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

Run Cae S-RH-24

set vmsw68ar = 1e8 | 1 | 1

set vmsw68br = 1e8 | 2 | 2

trgset 1 "k1p19bnn .eq. 1" | 3 | 3

trgset 2 "k1p11bnn .eq. 1" | 4 | 4

trg 2 "set vmsw68ar = 133.000" | 5 | 5

trg 1 "set vmsw68br = 128.000" | 6 | 6

Materials:

The following materials are required to be available to the examinee:

RHR Hard Card.

The following materials are required to be provided to examinee:

None

Note: All steps of this JPM are to be completed at control room panel 1H13-P601 unless otherwise noted.

The first loop's 1E12-F068 valve will not open forcing the examinee to choose the other loop.

Sim Op:

When it is clear which loop the examinee will choose as his first loop to place in suppression pool cooling, fail the open indication of that loops' 1E12 F068 valve by inserting one of the following commands in expert mode

Loop A IOR q1p19rrn off

Loop B IOR q1p11rrn off

It is not necessary to insert this before the examinee's attempt to open the first loops' 1E12-F068 valve but it will be necessary before he attempts the second loops' 1E12-F068.

NOTE: Examinee's actions with the first RHR SW loop after the attempted opening of 1E12-F068A/B do not affect the outcome of this JPM.

1. _____ Performance step: Examinee tries to open 1E12-F068A/B, A/B RHR Hx Wtr Otlt Vlv.

Standard: Places 1E12-F068A/B, A/B RHR Hx Wtr Otlt Vlv control switch in OPEN.

CUE: None

2. _____ Performance step: Examinee determines 1E12-F068A/B will not open.

Standard: Applicant determines valve has failed.

CUE: If examinee reports that 1E12-F068A/B will not open, direct the examinee to start the other loop of RHR in suppression pool cooling.

3. Performance step: Examinee shifts to other 1E12-F068A/B and opens that valve.

Standard: Opposite loop of RHR Hx Water Outlet Isolation Valve is open.

CUE: None.

4. Performance step: START RHR Service Water Pump 1E12-C300A/B/C/D.

Standard: Examinee starts RHR Service Water Pump 1E12-C300A/B/C/D.

CUE: Pumps A & B are associated w/ Loop A, pumps C & D are associated w/ Loop B.
Applicant chooses pumps he wants to start. Flow indication should be monitored by the Examinee on FI-1E12-R602A/B.

5. Performance step: When A/B Loop RHR Service Water flow rate increases to greater than 3000 gpm, START RHR Service Water Pump 1E12-C300A/B/C/D.

Standard: Examinee starts RHR Service Water Pump 1E12-C300A/B/C/D when A/B Loop RHR Service Water flow rate is >3000 gpm.

CUE: None

6. Performance step: START 1E12-C002A/B, A/B RHR Pump.

Standard: Examinee turns 1E12-C002A/B, A/B RHR Pump control switch to START.

CUE: None

7. Performance step: THROTTLE OPEN 1E12-F024A/B A/B RHR Test to SP Vlv to maintain flow between 1500 and 7450 gpm as indicated on 1E12-R603A/B.

Standard: Examinee turns 1E12-F024A/B A/B RHR Test to SP Vlv control switch to OPEN and establishes between 1500 to 7450 gpm flow.

CUE:

8. Performance step: Shuts 1E12-F048A/B, A/B RHR Hx Bypass Stop.

Standard: Examinee holds 1E12-F048A/B, A/B RHR Hx Bypass Stop control switch to CLOSE until closed light is lit and OPEN light is extinguished.

CUE: None

9. _____ Performance step: Informs Unit Supervisor that task is complete.

Standard: Examinee notifies Unit Supervisor '1A/B' RHR is running in max suppression pool cooling.

CUE: AS Unit Supervisor, acknowledge information. This JPM is complete.

JPM Stop Time: _____

LaSALLE NRC EXAM 2006-301

Job Performance Measure Simulator f.

Candidate Name: _____

LASALLE COUNTY STATION

Simulator JPM f.

Facility: LaSalle County Station U1/U2

Date: November 13, 2006

Task Title: Perform RWM Operability
Surveillance for Decreasing
Reactor Power Below 10%.

Job Performance Measure No: CR f

K/A Reference: 201006A3.02

Method of testing:

Simulated Performance _____ Actual Performance ✘

Classroom _____ Simulator ✘ Plant _____

Read to the examinee:

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues.

INITIAL CONDITIONS:

You are an extra SRO in the control room.
Unit 1 Shutdown is in progress.
Reactor Power is approximately 10%.
LOS-RW-SR1 Step 4 to test control rod withdrawal block is due. It has been nearly an hour since Thermal Power was reduced to <10%.

INITIATING CUE:

You are to perform LOS-RW-SR1, Attachment 1A, Step 4, in preparation for the Unit 1 shutdown.
Inform the Unit Supervisor when LOS-RW-SR1, Attachment 1A Step 4 is complete.

Task Standard: Correctly complete LOS-RW-SR1, Attachment 1A, Step 4, and inform the Unit Supervisor of any deviations.

Time Critical Task: Yes/No

SIMULATOR SETUP INSTRUCTIONS

Select an IC that is stable <10% RTP.

Materials:

The following materials are required to be available to the examinee:

LOS RW-SR1

The following materials are required to be provided to examinee:

Authorized copy of LOS-RW-SR1, Attachment 1A.

JPM Start Time: _____

Note: All steps of this JPM are to be completed at control room panel 1PM05J unless otherwise noted.

Note: In Mode 1, within 1 hour after Thermal Power is < 10% when reducing power, PERFORM the following to test control rod withdrawal block:

1. _____ Performance step: Retrieves LOS-RW-SR1, Attachment 1A. Goes to Step 4.

Standard: Opens correct reference book to arrive at this reference.

CUE: None

2. SELECT the A CPU of the RWM.

Standard: Applicant selects the A CPU of the RWM.

CUE: None

3. SELECT any out of sequence control rod NOT at notch position 48.

Standard: Selects any rod not at notch position 48.

CUE: None

4. ATTEMPT to single notch withdraw the control rod.

Standard: Attempts to single notch withdraw a control rod

CUE: None

5. _____ VERIFY a control rod withdrawal block is being applied preventing the rod from moving (Tech Spec SR 3.3.2.1.2 and SR 3.3.2.1.3).

Standard: Verifies control rod does not move.

CUE: None

6. SELECT in sequence control rod.

Standard: Selects an in-sequence control rod. At panel 1H13-P603, observes alarm window A308 clears.

CUE: None

7. SELECT the B CPU of the RWM.

Standard: Selects the B CPU of the RWM.

CUE: None

8. SELECT any out of sequence control rod NOT at notch position 48.

Standard: Selects an out-of-sequence control rod not at notch position 48.

CUE: None

9. ATTEMPT to single notch withdraw the control rod.

Standard: Attempts to withdraw the control rod.

CUE: None

10. VERIFY a control rod withdrawal block is being applied preventing the rod from moving (Tech Spec SR 3.3.2.1.2 and SR 3.3.2.1.3).

Standard: Verifies no control rod movement.

CUE: None

11. SELECT in sequence control rod.

Standard: Selects an in-sequence control rod. At panel 1H13-P603, OBSERVE alarm window A308 clears.

CUE: None

12. Reports to the Unit Supervisor the completion of LOS-RW-SR1, Attachment 1A, Step 4, with no errors.

Standard: Final report to the Unit Supervisor.

Terminating Cue: This JPM is complete.

JPM Stop Time: _____

LaSALLE NRC EXAM 2006-301

Job Performance Measure Simulator g.

Candidate Name: _____

LASALLE COUNTY STATION

Simulator JPM g.

Facility: LaSalle County Station U1/U2

Date: November 13, 2006

Task Title: Shift VC/VE from U1 to U2

Job Performance Measure No: Sim g

K/A Reference: 288000A401

Method of testing:

Simulated Performance _____ Actual Performance ✘

Classroom _____ Simulator ✘ Plant _____

Read to the examinee:

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues.

Initial Conditions: You are an extra SRO on shift.

Another operator from Unit 2 has requested you assist in shifting VC/VE.
LOP-VC-01 Step E.2.3 is complete.
The operator is standing by waiting for your verbal signal that you are ready to shift VC/VE from U2 to U1.

INITIATING CUE:

You are to assist the U2 Assist NSO shift VC/VE from U2 to U1.

Inform the Unit Supervisor of when you have completed shifting the ventilation system to Unit 1.

Task Standard: VC/VE isolated in response to ammonia smell.

Time Critical Task: Yes/No

SIMULATOR SETUP INSTRUCTIONS

Any IC can be used for this JPM.

Place U1 VC/VE in its normal standby condition per LOP-VC-01.

1PM06J-B-204 prepared to energize 90 seconds after 0A CRHVAC started.

Materials:

The following materials are required to be available to the examinee:

LOP-VC-01

LOR-1PM06J-B-204

The following materials are required to be provided to examinee:

LOP-VC-01

JPM Start Time: _____

NOTE: All steps of this JPM are to be completed at control room panel 1PM05J unless otherwise noted.

1. _____ Performance step: Coordinate with both Unit Supervisors and establish communications as necessary to stop 0B CR HVAC Supply Fan immediately on receipt of 0A CR HVAC Supply Fan start indication.

Standard: Step E.2.3 completed per initiating cue.

CUE: The examiner is the operator on Unit 2 and is standing by to secure 0B CR HVAC.

2. Performance step: At 1PM05J, momentarily place 0A CR HVAC Supply Fan 0VC01CA control switch to start and release.

Standard: 0A CR HVAC Supply Fan starts in 60 seconds.

CUE: None

3. _____ Performance step: After an approximate 60 second time delay for Zone Isolation dampers to open, check A CR HVAC Supply Fan ON indication is lit.

Standard: Indication is lit.

CUE: None

4 _____ Performance step: At 2PM05J, IMMEDIATELY STOP 0B CR HVAC Supply Fan 0VC01CB and CHECK 0B CR HVAC Supply Fan OFF light is lit.

Standard: U2 Reports 0B CR HVAC system is shut down.

CUE: As U2 NSO Assist, report that 0B CR HVAC is shut down.

5. _____ Performance step: Verify 0A CR HVAC Cooler Cndsr Fan 0VC04CA is running.

Standard: 0A CR HVAC Cooler Condenser Fan is operating

CUE: None

6 _____ Performance step: After approximately 30 seconds for Fan Suction damper to open, verify 0A CR HVAC Return Fan 0VC02CA is running.

Standard: Return Fan is running.

CUE: None ***** Start Alternate Path

7. _____ Performance step: Respond to annunciator 1PM06J-B-204, AMMONIA DETECTION.

Standard: Retrieves LOR-1PM06J-B-204

CUE: Cue the applicant that the alarm is valid and a light odor of ammonia can be detected in the control room air.

8. Performance step: Applicant places 0A CR HVAC in RECIRC mode.

Standard: Depresses red isolation pushbutton.

CUE: None

9. _____ Performance step: Applicant reports to Unit Supervisor that 0A CR HVAC is in its RECIRC mode.

Standard: Makes report to Unit Supervisor.

CUE: Respond as Unit Supervisor that 0A CR HVAC is in RECIRC mode.

Terminating Cue: This JPM is complete.

JPM Stop Time: _____