**Admin Task JPM A1**
**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 1270050401 Perform A Power Ascension Above 20%
TASK STANDARD: The Power ascension rate limit has been determined. The power ascension has been halted/reduced. The max power allowed has been determined.
K/A: 2.1.23 K/A RATING: RO: 3.9 SRO: 4.0
APPLICABLE POSITION(S): SRO/RO VALIDATION TIME: 20 min.
REFERENCES: 40OP-9ZZ05, Power Operations, Revision 56
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:
REVISION DATE: 4/19/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)
EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

## 1. SIMULATOR SETUP:

A. IC#: The simulator is not specifically needed for this JPM.

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | TAG | TITLE | VALUE | TIME DELAY | RAMP RATE |
|---|---|---|---|---|---|
| | N/A | | | | |
| | | | | | |

C. SPECIAL INSTRUCTIONS:

- Ensure that a **marked up copy** of 40OP-9ZZ05 is available with prerequisite steps and steps 5.3.1 thru 5.3.42 marked as completed. Circle step 5.2.7 indicating incomplete.

D. REQUIRED CONDITIONS:

- None

## 2. SPECIAL TOOLS/EQUIPMENT:

- **Blank copy** of 40OP-9ZZ05, Appendix J
- **Marked up copy** of 40OP-9ZZ05 is available with prerequisite steps and steps 5.3.1 through 5.3.42 marked as completed. Step 5.2.7 circled.
- Calculator

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The following plant conditions exist:**

- **The Plant has begun initial power ascension following a 30-day refueling outage.**
- **The Power ascension has been on hold for 2 days at 70% to allow B Main Feed Pump repairs.**
- **B Main Feed Pump has just been placed in service. Reactor Engineering has completed testing and Power ascension to 90% is planned.**
- **The power ascension ramp rate OAP is NOT available.**
- **The prerequisites of 40OP-9ZZ05, Power Operations are complete with the exception of 5.2.7, which requires reevaluation.**
- **Steps 5.3.1 through 5.3.42 of 40OP-9ZZ05 are complete.**

**The CRS has directed you to start at step 5.3.4 of 40OP-9ZZ05, perform Appendix J to monitor the power ascension to include the following:**

1. **Determine the most limiting loading rate for Power changes per step 5.2.7.**
2. **Monitor the power ascension and log data in accordance with Appendix J.**
3. **Following each data entry, determine if the power ascension rate is within limits and guidelines.**

**Note: 2nd verification is not required for this JPM. The examiner will provide actual power level.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.

- If this is the first JPM of the set, then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Obtain 40OP-9ZZ05, Power Operations, Appendix J | Obtains 40OP-9ZZ05, Power Operations and Appendix J, Power Ascension Ramprate Data Sheet. |

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SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2. *** | Determines most limiting rate for Power changes | Determines most limiting rate for Power changes to be 3.0% per hour per Appendix A – Fuel Preconditioning Guidelines.<br><br>EVALUATOR NOTE: Appendix C – Turbine Load Changes above 35% have no load change limit.<br><br>**If requested CUE: Reactor Engineering recommends Appendix A guidelines..**<br><br>**Inform CUE : The reactivity briefing has been completed and the increase in power will be by a 4 gpm dilution rate with power change estimated to be approximately 2 % per hour. The PO and SO will control the dilution and turbine load increase.** |

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | Enters initial data. | Enters the following data:<br>Date/: Current Date<br>Power Ascension Rate Limit 2.5%<br>(most limiting – 0.5% = 3.0% - 0.5%)<br>Max Power 72.5% (73% max limit)<br>Actual Power 70%:<br>Performed by: Examinee's initials<br>Verified by: (Not required for this JPM)<br><br>**When requested CUE: Actual power is 70%.**<br><br>**Inform CUE:**<br>**A 4 gpm dilution has commenced and power is increasing. 15 minutes has elapsed and power is now at 70.6%. Determine the power ascension status.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Logs data and determines power ascension status. | Logs data and determines that the power ascension is acceptable (below target and max allowed limit).<br><br>**When requested CUE: I understand power ascension is acceptable.** (note: examinee may state that the power ascension rate is greater that what was predicted during the reactivity briefing- if so, state that the dilution will continue at the current rate)<br><br>**Inform CUE: Another 15 minutes has elapsed and power is now at 71.3%. Determine the power ascension status.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **5.** | Logs data and determines power ascension status. | Logs data and informs the CRS that the power ascension rate is below the maximum allowed limit (Examinee may state that the rate exceeds 15 minute target rate).<br><br>**When requested CUE: I understand that the power ascension rate is below the maximum allowable limit (but exceeds the 15 minute target rate). Continue with the power increase.**<br><br>EVALUATOR NOTE: The operator may indicate that he would not continue at this point.<br>The intent is to have the operator continue with the power ascension.<br><br>**Inform CUE: Another 15 minutes has elapsed and power is now at 72.3%. Determine the power ascension status.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **6. *** | Logs data and determines power ascension status. | Examinee informs the CRS that the power ascension must stop or be reduced to prevent exceeding Max Power Allowed for the hour.<br><br>**When requested CUE: I understand that the power ascension is excessive. The power ascension will be halted.**<br><br>**Inform CUE: Another 15 minutes has elapsed and power in now at 72.5%. Determine the power ascension status.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **7.** | Logs data and determines power ascension status. | Informs the CRS that power ascension ramprate equals the Max Power Allowed.<br><br>**When requested CUE: I understand that the Avg. ramprate equals the guideline target limit.**<br><br>**Inform CUE: Determine the new Max power limit allowed for the next 15 minute interval.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **8. *** | Logs data and determines new Max Power Allowable limit. | Determines the new Max Power Allowed to be 73.1<br><br>**When requested CUE: I understand the new Max Power Allowed limit is 73.1 % .**<br><br>**Inform CUE: Another operator will complete Appendix J.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 00 | 04/20/01 | 6 | Original |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The following plant conditions exist:**

- **The Plant has begun initial power ascension following a 30-day refueling outage.**
- **The Power ascension has been on hold for 2 days at 70% to allow B Main Feed Pump repairs.**
- **B Main Feed Pump has just been placed in service. Reactor Engineering has completed testing and Power ascension to 90% is planned.**
- **The power ascension ramp rate OAP is NOT available.**
- **The prerequisites of 40OP-9ZZ05, Power Operations are complete with the exception of 5.2.7, which requires reevaluation.**
- **Steps 5.3.1 through 5.3.42 of 40OP-9ZZ05 are complete.**

**The CRS has directed you to start at step 5.3.4 of 40OP-9ZZ05, perform Appendix J to monitor the power ascension to include the following:**

1. **Determine the most limiting loading rate for Power changes per step 5.2.7.**
2. **Monitor the power ascension and log data in accordance with Appendix J.**
3. **Following each data entry, determine if the power ascension rate is within limits and guidelines.**

**Note: 2nd verification is not required for this JPM. The examiner will provide actual power level.**

**SAFETY CONSIDERATIONS:**

- None

**Admin Task JPM A2**
**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 1250140201 Respond to excessive Steam Generator tube leakage
TASK STANDARD: Respond to excessive Steam Generator tube leakage-Determine the leakrate.
K/A: 42037AA212 K/A RATING: RO: 3.3 SRO: 4.1
K/A: 2.1.33 K/A RATING: RO: 3.4 SRO: 4.0
APPLICABLE POSITION(S): RO/SRO VALIDATION TIME: 15 minutes
REFERENCES: 40AO-9ZZ02, Excessive RCS Leakrate Appendix A, Revision 6
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:
REVISION DATE: 4/25/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
)

**PVNGS JOB PERFORMANCE MEASURE**

**1. SIMULATOR SETUP:**

A. IC# : Any at power IC (20 preferred)

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | IMF TH06A 2.5 | SG #1 Tube leak of approximately 25 gpm. |
| **2.** | | |
| **3.** | | |
| **4.** | | |

C. SPECIAL INSTRUCTIONS:

- Allow the simulator to run for approximately 5 minutes and **verify** that any Reset-induced leak rate is cleared.
- Insert malfunction and let the simulator run for approximately 10 minutes.
- Acknowledge all alarms including RMS

D. REQUIRED CONDITIONS:

- None

**2. SPECIAL TOOLS/EQUIPMENT:**

- Calculator

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**A Steam Generator tube leak exists.**

**40AO-9ZZ02, Excessive Leak Rate has been entered.**

**The CRS instructs you to:**

1. **Calculate the leak rate using Appendix A, 15 minute Leak Rate Calculation.**
    - **Another operator will address RMS alarms.**
2. **(SRO only) Determine any applicable Tech Spec action(s)**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Ensure Tc is constant (±1°F). | Examinee verifies Tc is constant.<br><br>**If requested CUE: TC is 554°F and constant.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2.** | Check that pressurizer pressure is stable between 2235 psia and 2265 psia. | Examinee verifies pressurizer pressure is stable and between 2235 psia and 2265 psia.<br><br>**If requested CUE: Pressurizer pressure is 2250 psia and stable.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | Ensure Chemistry is NOT drawing samples from the RCS or CVCS. | Examinee simulates contacting Chemistry.<br><br>**When requested CUE: The RCS and CVCS are not being sampled at this time.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Ensure that ONE of the following conditions exist:<br>• Letdown is aligned to the VCT<br>• Letdown is isolated | Examinee verifies Letdown is aligned to the VCT (current lineup).<br><br>**If requested CUE: letdown is aligned to the VCT.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **5.** | | Ensure that ONE of the following conditions exist:<br>• Charging pump suction is aligned to the VCT.<br>• Charging pumps are stopped. | Examinee verifies charging pump suction is aligned to VCT (Current lineup).<br><br>**If requested CUE: Charging pump suction is aligned to the VCT.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **6.** | * | Place CHN-FIC-210X, Reactor Makeup Water to VCT, in "MANUAL" with zero output. | Examinee places CHN-FIC-210X, in "MANUAL" with zero output.<br><br>**If requested CUE: CHN-FIC-210X is in "MANUAL" with zero output.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **7.** | * | Place CHN-FIC-210Y, Boric Acid Makeup to VCT, in "MANUAL" with zero output. | Examinee places CHN-FIC-210Y in "MANUAL" with zero output.<br><br>**If requested CUE: CHN-FIC-210Y is in "MANUAL" with zero output.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | | Place CHN-HS-527, Make-up to Charging Pumps (VCT Bypass) Valve, in "CLOSED". | Examinee places CHN-HS-527, Make-up to Charging Pumps (VCT Bypass) Valve, in "CLOSED".<br><br>**If requested CUE: CHN-HS-527 indicates green light on, red light off.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | * | When CHN-UV-527 indicates closed, Then place CHN-HS-210, Makeup Mode Select Switch, in "MANUAL". | Examinee verifies CHN-UV-527 is closed, then places CHN-HS-210 in "MANUAL".<br><br>**If requested CUE: CHN-UV-527 is closed and CHN-HS-210 is in "MANUAL".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **10.** | Record both of the following using Attachment A-1, Leak rate data sheet:<br>• Start Time<br>• Initial Data | Examinee records appropriate start time and initial data on Attachment A-1.<br><br>**If requested CUE:**<br>**Pzr Level is 50%**<br>**VCT Level is 49%**<br>**T-AVG is 580°F** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **11.** | When 15 minutes have elapsed or VCT level has lowered to 15%, THEN Record both the following using Attachment A-1, Leak Rate Data Sheet:<br>• Stop Time<br>• Final Data | Examinee records appropriate stop and final data on Attachment A-1.<br><br>**If requested CUE: 15 minutes has elapsed.**<br>**Pzr Level is 50%**<br>**VCT Level is 39%**<br>**T-AVG is 580°F** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **12.** | * | Calculate the leak rate using Attachment A-1, Leak Rate Data Sheet. | **Using Simulator:** Examinee determines leak rate to be 26.9 gpm ± 20% or 5 gpm.<br><br>Note: Leak rates based on actual Simulator values may vary from this value but should be within ± 20% of the actual ERFDADS calculated value.<br><br>**No Simulator**: If examinee determines the leak rate based on the CUEs provided in this JPM, his answer should be 26.9 ± 1 gpm.<br><br>**Inform CUE: Another operator will complete Appendix A.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **13.** | * | (SRO Only) Determine Tech Spec action. | Examinee determines Tech Spec 3.4.14 Condition A, Action A.1 and Condition B, Action B.1 and B.2. Be in Mode 3 in 6 hours and Mode 5 in 36 hours.<br><br>**When requested CUE: I understand be in Mode 3 in 6 hours and Mode 5 in 36 hours** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 04/25 /01 | 6 | New JPM. |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**A Steam Generator tube leak exists.**

**40AO-9ZZ02, Excessive Leak Rate has been entered.**

**The CRS instructs you to:**

1. **Calculate the leak rate using Appendix A, 15 minute Leak Rate Calculation.**
    - **Another operator will address RMS alarms.**
2. **(SRO only) Determine any applicable Tech Spec action(s)**

**SAFETY CONSIDERATIONS:**

- None

**SRO Admin Task JPM A3**
**PVNGS JOB PERFORMANCE MEASURE**

## ADMIN TASK BASIS INFORMATION

TASK: 1290620402 Applies Maintenance Rule Requirements
TASK STANDARD: Review PCRIM for risk assessment and perform follow-up work control actions.
K/A: 2.2.17 K/A RATING: RO: 2.3 SRO: 3.5
APPLICABLE POSITION(S): SRO VALIDATION TIME: 15 minutes
REFERENCES: 30DP-9MT03 Assessment and Management of Risk when Performing Maintenance in Modes 1-4, Revision 1
SUGGESTED TESTING ENVIRONMENT: SIMULATOR _____ PLANT X

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:
REVISION DATE: 5-1-01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**1. SIMULATOR SETUP:**

A. IC# : N/A

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | N/A | |

C. SPECIAL INSTRUCTIONS:

- None

D. REQUIRED CONDITIONS:

- None

**2. SPECIAL TOOLS/EQUIPMENT:**

- Copy 30DP-9MT03, Rev. 1 with color copy of Appendix A, PCRIM Tables 1 and 2.
- Unit 2 “Schedule Tracker for Week of 05/07/01” (Located in Vista under All Public Folders/ Palo Verde/ POD/ FINAL SCHEDULES (T-3)/ FINAL_SCHD_050701, page 11of 149).

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**Given the following conditions:**

- **Unit 2 is at 100% power.**
- **Workday is Saturday, night shift, May 12th.**
- **The following work listed on the Schedule Tracker for Week of 5/7/01, Cycle 32, Week 2, (A) Train, is IN PROGRESS:**
  - **High rate Blowdown**
  - **"A" Charging Pump Pulsation Dampener PM.**
- **NNN-D11 has tripped on a ground fault.**

**As the CRS you are directed to:**

**Assess and manage risk for emergent conditions in accordance with Section 3.3 of 30DP-9MT03, "Assessment and Management of Risk When Performing Maintenance in Modes 1-4," by determining the following:**

- **Risk Management Action Level**
- **Actions regarding equipment.**

**The STA will perform all Technical Specification reviews and operability determinations.**

**Another SRO will perform the AOP actions for the loss of NNN-D11.**

**The evaluator will provide a color copy of PCRIM Tables and Schedule Tracker.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.
- **Provide examinee with the following:**

  **•30DP-9MT03, "Assessment and Management of Risk When Performing Maintenance in Modes 1-4"**

  **•color copy of Appendix A, PCRIM Tables 1 and 2 and**

  **•Unit 2 Cycle 32 Week 2 Schedule Tracker For Week of 05/07/01.**

**SAFETY CONSIDERATIONS:**

- None

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **1.** | * | Evaluated NNN-D11 to be within scope of "a(4)" using Appendix G. | Determines NNN-D11 to be within the scope of a(4).<br><br>**When requested Cue:**<br>**NNN-D11 is within the scope of "(a)(4)".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **2.** | * | Evaluates the risk associated with NNN-D11 out of service using Appendix A, PCRIM Table 2. | Determines Risk Action Level as "Red".<br><br>**When requested CUE:**<br>**Risk Action Level is "Red".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **3.** | * | Using Appendix A or Appendix D guidance determines actions required for "Red" action level. | • Stop all new work (listed on schedule)<br>• Restore SSC equipment:<br>(Critical to state restoration of SSC equipment. May specifically discuss NNN-D11, or "A" Charging pump)<br><br>(Examinee may also include actions to notify VP Nuclear Production, SSM, UDL and PRA)<br><br>**When requested CUE:**<br>**All scheduled work has stopped.**<br>**Maintenance and Engineering have initiated work to restore NNN-D11.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 1 | 3/9/99 | 6 | Revised for 1999 Initial SRO Upgrade Exam. |
| 2 | 8/12/99 | 6 | Corrected grammatical errors, changed role assignment to Shift Manger, enhanced initiating CUE.. |
| 2 | 5/1/01 | 3 | Revised for 2001 Initial SRO Upgrade Exam. Corrected to new procedure revision. |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**Given the following conditions:**

- **Unit 2 is at 100% power.**
- **Workday is Saturday, night shift, May 12th.**
- **The following work listed on the Schedule Tracker for Week of 5/7/01, Cycle 32, Week 2, (A) Train, is IN PROGRESS:**
  - **High rate Blowdown**
  - **"A" Charging Pump Pulsation Dampener PM.**
- **NNN-D11 has tripped on a ground fault.**

**As the CRS you are directed to:**

**Assess and manage risk for emergent conditions in accordance with Section 3.3 of 30DP-9MT03, "Assessment and Management of Risk When Performing Maintenance in Modes 1-4," by determining the following:**

- **Risk Management Action Level**
- **Actions regarding equipment.**

**The STA will perform all Technical Specification reviews and operability determinations.**

**Another SRO will perform the AOP actions for the loss of NNN-D11.**

**The evaluator will provide a color copy of PCRIM Tables and Schedule Tracker.**

## SAFETY CONSIDERATIONS:

- None

**RO Admin Task JPM A3**
**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 1290310301 Perform a Tech Review of a Permit
TASK STANDARD: Tech Review a Permit and determine three errors
K/A: 2.2.13 K/A RATING: RO: 3.6 SRO: 3.8
APPLICABLE POSITION(S): RO VALIDATION TIME: 20 minutes
REFERENCES: 40DP-9OP29, Permit and Tagging Process
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:
REVISION DATE: 5/10/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**1. SIMULATOR SETUP:**

A. IC# : Any at power IC (20 preferred)

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | | |
| **2.** | | |
| **3.** | | |
| **4.** | | |

C. SPECIAL INSTRUCTIONS:

- None

D. REQUIRED CONDITIONS:

- None

**2. SPECIAL TOOLS/EQUIPMENT:**

- Copy of Test Permit 30706 Permit Details and Tag Assignment Sheet.
- Copy of Work Order WO# 2324061 Cover page

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**Unit 1 is 100% power**

**The CRS has directed you to perform Tech Review of Permit 30706.**

- **Identify three (3) errors (Non-clerical – not typos).**
- **Determine any required action(s) that need to be done as a result of these 3 errors.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **1.** | | Reviews Permit or Work Order to determine scope of work to be performed. | Examinee reviews Permit or Work Order and determines work scope to be Remove and rebuild Control Bldg sump pump 1EOWNP07A |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **2.** | * | Reviews Tag Assignment Sheet and Prints to verify Permit adequacy for job scope. | Examinee determines the following inaccuracies/inadequacies.<br>• Tag 2 is the wrong circuit breaker (breaker is for the "B" pump)<br>• Tag 3 has wrong position (OPEN) for the discharge valve.<br>• Tag 6 has right valve but wrong Unit (Unit 2) |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **3.** | * | Examinee returns Permit for correction by the Preparer | Examinee returns Permit for correction (i.e. deficiencies noted shall not be corrected by the Tech Reviewer). |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 05/10 /01 | 6 | New JPM. |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**Unit 1 is 100% power**

**The CRS has directed you to perform Tech Review of Permit 30706.**

- **Identify three (3) errors (Non-clerical – not typos).**
- **Determine any required action(s) that need to be done as a result of these 3 errors.**

**SAFETY CONSIDERATIONS:**

- None

**SRO Admin Task JPM A5-A**
**PVNGS JOB PERFORMANCE MEASURE**

## ADMIN TASK BASIS INFORMATION

TASK: 1240100202 Classify events requiring emergency plan implementation
1240100302 Direct an emergency response as the emergency coordinator (EC)
1240100402 Determine protective action recommendations (PAR)

TASK STANDARD: An Alert is declared within 15 minutes; form EP-0541 is filled out, Notification directed within 15 minutes of classificaiton

K/A: 2.4.38 K/A RATING: SRO: 4.0

APPLICABLE POSITION(S): SRO VALIDATION TIME: 20 minutes

REFERENCES: EPIP-01, Satellite Technical Support Center Actions Rev. 8

SUGGESTED TESTING ENVIRONMENT: SIMULATOR **X** PLANT _____

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:

REVISION DATE: 4/17/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**SRO Admin Task JPM A5-A**
**PVNGS JOB PERFORMANCE MEASURE**

## 1. SIMULATOR SETUP:

A. IC# : 18

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | NRC LOIT Scenairo #1 | LOCA and Loss of Containment Spray |
| | | |

C. SPECIAL INSTRUCTIONS:

- Ensure the following:

  All alarms are acknowledged on RMS.

  The simulator is in FREEZE following completion of Scenario #1

D. REQUIRED CONDITIONS:

High and Alert Alarms on RU-16 and Alert Alarm on RU-1

SIAS/CIAS actuated with HPSI injection

RVLMS above 21%

Containment Spray in service

## 2. SPECIAL TOOLS/EQUIPMENT:

- Form EP-0541 available, blocks 1, 4 and 6 complete.
- A watch or clock to time event classification and notifications.

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant event resulting in a Loss of Coolant and loss of Containment Spray. Containment Spray has been restored.**
- **Based on current plant conditions, perform all Onshift Emergency Coordinator duties for this event until properly relieved.**
- **The current time for the purpose of this task is night shift during the normal work week.**
- **This is a time critical JPM.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **1.** | | Obtain Procedure EPIP-01 | EPIP-01 obtained.<br><br>Note: The critical time to classify the event is 15 minutes from the time the examinee has received the initiating cues.<br>START TIME: _____ |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **2.** | * | Determines EAL Level currently being met or exceeded. | Uses Appendix A and determines EAL as **Loss of RCS Barrier** (1-6, RCS leak rate >available makeup capacity as indicated by a loss of RCS subcooling ).<br><br>**If requested CUE:**<br>**RU-16 Channel 1 is in High Alarm. RU-1 Channel 1 and 3 are in Alert. CET subcooling indicates <24 degrees. HPSI injection is occurring.**<br><br>**If requested CUE:**<br>**RU-148 and 148 are stable at 1.2E+3 mrem/hr each** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **3.** | | Directs the Onshift STA or another EC qualified individual to independently verify EALdetermination | Directs the Onshift STA or another EC qualified individual to independently verify EAL determination.<br><br>**If requested CUE: The STA concurs with your determination** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **4.** | * | Classify the event. | Classifies event as an **Alert** within 15 minutes of step 1 START TIME.<br><br>Record CLASSIFICATION TIME:_____<br><br>**Total time to classify (≤15 min)**_____<br><br>**If requested CUE: The STA concurs with your determination** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**Steps 5 and 6 may be performed in any order**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **5.** | * | Completes form EP-0541, Palo Verde NAN Emergency Message Form | EC completes steps 3 and 5 of Form EP-541 as follows:<br>• Sec. #3 **Alert**, UNIT 1 Status Code **1-6**<br>• Sec. #5 **NO Radioactive release is in progress. NO Protective Actions are required (see step 7 below)**<br><br>*STSC Communicator(Examiner) completes steps 1,4 and 6 of Form EP-0541.*<br>**Note: Provide the examinee with the EP-0541 form, blocks 1, 4 and 6 should be completed.**<br><br>EC reviews form for accuracy and signs step 6.<br><br>**If requested CUE: The STSC Communicator has arrived in the Unit 1 Control Room.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **6.** | * | Contact Security (CAS) | Using the telephone or radio contacts CAS and directs the CAS operator to notify the Security Operations Section Leader to **complete supplemental notifications and activate the auto dialer.**<br><br>**If requested CUE:CAS has been notified** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **7.** | Determine appropriate Protective Action Recommendations.<br><br>**Note:** Examinee may have previously completed this action since it is information to be included on form EP-0541. | Consults Appendix B, Protective Action Recommendations.<br><br>Protective Actions are **NONE** Recommended |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | * | Direct the STSC Communicator to complete and transmit the Palo Verde NAN Emergency Message form.<br><br>Note: This step may have been performed at step 5 above. | The Onshift EC directs the STSC Communicator to transmit NAN form within 15 minutes of event CLASSIFICATION TIME in step 4.above.<br><br>Time STSC Communicator directed:_____<br><br>Total time since CLASSIFICATION TIME <15 Mins._____<br><br>**If requested CUE: The STSC Communicator has initiated the NAN Message form** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | | Notify Site Manager. | Site Manager notified of the Emergency Situation and directed to come to the UNIT 1 Control room to assume the role of Onshift Emergency Coordinator.<br><br>**If requested CUE: Site Manager has been informed to report to the Unit 1 Control Room.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **10.** | | Assemble the Onshift Emergency Response Organization (ERO) staff for an initial briefing in the STSC general area. | Assembles ERO staff for briefing.<br><br>**Inform CUE: The Radiation Protection Monitor and Shift Technical Advisor have not yet arrived in the STSC. The briefing can be performed when the ERO staff has assembled in the STSC.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **11.** | * | Conduct onsite notification. | As a minimum, step 5.1.5 "Standard Notification" message for ALERT is transmitted over the Unit Evacuation System<br><br>**Note:** examinee may direct the following (Recommended unless the EC is fairly certain plant conditions will not deteriorate.):<br>• "Assembly Notification"(step 5.1.20) and,<br>• "Accountability Request"(step 5.1.3)<br><br>**If requested CUE: Notifications complete**<br><br>**Inform CUE: The Site Manager has relieved you as the Emergency Coordinator.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 4/17/01 | 6 | New Admin Task JPM |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant event resulting in a Loss of Coolant and loss of Containment Spray. Containment Spray has been restored.**
- **Based on current plant conditions, perform all Onshift Emergency Coordinator duties for this event until properly relieved.**
- **The current time for the purpose of this task is night shift during the normal work week.**
- **This is a time critical JPM.**

**SAFETY CONSIDERATIONS:**

- None

**SRO Admin Task JPM A5-A**
**PVNGS JOB PERFORMANCE MEASURE**

## ADMIN TASK BASIS INFORMATION

TASK: 1240100202 Classify events requiring emergency plan implementation
1240100302 Direct an emergency response as the emergency coordinator (EC)
1240100402 Determine protective action recommendations (PAR)

TASK STANDARD: An Alert is declared within 15 minutes; form EP-0541 is filled out, Notification directed within 15 minutes of classificaiton

K/A: 2.4.38 K/A RATING: SRO: 4.0

APPLICABLE POSITION(S): SRO VALIDATION TIME: 20 minutes

REFERENCES: EPIP-01, Satellite Technical Support Center Actions Rev. 8

SUGGESTED TESTING ENVIRONMENT: SIMULATOR **X** PLANT _____

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:

REVISION DATE: 4/17/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**SRO Admin Task JPM A5-A**
**PVNGS JOB PERFORMANCE MEASURE**

## 1. SIMULATOR SETUP:

A. IC# : 18

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | NRC LOIT Scenairo #1 | LOCA and Loss of Containment Spray |
| | | |

C. SPECIAL INSTRUCTIONS:

- Ensure the following:

  All alarms are acknowledged on RMS.

  The simulator is in FREEZE following completion of Scenario #1

D. REQUIRED CONDITIONS:

High and Alert Alarms on RU-16 and Alert Alarm on RU-1

SIAS/CIAS actuated with HPSI injection

RVLMS above 21%

Containment Spray in service

## 2. SPECIAL TOOLS/EQUIPMENT:

- Form EP-0541 available, blocks 1, 4 and 6 complete.
- A watch or clock to time event classification and notifications.

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant event resulting in a Loss of Coolant and loss of Containment Spray. Containment Spray has been restored.**
- **Based on current plant conditions, perform all Onshift Emergency Coordinator duties for this event until properly relieved.**
- **The current time for the purpose of this task is night shift during the normal work week.**
- **This is a time critical JPM.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **1.** | | Obtain Procedure EPIP-01 | EPIP-01 obtained.<br><br>Note: The critical time to classify the event is 15 minutes from the time the examinee has received the initiating cues.<br>START TIME: _____ |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **2.** | * | Determines EAL Level currently being met or exceeded. | Uses Appendix A and determines EAL as **Loss of RCS Barrier** (1-6, RCS leak rate >available makeup capacity as indicated by a loss of RCS subcooling ).<br><br>**If requested CUE:**<br>**RU-16 Channel 1 is in High Alarm. RU-1 Channel 1 and 3 are in Alert. CET subcooling indicates <24 degrees. HPSI injection is occurring.**<br><br>**If requested CUE:**<br>**RU-148 and 148 are stable at 1.2E+3 mrem/hr each** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **3.** | | Directs the Onshift STA or another EC qualified individual to independently verify EALdetermination | Directs the Onshift STA or another EC qualified individual to independently verify EAL determination.<br><br>**If requested CUE: The STA concurs with your determination** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **4.** | * | Classify the event. | Classifies event as an **Alert** within 15 minutes of step 1 START TIME.<br><br>Record CLASSIFICATION TIME:_____<br><br>**Total time to classify (≤15 min)**_____<br><br>**If requested CUE: The STA concurs with your determination** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**Steps 5 and 6 may be performed in any order**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **5.** | * | Completes form EP-0541, Palo Verde NAN Emergency Message Form | EC completes steps 3 and 5 of Form EP-541 as follows:<br>• Sec. #3 **Alert**, UNIT 1 Status Code **1-6**<br>• Sec. #5 **NO Radioactive release is in progress. NO Protective Actions are required (see step 7 below)**<br><br>*STSC Communicator(Examiner) completes steps 1,4 and 6 of Form EP-0541.*<br>**Note: Provide the examinee with the EP-0541 form, blocks 1, 4 and 6 should be completed.**<br><br>EC reviews form for accuracy and signs step 6.<br><br>**If requested CUE: The STSC Communicator has arrived in the Unit 1 Control Room.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **6.** | * | Contact Security (CAS) | Using the telephone or radio contacts CAS and directs the CAS operator to notify the Security Operations Section Leader to **complete supplemental notifications and activate the auto dialer.**<br><br>**If requested CUE:CAS has been notified** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **7.** | Determine appropriate Protective Action Recommendations.<br><br>**Note:** Examinee may have previously completed this action since it is information to be included on form EP-0541. | Consults Appendix B, Protective Action Recommendations.<br><br>Protective Actions are **NONE** Recommended |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | * | Direct the STSC Communicator to complete and transmit the Palo Verde NAN Emergency Message form.<br><br>Note: This step may have been performed at step 5 above. | The Onshift EC directs the STSC Communicator to transmit NAN form within 15 minutes of event CLASSIFICATION TIME in step 4.above.<br><br>Time STSC Communicator directed:_____<br><br>Total time since CLASSIFICATION TIME <15 Mins._____<br><br>**If requested CUE: The STSC Communicator has initiated the NAN Message form** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | | Notify Site Manager. | Site Manager notified of the Emergency Situation and directed to come to the UNIT 1 Control room to assume the role of Onshift Emergency Coordinator.<br><br>**If requested CUE: Site Manager has been informed to report to the Unit 1 Control Room.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **10.** | | Assemble the Onshift Emergency Response Organization (ERO) staff for an initial briefing in the STSC general area. | Assembles ERO staff for briefing.<br><br>**Inform CUE: The Radiation Protection Monitor and Shift Technical Advisor have not yet arrived in the STSC. The briefing can be performed when the ERO staff has assembled in the STSC.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **11.** | * | Conduct onsite notification. | As a minimum, step 5.1.5 "Standard Notification" message for ALERT is transmitted over the Unit Evacuation System<br><br>**Note:** examinee may direct the following (Recommended unless the EC is fairly certain plant conditions will not deteriorate.):<br>• "Assembly Notification"(step 5.1.20) and,<br>• "Accountability Request"(step 5.1.3)<br><br>**If requested CUE: Notifications complete**<br><br>**Inform CUE: The Site Manager has relieved you as the Emergency Coordinator.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 4/17/01 | 6 | New Admin Task JPM |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant event resulting in a Loss of Coolant and loss of Containment Spray. Containment Spray has been restored.**
- **Based on current plant conditions, perform all Onshift Emergency Coordinator duties for this event until properly relieved.**
- **The current time for the purpose of this task is night shift during the normal work week.**
- **This is a time critical JPM.**

**SAFETY CONSIDERATIONS:**

- None

**SRO Admin Task JPM A5-B**
**PVNGS JOB PERFORMANCE MEASURE**

## ADMIN TASK BASIS INFORMATION

TASK: 1240100202 Classify events requiring emergency plan implementation
1240100302 Direct an emergency response as the emergency coordinator (EC)
1240100402 Determine protective action recommendations (PAR)

TASK STANDARD: An Alert is declared within 15 minutes; form EP-0541 is filled out, Notification directed within 15 minutes of classificaiton

K/A: 2.4.38 K/A RATING: SRO: 4.0

APPLICABLE POSITION(S): SRO VALIDATION TIME: 20 minutes

REFERENCES: EPIP-01, Satellite Technical Support Center Actions Rev. 8

SUGGESTED TESTING ENVIRONMENT: SIMULATOR **X** PLANT _____

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:

REVISION DATE: 4/18/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**SRO Admin Task JPM A5-B**
**PVNGS JOB PERFORMANCE MEASURE**

## 1. SIMULATOR SETUP:

A. IC# : 20

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | NRC LOIT Scenairo #2 | SGTR and Loss of HPSI |
| | | |

C. SPECIAL INSTRUCTIONS:

- Ensure the following:

  All alarms are acknowledged on RMS.

  The simulator is in FREEZE following completion of Scenario #2

D. REQUIRED CONDITIONS:

High and Alert Alarms on RU-4

SIAS/CIAS actuated with HPSI injection

SGTR >132 gpm

## 2. SPECIAL TOOLS/EQUIPMENT:

- Form EP-0541 available, blocks 1, 4 and 6 complete.
- A watch or clock to time event classification and notifications.

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant event resulting in a SGTR and loss of HPSI. Adequate HPSI flow has been restored.**
- **Based on current plant conditions, perform all Onshift Emergency Coordinator duties for this event until properly relieved.**
- **The current time for the purpose of this task is night shift during the normal work week.**
- **This is a time critical JPM.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **1.** | | Obtain Procedure EPIP-01 | EPIP-01 obtained.<br><br>Note: The critical time to classify the event is 15 minutes from the time the examinee has received the initiating cues.<br>START TIME: _____ |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **2.** | * | Determines EAL Level currently being met or exceeded. | Uses Appendix A and determines EAL as **Loss of RCS Barrier** (1-7, RCS leak rate >available makeup capacity as indicated by a loss of RCS subcooling ).<br><br>**If requested CUE:**<br>**RU-4 Channel 1 is in High Alarm.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **3.** | | Directs the Onshift STA or another EC qualified individual to independently verify EALdetermination | Directs the Onshift STA or another EC qualified individual to independently verify EAL determination.<br><br>**If requested CUE: The STA concurs with your determination** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **4.** | * | Classify the event. | Classifies event as an **Alert** within 15 minutes of step 1 START TIME.<br><br>Record CLASSIFICATION TIME:_____<br><br>**Total time to classify (≤15 min)**_____<br><br>**If requested CUE: The STA concurs with your determination** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**Steps 5 and 6 may be performed in any order**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **5.** | * | Completes form EP-0541, Palo Verde NAN Emergency Message Form | EC completes steps 3 and 5 of Form EP-541 as follows:<br>• Sec. #3 **Alert**, UNIT 1 Status Code **1-7**<br>• Sec. #5 **NO Radioactive release is in progress. NO Protective Actions are required (see step 7 below)**<br><br>*STSC Communicator(Examiner) completes steps 1,4 and 6 of Form EP-0541.*<br>**Note: Provide the examinee with the EP-0541 form, blocks 1, 4 and 6 should be completed.**<br><br>EC reviews form for accuracy and signs step 6.<br><br>**If requested CUE: The STSC Communicator has arrived in the Unit 1 Control Room.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **6.** | * | Contact Security (CAS) | Using the telephone or radio contacts CAS and directs the CAS operator to notify the Security Operations Section Leader to **complete supplemental notifications and activate the auto dialer.**<br><br>**If requested CUE:CAS has been notified** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **7.** | Determine appropriate Protective Action Recommendations.<br><br>**Note:** Examinee may have previously completed this action since it is information to be included on form EP-0541. | Consults Appendix B, Protective Action Recommendations.<br><br>Protective Actions are **NONE** Recommended |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | * | Direct the STSC Communicator to complete and transmit the Palo Verde NAN Emergency Message form.<br><br>Note: This step may have been performed at step 5 above. | The Onshift EC directs the STSC Communicator to transmit NAN form within 15 minutes of event CLASSIFICATION TIME in step 4.above.<br><br>Time STSC Communicator directed:_____<br><br>Total time since CLASSIFICATION TIME <15 Mins._____<br><br>**If requested CUE: The STSC Communicator has initiated the NAN Message form** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | | Notify Site Manager. | Site Manager notified of the Emergency Situation and directed to come to the UNIT 1 Control room to assume the role of Onshift Emergency Coordinator.<br><br>**If requested CUE: Site Manager has been informed to report to the Unit 1 Control Room.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **10.** | | Assemble the Onshift Emergency Response Organization (ERO) staff for an initial briefing in the STSC general area. | Assembles ERO staff for briefing.<br><br>**Inform CUE: The Radiation Protection Monitor and Shift Technical Advisor have not yet arrived in the STSC. The briefing can be performed when the ERO staff has assembled in the STSC.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **11.** | * | Conduct onsite notification. | As a minimum, step 5.1.5 "Standard Notification" message for ALERT is transmitted over the Unit Evacuation System<br><br>**Note:** examinee may direct the following (Recommended unless the EC is fairly certain plant conditions will not deteriorate.):<br>• "Assembly Notification"(step 5.1.20) and,<br>• "Accountability Request"(step 5.1.3)<br><br>**If requested Cue: Notifications complete**<br><br>**Inform CUE: The Site Manager has relieved you as the Emergency Coordinator.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 4/17/01 | 6 | New Admin Task JPM |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant event resulting in a SGTR and loss of HPSI. Adequate HPSI flow has been restored.**
- **Based on current plant conditions, perform all Onshift Emergency Coordinator duties for this event until properly relieved.**
- **The current time for the purpose of this task is night shift during the normal work week.**
- **This is a time critical JPM.**

**SAFETY CONSIDERATIONS:**

- None

**AD006-J-C/R-02**

**PVNGS JOB PERFORMANCE MEASURE**

**Admin Task JPM A5**

# ADMIN TASK BASIS INFORMATION

TASK: 1290240302 Ensure Emergency Notification and Response
1290240301

TASK STANDARD: Perform event notification for a chemical spill

K/A: 2.1.26 K/A RATING: RO: **2.2** SRO: **2.6**

K/A: 2.4.43 K/A RATING: RO: **2.8** SRO: **3.5**

APPLICABLE POSITION(S): SRO VALIDATION TIME: 15 minutes

REFERENCES: 14DP-0FP32, Emergency Notification and Response, Revision 11

SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

# APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:

REVISION DATE: 04/05/01 APPROVAL:

# TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM X

# EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**AD006-J-C/R-02**

**PVNGS JOB PERFORMANCE MEASURE**

**Admin Task JPM A5**

**1. SIMULATOR SETUP:**

A. IC# : N/A

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | N/A | |

C. SPECIAL INSTRUCTIONS:

- If performed in the simulator or a Unit control room the examinee should locate and simulate use of the actual equipment.

D. REQUIRED CONDITIONS:

- None

**2. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The Unit 1 Demin operator was assigned to backwash the Condensate Demins.**

- **He reports to your Shift Manager (Unit 1) that the acid day tank has ruptured, and 5 gallons of acid have spilled on the floor near the acid day tank.**
- **NO one else has been informed.**
- **The Shift Manager directs you to perform applicable Control Room Actions per 14DP-0FP32, Emergency Notification and Response.**
- **The Shift Manager will address event classification and offsite notification per the Emergency Plan.**
- **The STA will address non-Emergency Plan notification using the Event Reporting Manual.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- The examinee should perform the Control Room Actions in section 3.2.2 of 14DP-0FP32 including Appendix C.
- Due to the nature of the procedure layout the examinee may satisfy steps in section 3.2 (Control Room action) by performing some step from steps 2.1, 2.7, or 3.1. If necessary, CUE the examinee that they are to perform Control Room Actions.
- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 1. | * | Notify Security of emergency location, type, and severity.<br>Advise them to contact the Fire Department (3.2.2.1) | Examinee simulates notifying security with required information, directs Security to contact the Fire Department.<br>**When Requested CUE: Security has been notified and they will contact the Fire Department.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 2. | * | Activates the Emergency Fire Alarm and makes required Site announcement (3.2.2.1 and Appendix C). | Examinee simulates sounding the Emergency fire Alarm for 15 to 20 seconds and using the emergency paging system makes the site announcement for a chemical spill using Appendix C.<br><br>**When Requested CUE: Site Announcement has been made.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 3. | * | Establish contact with Fire Department on the "Unified Command" radio talk group (3.2.2.1). | Examinee simulates contacting Fire Department on the radio using "Unified Command".<br><br>**When Requested CUE: Fire Department has been contacted.**<br><br>**Inform CUE: The Incident Commander is on the radio and requests information concerning the event.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **4.** | * | Provide information to response team regarding the nature of the event (3.2.3.1). | Examinee informs the response team that 5 gallons of acid have been spilled on the floor by the acid day tank.<br><br>**Inform CUE: The Incident Commander reports that Phoenix Fire Department assistance is NOT necessary at this time.**<br><br>Inform CUE: The Incident Commander now informs you that the emergency is terminated and makes no other requests. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **5.** | Performs completion of Appendix C and announces termination of the event. (3.2.4.1) | Examinee simulates sounding the "All Clear" signal for 15 to 20 seconds and makes the event termination announcement using Appendix C.<br><br>**When Requested CUE: Termination announcement has been completed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**AD006-J-C/R-02**

**PVNGS JOB PERFORMANCE MEASURE**

**Admin Task JPM A5**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 09/02/98 | 6 | New JPM (site importance: 1998 acid spill event) |
| 1 | 03/26/99 | 3 | Updated to match procedure revision |
| 2 | 04/05/01 | 6 | Update to reflect current RO task analysis |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The Unit 1 Demin operator was assigned to backwash the Condensate Demins.**

- **He reports to your Shift Manager (Unit 1) that the acid day tank has ruptured, and 5 gallons of acid have spilled on the floor near the acid day tank.**
- **NO one else has been informed.**
- **The Shift Manager directs you to perform applicable Control Room Actions per 14DP-0FP32, Emergency Notification and Response.**
- **The Shift Manager will address event classification and offsite notification per the Emergency Plan.**
- **The STA will address non-Emergency Plan notification using the Event Reporting Manual.**

**SAFETY CONSIDERATIONS:**

- None

Op-Test No: 1 Scenario No: 1 Event No: N/A Page 1 of 7

Event Description: Re-pressurize 1B Safety Injection Tank (SIT).

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=0 | CRS | Briefs crew appropriately for re-pressurizing 1B SIT |
| | PO | Refer to 40OP-9SI03, Safety Injection Tank Operations<br>• Open GAA-UV-1, Nitrogen supply to SIT Isolation Valve<br>• Align nitrogen to SIT 1B by opening SIB-HV-642 and SIA-HV-649<br>• When SIT 1B reaches required pressure close the above valves |
| | SO | Monitors balance of plant parameters while PO is re-pressurizing 1B SIT |
| | | |
| | | |
| | | |
| | | |
| | | |

Op-Test No: 1 Scenario No: 1 Event No: 1 Page 2 of 7

Event Description: Channel D SG #1 Differential Pressure (RCS Flow) transmitter fails low. Crew to determine that it is an instrument failure and take action to bypass required Reactor Protection System (RPS) RCS low flow bistable.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=10 | CRS/SO | Respond to alarms and diagnose Channel 'D' SG #1 Differential pressure (RCS) flow failure low. |
| | SO | Respond to alarm on B05<br>• Verify alarm is due to Channel 'D' transmitter failure and not actual RCS low flow condition |
| | CRS | Refer to Technical Specification 3.3.1 and direct bypassing RPS bistable for Channel 'D' RCS low flow trip |
| | SO | Bypass RPS bistable for Channel 'D' RCS low flow trip |
| | PO | Monitors balance of plant parameters while SO is responding to alarms and bypassing RPS trip |
| | | |
| | | |
| | | |

Op-Test No: 1 Scenario No: 1 Event No: 2 Page 3 of 7

Event Description: Slow recoverable loss of Condenser vacuum. Crew to coordinate power reduction by boration and Control Element Assembly (CEA) insertion to maintain Condenser vacuum within allowed operating parameters.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=18 | CRS/SO | Respond to alarms and diagnose degrading Condenser vacuum |
| | SO | Respond to alarms |
| | CRS | Implement 40AO-9ZZ07. Loss of Condenser Vacuum<br>• Direct AO's to investigate source of in-leakage<br>• Direct SO to reduce Turbine load to maintain <5" Condenser backpressure<br>• Direct PO to initiate boration to assist power reduction |
| | SO | Reduce Turbine load to maintain Condenser backpressure as directed |
| | PO | Initiate boration as directed<br>Monitor balance of plant |
| | CRS | After source of air in-leakage is discovered and corrected direct plant stabilization |
| | SO/PO | Perform actions as directed to stabilize plant |
| | | |

Op-Test No: 1 Scenario No: 1 Event No: 3 Page 4 of 7

Event Description: LT-227 fails low resulting in a swapover of charging pump suction from the Volume Control Tank (VCT) to the Refueling Water Tank (RWT).

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=29 | CRS | Response to alarms at B03:<br>• Ensures use of alarm response procedures<br>• Assesses conditions and operator inputs<br>Confirms/diagnoses LT-227 failure<br>Directs/confirms realigning charging pump suction to the VCT by:<br>• Holding CHN-UV-501 Open<br>• Holding CHN-UV-514 Closed<br>Direct SO to monitor plant for effects of boration, if RCS cooldown occurs may direct a reactor trip<br>Directs opening supply breakers for the following valves:<br>• CHN-UV-501<br>• CHN-UV-514<br>• CHE-HV-536<br>Contact maintenance for repairs and Site Manager.<br>Briefs crew on conditions (if time permits)<br>• Establish monitoring of LT-226 or other method |
| | PO | Respond to B03 alarm "VCT LVL LO-LO"<br>• Determine LT-227 has failed low<br>• Holds CHN-UV-501 in Open position<br>• Holds CHN-UV-514 in Closed position |
| | SO | Monitors plant for effects of boration<br>Directs AO to open the breakers for the following three valves<br>• CHN-UV-501<br>• CHN-UV-514<br>• CHE-HV-536 |
| | | |
| | | |

Op-Test No: 1 Scenario No: 1 Event No: 4 Page 5 of 7

Event Description: Loss of Coolant Accident (LOCA) occurs inside containment. This develops a Low RCS pressure condition causing the CRS to direct a manual reactor trip (automatic trip may occur first) and implement Standard Post Trip Actions (SPTAs). The 'A' HPSI pump will fail to automatically start causing the crew to manually start the pump.

**NOTE TO EXAMINER: This event is continued on page 6**

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=39 | CRS/PO/SO | Diagnose a loss of RCS Pressure with indications of energy release into containment |
| | CRS* | Direct a manual reactor trip (automatic trip may occur first)<br>Direct Standard Post Trip Actions (SPTAs)<br>• Direct starting 'A' HPSI pump during Inventory Control Safety Function (Critical Task to start 'A' HPSI pump)<br>• Direct (ensures) RCP seal bleedoff is isolated after CSAS actuates during Containment Temperature, Pressure, and Combustible Gas Control Safety Function check (Critical Task to stop RCPs and Isolate Seal Bleedoff) |
| | SO/PO | Manually trip the reactor and verify reactor trip |
| | SO/PO | Verify Maintenance of Vital Auxiliaries |
| | PO* | Verify RCS Inventory Control<br>• Verify Letdown isolated after SIAS/CIAS<br>• Start 'A' HPSI pump (Critical Task to start 'A' HPSI pump)<br>Verify RCS Pressure Control<br>• May recommend SIAS/CIAS initiation, if not automatically initiated<br>Verify Core Heat Removal<br>• Stop 2 RCPs when < 1837 psia RCS pressure |
| | SO | Ensures RCS Heat Removal<br>• SG levels being restored using Auxiliary Feedwater<br>• SG pressure control using ADVs, if required<br>Verifies Containment Isolation<br>Determines containment conditions<br>• Temperature > 114 °F<br>• Pressure > 2.5 psig |
| | | **NOTE TO EXAMINER: This event is continued on page 6** |

Op-Test No: 1 Scenario No: 1 Event No: 4 Continued Page 6 of 7

Event Description: Continuation of event 4

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| | PO* | After Containment Spray Actuation Signal actuates (CSAS)<br>• Verify adequate Containment spray flow on 'A' Train<br>• Report to CRS at this time or during SPTA brief that UV-671 failed to open<br>• Stop all RCPs and isolate Seal Bleedoff when Containment Spray Actuates (CSAS) (Critical Task to stop RCPs and Isolate Seal Bleedoff) |
| | CRS | Diagnose event as a LOCA inside Containment and transition to LOCA EOP |
| | | |
| | SO/PO | Perform Safety Function Status Checks for LOCA every 15 minutes |
| | | |

Op-Test No: 1 Scenario No: 1 Event No: 5 Page 7 of 7

Event Description: 'A' Train Containment Spray pump trips resulting in a Loss of Containment Temperature, Pressure, and Combustible Gas Control Safety Function. This requires transition to the Functional Recovery Procedure and implementation of CTPC-2 to align 'A' LPSI pump to supply 'A' Train Containment Spray flow.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=49 | PO | Diagnose the loss of 'A' Train Containment Spray pump by SESS alarms and board indications.<br>Inform the CRS |
| | CRS* | Diagnose loss of CTPC safety function<br>• Loss of only available Containment Spray pump<br>Transitions to the Functional Recovery Procedure and directs crew actions<br>• Determines CTPC is jeopardized<br>• Determines CTPC-2 is preferred recovery path<br>• Step 3 verifies that a LPSI pump is available to be aligned for CS operation<br>• Step 4 aligns 'A' LPSI pump for CS operation<br>• Directs aligning 'A' LPSI pump for CS operation (Critical Task to restore Train A Containment Spray flow using the A LPSI pump)<br>Verifies safety functions are met |
| | PO* | Aligns 'A' LPSI pump as directed to 'A' Train CS (Critical Task to restore Train A Containment Spray flow using the A LPSI pump) |
| | SO | Perform other actions as directed |
| | | |
| T~60 | | The scenario is complete when 'A' Containment Spray flow has been restored, or when deemed appropriate by lead examiner |

Op-Test No: 2 Scenario No: 2 Event No: N/A Page 1 of 7

Event Description: Return #1 SG Blowdown to normal

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=0 | CRS | Briefs crew appropriately for realinging blowdown |
| | SO | Refer to 40OP-<br>• <br>• <br>• |
| | PO | Monitors balance of plant parameters while SO is re-pressurizing 1B SIT |
| | | |
| | | |
| | | |
| | | |
| | | |

Op-Test No: 2 Scenario No: 2 Event No: 1 Page 2 of 7

Event Description: RCA-LT-110X fails low. Crew to determine insturment failure and take actions to remove it from service and refer to appropriate Technical Specifications.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T= | CRS/PO | Respond to alarms and RCA-LT-110X failure low. |
| | PO | Respond to alarm on B04<br>• Verify alarm is due to RCA-LT-110X failure and not actual Pressurizer level condition |
| | PO | Selects RCA-LT-110Y as controlling channel |
| | CRS | Refer to Technical Specification 3.3.10 |
| | SO | Monitors balance of plant parameters while SO is responding to alarms and bypassing RPS trip |
| | | |
| | | |
| | | |

Op-Test No: 2 Scenario No: 2 Event No: 2 Page 3 of 7

Event Description: #1 SG Tube leak. Crew to diagnose and quanitfy tube leakage. CRS to direct unit shutdown to meet Technical Specification and procedural guidance. Crew to coordiante downpower by boration and CEA insertions.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T= | CRS/SO | Respond to RMS alarms and diagnose #1 SG tube leak |
| | SO | Respond to RMS alarms |
| | CRS | Implement 40AO-9ZZ02. Excessive RCS Leakage<br>•<br>•<br>• |
| | SO/PO | Quantify leakage per procedural guidance |
| | CRS | Direct unit downpower |
| | PO | Initiate boration as directed and monitor CEAs |
| | SO | Reduce turbine load |
| | | |

Op-Test No: 2 Scenario No: 2 Event No: 3 Page 4 of 7

Event Description: Main generator trips causing a Reactor Power Cutback. Crew to diagnose and stabilize plant then continue downpower.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T= | Crew | Response to alarms at B04 and 6<br>Confirms/diagnoses Reactor Power cutback |
| | CRS | Implement 40AO-9ZZ08,<br>• <br>• <br>• |
| | PO | Stop boration |
| | SO | Verify Steam Bypass is conttolling Steam Generator pressure |
| | CRS | Direct unit shutdown |
| | PO/SO | Implement CRS unit shutdown gameplan |
| | | |

Op-Test No: 2 Scenario No: 2 Event No: 4 Page 5 of 7

Event Description: Steam Generator Tube Rupturre (SGTR) occurs in #1 SG. This develops a low RCS pressure and inventory requiring the CRS to direct a manual unit trip (automatic trip may occur first) and implement Standard Post Trip Actions (SPTAs).

**NOTE TO EXAMINER: This event is continued on page 6**

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=39 | CRS/PO/SO | Diagnose a loss of RCS Pressure with indications of energy release into containment |
| | CRS* | Direct a manual reactor trip (automatic trip may occur first)<br>Direct Standard Post Trip Actions (SPTAs)<br>• Direct starting 'A' HPSI pump during Inventory Control Safety Function (Critical Task to start 'A' HPSI pump)<br>• Direct (ensures) RCP seal bleedoff is isolated after CSAS actuates during Containment Temperature, Pressure, and Combustible Gas Control Safety Function check (Critical Task to stop RCPs and Isolate Seal Bleedoff) |
| | SO/PO | Manually trip the reactor and verify reactor trip |
| | SO/PO | Verify Maintenance of Vital Auxiliaries |
| | PO* | Verify RCS Inventory Control<br>• Verify Letdown isolated after SIAS/CIAS<br>• Start 'A' HPSI pump (Critical Task to start 'A' HPSI pump)<br>Verify RCS Pressure Control<br>• May recommend SIAS/CIAS initiation, if not automatically initiated<br>Verify Core Heat Removal<br>• Stop 2 RCPs when < 1837 psia RCS pressure |
| | SO | Ensures RCS Heat Removal<br>• SG levels being restored using Auxiliary Feedwater<br>• SG pressure control using ADVs, if required<br>Verifies Containment Isolation<br>Determines containment conditions<br>• Temperature > 114 °F<br>• Pressure > 2.5 psig |
| | | **NOTE TO EXAMINER: This event is continued on page 6** |

Op-Test No: 2 Scenario No: 2 Event No: 4 Continued Page 6 of 7

Event Description: Continuation of event 4

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| | PO* | After Containment Spray Actuation Signal actuates (CSAS)<br>• Verify adequate Containment spray flow on 'A' Train<br>• Report to CRS at this time or during SPTA brief that UV-671 failed to open<br>• Stop all RCPs and isolate Seal Bleedoff when Containment Spray Actuates (CSAS) (Critical Task to stop RCPs and Isolate Seal Bleedoff) |
| | CRS | Diagnose event as a LOCA inside Containment and transition to LOCA EOP |
| | | |
| | SO/PO | Perform Safety Function Status Checks for LOCA every 15 minutes |
| | | |

Op-Test No: 2 Scenario No: 2 Event No: 5 Page 7 of 7

Event Description: 'A' Train HPSI pump trips resulting in a Loss of HPSI injection and the Inventroy Control Safety Function. This requires transition to the Functional Recovery Procedure and implementation of MVAC-1 to align Offsite powe to PBA-S03 and start or ensure automatic start of 'A' HPSI pump..

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T= | PO | Diagnose the loss of NBN-X03 and the failure of 'A' Spray pond pump to start<br>Inform the CRS |
| | CRS* | Direct emergency stopping of 'A' DG.<br>Diagnose loss of IC safety function<br>• Loss of only available HPSI pump<br>Transitions to the Functional Recovery Procedure and directs crew actions<br>• Determines MVAC-1 and IC-2 are jeopardized<br>• Determines MVAC-1 is first recovery path<br>• Step XXX directs cross-tieing offsite power to PBA-S03<br>• Directs aligning offsite power to PBA-S03 (Critical Task to restore power to PBA-S03) |
| | PO* | Aligns offsite power to PBA-S03 (Critical Task to restore power to PBA-S03) |
| | SO | Perform other actions as directed |
| | | |
| | | Go on with other FRP actions |
| | | |
| | | |
| | | |
| | | |
| T~60 | | The scenario is complete when 'A' Containment Spray flow has been restored, or when deemed appropriate by lead examiner |

Op-Test No: 3 Scenario No: 3 Event No: N/A Page 1 of 7

Event Description: Place 'B' Main Feed pump (MFP) in service and continue power increase.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=0 | CRS | Refers to 40OP-9ZZ05, Power Operations, Section 5.0 for power increase<br>• Directs crew activities<br>• Briefs crew appropriately for coordination of 'B' Main Feed pump start and subsequent power increase |
| | SO | Refers to 41OP-1FT02, FW Pump Turbine "B" Section 6.0, Step 6.3.27<br>• Check FWPT setpoint controller SGN-FIC-1108 in "AUTO" with bias. (50% scale)<br>• Close FTN-HV-10<br>• Increase speed to match discharge pressure using FTN-HS-54<br>• Ensure discharge valve is open (FWN-HV-32)<br>• Adjust bias on SGN-FIC-1108 to obtain zero deviation<br>• Place speed controller FTN-HS-100 to "AUTO"<br>• Balance performance using bias's on speed controllers on "A" & "B" FWPT's |
| | PO | Initiates Dilution of RCS at a rate calculated to support power ascension objectives when directed.<br>• May be directed by CRS to initially dilute a given amount to start the power increase (16 gpm provided in turnover)<br>• Uses 41OP-1CH01, Section 9.0<br>• Observes for indications of dilution on RCS<br>- Temperature, Power, PZR pressure, PZR Level |
| | | |

Op-Test No: 3 Scenario No: 3 Event No: 1 Page 2 of 7

Event Description: Nuclear Cooling Water From LD Heat Exchanger flow instrument NCN-FSL-613 Fails low.

| | Position | Applicant's Actions or Behavior |
|---|---|---|
| Time | Position | Applicant's Actions or Behavior |
| T=20 | CRS | Directs Response to B03 alarms<br>• LD HDR SYS TRBL (Window 3A 10A)<br>• LD Process Mon TRBL (Window)<br>Assess condition and operator inputs<br>• CHB-UV-523 closes on NC low flow from LD Heat Exchanger<br>• NCN-FSL-613 failed low<br>Directs entry into loss of Letdown, 40AO-9ZZ05 |
| | PO | Observes B03 alarms and refers to Alarm Response procedure<br>• NCN-FSL-613 failed low<br>• CHB-UV-523 indicates closed<br>Recognizes that CHB-UV-523 cannot be re-opened<br>Performs Section 3.0 of Loss of Letdown 40AO-9ZZ05<br>• Place RCN-LIC-110 in "MAN" and close letdown valves<br>• Checks back pressure<br>• Removes one charging pump from service<br>• Troubleshoots problem per App. E<br>• Diagnose NCW flow switch FS613 problem |
| | SO | Monitors Secondary Systems and continues power increase |
| | CRS | May direct recovery per Step 9 of Loss of Letdown<br>• Directs maintenance to jumper low flow switch<br>Addresses TS for Pressurizer level<br>• TS 3.4.9.a – Pressurizer shall be OPERABLE with level ≤ 56%<br>– Be in Mode 3 with reactor trip breakers open in 6 hrs. and be in Mode 4 in 12 hrs. |
| | PO | As time permits, restores letdown when flow switch is jumpered. |
| | | |

Op-Test No: 3 Scenario No: 3 Event No: 2 Page 3 of 7

Event Description: Steam Generator #1 Wide Range Level Channel fails low.

| | Position | Applicant's Actions or Behavior |
|---|---|---|
| Time | Position | Applicant's Actions or Behavior |
| T=30 | SO | Recognizes SG #1 WR level SGDLT1113D fails low<br>• Reports condition to CRS<br>• Verifies plant conditions don't support instrument reading.<br>• Refers to 41AL-1RK5A or 41AL-1RK5B which directs TS applicability |
| | CRS | Refers to TS to review applicability<br>• TS 3.3.1A – place affected channel in bypass within 1 hr.<br>• TS 3.3.5A – place affected channel in bypass within 1 hr.<br>Directs SO/PO to place RPS and ESPFAS channels in bypass for low SG level.<br>Must ensure both ESFAS S/G levels are bypassed |
| | SO/PO | Obtains keys and places low SG level channels in bypass<br>• PPS & ESFAS |
| | PO/SO | Monitors primary and secondary plant parameters while other operator is placing channels in bypass |
| | | |

Op-Test No: 3 Scenario No: 3 Event No: 3 Page 4 of 7

Event Description: Feedwater Economizer Valve SGNFV1122 Fails Closed requiring Crew to Initiate a manual unit trip.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=40 | CRS | Directs Response to FWPT Disch Pressure HIGH |
| | SO | Recognized Lowering #2 S/G levels<br>• May attempt manual control of #2 FW control system to increase level<br>• All attempts fail due to SGN-FV-1122 failing closed |
| | CRS | Directs Rx Trip based on Trending of S/G levels towards RPS Setpoints<br>• Directs performance of SPTA's |
| | PO | Assists in monitoring plant response |
| | PO/SO | Directed to trip Reactor, using Reactor Trip push buttons located on B05 |
| | | |

Op-Test No: 3 Scenario No: 3 Event No: 4 Page 5 of 7

Event Description: Anticipated trip without scram (ATWS) event requires load center breakers to be opened and a Main Steam Safety valve fails open during Standard Post Trip Actions.

**NOTE TO EXAMINER: This event is continued on page 6**

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| T=41 | CRS* | Recognizes Reactor has not tripped using manual push buttons<br>• Directs opening L03 & L10 supply breakers.(CRITICAL TASK)<br>May direct SIAS/CIAS and MSIS. |
| | PO* | Opens L03 & L10 (CRITICAL TASK).<br>• May re-close after 5 seconds |
| | PO/SO | Verifies reactor tripped<br>Initiates SIAS/CIAS and MSIS as directed. |
| | SO | Verifies electrical power.<br>• Turbine tripped.<br>• Main Generator breakers open.<br>• Station loads transfer to offsite power.<br>• Vital/non-vital AC/DC buses power. |
| | PO | Determines RCS inventory control<br>• Pressurizer level control<br>• RCS subcooling ≥ 24 °F<br>• RCP seal injection and cooling (NCW)<br>Determines RCS pressure control. May suggest SIAS/CIAS<br>• Stops two RCPs < 1837 psia<br>• Ensures HPSI flow to RCS<br>• Starts all available charging pumps<br>Determines core heat removal.<br>• Loop delta T<br>• RCS subcooling ≥ 24 °F |
| | | **NOTE TO EXAMINER: This event is continued on page 6** |

Op-Test No: 5 Scenario No: 5 Event No: 4 Continued Page 6 of 7

Event Description: Continuation of event 4

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| | SO | Determines RCS heat removal<br>• SG level restoring. Aux. Feed will start if AFAS-2. SO may override flow valves to #2 SG and stop flow. Ensures flow to SG #1.<br>• RCS Tcold below 560 – 570 band<br>• SG pressure control. May report SG #2 safety valve open.<br>• May suggest MSIS.<br>Determines containment isolation<br>– Pressure ≤ 2.5 psig<br>– RMS alarms and trends<br>Determines containment conditions<br>– Temperature 114 °F or less.<br>– Pressure 2.5 psig or less. |
| | | |

Op-Test No: 5 Scenario No: 5 Event No: 4 Continued Page 7 of 7

Event Description: Excess Steam Demand actions.

| Time | Position | Applicant's Actions or Behavior |
|---|---|---|
| | CRS* | Diagnoses of event as ESD and enters Excess Steam Demand EOP.<br>• Directs isolation of #2 S/G (CRITICAL TASK) |
| | SO* | Isolates #2 SG<br>• Stops Feeding and steaming #2 S/G (CRITICAL TASK)<br>– Closes Steam Supply to AFA-P01 |
| | PO/SO | Monitors RCS parameters for SG blowdown/RCS rebound.<br>• Selects target temperature/pressure<br>• RCS T-cold stable/increasing<br>• RCS pressure rising |
| | SO* | Upon rebound indication, uses SG #1 ADV to control RCS temperature and pressure (CRITICAL TASK – prevent Pressurizer safeties from lifting). |
| | PO | Throttles HPSI flow as needed. |
| T~60 | END | Scenario will end when RCS has been stabilized and the unisolated Steam Generator Level is being maintained 40-60% NR<br>**OR**<br>Actions have been taken for plant stabilization and the unisolated Steam Generator level is trending towards 40%-60% NR |
| | | |

**JPM-JP2 (ALTERNATE PATH)**
**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 1250065201 Align local air /nitrogen bottle to the Fuel Transfer Canal Gate Seal
TASK STANDARD: Pressurize the Fuel Transfer Canal Gate Seal
K/A: 3.8-078-K4.02 K/A RATING: RO: 3.2 SRO: 3.5
K/A: 3.8-078-A3.01 K/A RATING: RO: 3.1 SRO: 3.2
APPLICABLE POSITION(S): RO/SRO VALIDATION TIME: 15 minutes
REFERENCES: 40AO-9ZZ06 Loss of Instrument Air, Appendix H
SUGGESTED TESTING ENVIRONMENT: SIMULATOR _____ PLANT X

## APPROVAL

DEVELOPER: Jim Shannon TECH REVIEW:
REVISION DATE: 4/12/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT X

TESTING METHOD: SIMULATE X PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)
EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
(SEE 15TD-0TR03)

**1. SIMULATOR SETUP:**

A. IC# : N/A

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | N/A | |
| **2.** | | |
| **3.** | | |
| **4.** | | |
| **5.** | | |
| **6.** | | |
| **7.** | | |

C. SPECIAL INSTRUCTIONS:

- None

D. REQUIRED CONDITIONS:

- None

**2. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **The unit was operating at 100% power when a loss of instrument air occurred. The CRS entered 40AO-9ZZ06, the Loss of Instrument Air procedure.**
- **The CRS directs you to perform Appendix H to align the local air/ nitrogen bottle to the Fuel Transfer Canal Gate Seal and verify pressure to the Cask Loading Pit Gate and the Decon Washdown Pit Gate.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- Slip/fall hazard on stairways.
- Pinch points at doorways.

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 1. | | Obtains copy of 40AO-9ZZ06, Loss of Instrument Air, Appendix H. | Examinee obtains copy of 40AO-9ZZ06, Loss of Instrument Air, Appendix H from procedure set at CRS desk, SM and STA console, or file cabinet. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 2. | * | Close IAN-VE90 "Air Isolation from IA Header". | Examinee simulates closing IAN-VE90.<br><br>**If Requested CUE: IAN-VE90 is closed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 3. | | **Unit 1 only -**<br>Close IAN-VG21 "Cask Loading Pit and Decon Area Gate Isolation Valve"<br>• | Examinee simulates closing IAN-VG21.<br><br>**If Requested CUE: IAN-VG21 is closed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 4. | | If it is desired to place the Transfer Canal Gate Seal Nitrogen / Air bottle #1in service.<br><br>Ensure that the Nitrogen / Air bottle #1 Pressure Regulator Control Knob is adjusted to the fully counter clockwise position, minimum output no spring pressure. | **CUE: It is desired to place the Transfer Canal Gate Seal Nitrogen / Air Bottle #1 in service.**<br>Examinee simulates adjusting the Nitrogen / Air bottle #1 Pressure Regulator Control Knob to the fully counter clockwise position.<br><br>**If Requested CUE: the Nitrogen / Air bottle #1 Pressure Regulator Control Knob is adjusted to the fully counter clockwise position.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **5.** | * | • Open the Nitrogen / Air bottle #1 isolation valve. | Examinee simulates opening the Nitrogen / Air bottle #1 isolation valve.<br><br>**If Requested CUE: The Nitrogen / Air bottle #1 isolation valve is open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **6.** | * | Adjust the Nitrogen / Air bottle #1 Pressure Regulator Control Knob in the clockwise direction until the pressure output is 35-40 psig. | Examinee simulates adjusting the Nitrogen / Air bottle #1 Pressure Regulator Control Knob in the clockwise direction until the pressure output is 35-40 psig.<br>**If Requested CUE: The pressure output from the Nitrogen / Air bottle #1 Pressure Regulator is 38 psig.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **7.** | * | Open the Nitrogen / Air bottle #1 Pressure Regulator Outlet Valve. | Examinee simulates opening the Nitrogen / Air bottle #1 Pressure Regulator Outlet Valve.<br><br>**If Requested CUE: The Nitrogen / Air bottle #1 Pressure Regulator Outlet Valve is open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | * | Open IAN-VE92, Local Air / Nitrogen Bottle #1 Header Isolation Valve. | Examinee simulates opening IAN-VE92, Local Air / Nitrogen Bottle #1 Header Isolation Valve.<br><br>**If Requested CUE: IAN-VE92, Local Air / Nitrogen Bottle #1 Header Isolation Valve is open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **9.** | If it is desired to place the Transfer Canal Gate Seal Nitrogen / Air bottle #2 in service.<br><br>Ensure that the Nitrogen / Air bottle #2 Pressure Regulator Control Knob is adjusted to the fully counter clockwise position, minimum output no spring pressure. | **CUE: It is <u>not</u> desired to place the Transfer Canal Gate Seal Nitrogen / Air Bottle #2 in service.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **10.** | **Unit 1 only -**<br>Open all the following valves for the pressure indicators on the Cask Loading Pit and Decon Area Gate Seals:<br>• IAN-VF87, "IAN-PI-275 Isolation Valve".<br>• IAN-VF89, "IAN-PI-278 Isolation Valve".<br>• IAN-VF94, "IAN-PI-281A Isolation Valve".<br>• IAN-VF98, "IAN-PI-282A Isolation Valve".<br>• IAN-VG004, "IAN-PI-283 Isolation Valve".<br>• IAN-VG006, "IAN-PI-284 Isolation Valve".<br>• IAN-VG11, "IAN-PI-281B Isolation Valve".<br>• IAN-VG15, "IAN-PI-282B Isolation Valve". | Examinee simulates opening all the following valves:<br>• IAN-VF87, "IAN-PI-275 Isolation Valve".<br>• IAN-VF89, "IAN-PI-278 Isolation Valve".<br>• IAN-VF94, "IAN-PI-281A Isolation Valve".<br>• IAN-VF98, "IAN-PI-282A Isolation Valve".<br>• IAN-VG004, "IAN-PI-283 Isolation Valve".<br>• IAN-VG006, "IAN-PI-284 Isolation Valve".<br>• IAN-VG11, "IAN-PI-281B Isolation Valve".<br>• IAN-VG15, "IAN-PI-282B Isolation Valve".<br><br>**If Requested CUE: The following valves are open:**<br>• **IAN-VF87, "IAN-PI-275 Isolation Valve".**<br>• **IAN-VF89, "IAN-PI-278 Isolation Valve".**<br>• **IAN-VF94, "IAN-PI-281A Isolation Valve".**<br>• **IAN-VF98, "IAN-PI-282A Isolation Valve".**<br>• **IAN-VG004, "IAN-PI-283 Isolation Valve".**<br>• **IAN-VG006, "IAN-PI-284 Isolation Valve".**<br>• **IAN-VG11, "IAN-PI-281B Isolation Valve".**<br>• **IAN-VG15, "IAN-PI-282B Isolation Valve".** |

**COMMENTS:**

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **11.** | **Unit 1 only -**<br>Check that the pressure on all of the following is 36.5 – 43.5 psig:<br>• IAN- PI-278 (Seal A Header).<br>• IAN-PI-281A (Cask Loading Pit A Seal).<br>• IAN-PI-282A (Decon Area Seal A). | Examinee simulates checking the pressure on:<br>• IAN- PI-278 (Seal A Header).<br>• IAN-PI-281A (Cask Loading Pit A Seal).<br>• IAN-PI-282A (Decon Area Seal A).<br><br>**If Requested CUE. The pressure on IAN- PI-278 (Seal A Header), IAN-PI-281A (Cask Loading Pit A Seal) and IAN-PI-282A (Decon Area Seal A)is 38 psig..** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **12.** | **Unit 1 only -**<br>Check that the pressure on all of the following is 36.5 – 43.5 psig:<br>• IAN- PI-284 (Seal B Header).<br>• IAN-PI-281B (Cask Loading Pit B Seal).<br>• IAN-PI-282B (Decon Area Seal B). | Examinee simulates checking the pressure on:<br>• IAN- PI-284 (Seal B Header).<br>• IAN-PI-281B (Cask Loading Pit B Seal)<br>• IAN-PI-282B (Decon Area Seal B).<br><br>**If Requested CUE. The pressure on IAN- PI-284 (Seal B Header), IAN-PI-281B (Cask Loading Pit B Seal), and IAN-PI-282B (Decon Area Seal B) is 39 psig.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **13.** | **Unit 1 only -**<br>Close all the following valves for the pressure indicators on the Cask Loading Pit and Decon Area Gate Seals:<br>• IAN-VF87, "IAN-PI-275 Isolation Valve".<br>• IAN-VF89, "IAN-PI-278 Isolation Valve".<br>• IAN-VG004, "IAN-PI-283 Isolation Valve".<br>• IAN-VG006, "IAN-PI-284 Isolation Valve".<br>• IAN-VF94, "IAN-PI-281A Isolation Valve".<br>• IAN-VF98, "IAN-PI-282A Isolation Valve".<br>• IAN-VG11, "IAN-PI-281B Isolation Valve".<br>• IAN-VG15, "IAN-PI-282B Isolation Valve". | Examinee simulates closing the following valves:<br>• IAN-VF87, "IAN-PI-275 Isolation Valve".<br>• IAN-VF89, "IAN-PI-278 Isolation Valve".<br>• IAN-VG004, "IAN-PI-283 Isolation Valve".<br>• IAN-VG006, "IAN-PI-284 Isolation Valve".<br>• IAN-VF94, "IAN-PI-281A Isolation Valve".<br>• IAN-VF98, "IAN-PI-282A Isolation Valve".<br>• IAN-VG11, "IAN-PI-281B Isolation Valve".<br>• IAN-VG15, "IAN-PI-282B Isolation Valve".<br><br>**If Requested CUE: The following valves are closed:**<br>• **IAN-VF87, "IAN-PI-275 Isolation Valve".**<br>• **IAN-VF89, "IAN-PI-278 Isolation Valve".**<br>• **IAN-VG004, "IAN-PI-283 Isolation Valve".**<br>• **IAN-VG006, "IAN-PI-284 Isolation Valve".**<br>• **IAN-VF94, "IAN-PI-281A Isolation Valve".**<br>• **IAN-VF98, "IAN-PI-282A Isolation Valve".**<br>• **IAN-VG11, "IAN-PI-281B Isolation Valve".**<br>• **IAN-VG15, "IAN-PI-282B Isolation Valve".** |

**COMMENTS:**

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **14.** | Monitor the local nitrogen / air bottle pressure using Attachment H-1, "Local Air / Nitrogen Bottle Log", until this procedure is exited. | **CUE: Another operator will monitor the local nitrogen / air bottle pressure using Attachment H-1, "Local Air / Nitrogen Bottle Log".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **15.** * | | |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **16.** * | | |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **17.** | | |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **18.** | a. | |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **19.** | a. | |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 4/11/01 | 2 | New JPM |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

### SPECIAL CONSIDERATIONS:

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

### INITIATING CUE:

- **The unit was operating at 100% power when a loss of instrument air occurred. The CRS entered 40AO-9ZZ06, the Loss of Instrument Air procedure.**
- **The CRS directs you to perform Appendix H to align the local air/ nitrogen bottle to the Fuel Transfer Canal Gate Seal and verify pressure to the Cask Loading Pit Gate and the Decon Washdown Pit Gate.**
- **.**

### SAFETY CONSIDERATIONS:

- Slip/fall hazard on stairways.
- Pinch points at doorways.

**JP03#***

**PVNGS JOB PERFORMANCE MEASURE**

# JPM BASIS INFORMATION

TASK: 1250440201 Perform Event Control Actions for a Control Room Fire
TASK STANDARD: Start Diesel Generator "B" and supply loads on PBB-S04
K/A: 4.2-068-AA1.10 K/A RATING: RO: 3.7 SRO: 3.9
K/A: 4.2-068-AA1.31 K/A RATING: RO: 3.9 SRO 4.0
APPLICABLE POSITION(S): AO/RO/SRO VALIDATION TIME: 25 min.
TIME CRITICAL - 15 MINUTES FROM THE TIME D/G "B" IS STARTED UNTIL SP "B" IS STARTED

REFERENCES: 40AO-9ZZ19, Control Room Fire

SUGGESTED TESTING ENVIRONMENT: SIMULATOR _____ PLANT X

# APPROVAL

DEVELOPER: J. Shannon TECH REVIEW:
REVISION DATE: 04/24/01 APPROVAL:

# TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT X

TESTING METHOD: SIMULATE X PERFORM _____

# EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
(SEE OTG-04)

**0. SIMULATOR SETUP:**

A. IC# : N/A

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | | |
| **2.** | | |
| **3.** | | |
| **4.** | | |

C. SPECIAL INSTRUCTIONS:

- None

D. REQUIRED CONDITIONS:

- None

**1. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **The control room has been evacuated due to a fire.**
- **There has been a loss of offsite power. No automatic start and loading of the Emergency Diesel Generators, or load shed has occurred.**
- **The CRS directs you to complete Appendix E of 40AO-9ZZ19 as the D/G AO to manually start and load the "B" Diesel Generator.**
- **Assume you have a portable lantern.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- The complete load shed and manual sequencing of loads will not be performed.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW OTG-01.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Supervisor of in-plant JPM performance.
- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Elements and Standards are met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.

**SAFETY CONSIDERATIONS:**

- None

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **0.** | Examinee obtains 40AO-9ZZ19, Appendix E. | Examinee obtains 40AO-9ZZ19, Appendix E. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Direct the lower Auxiliary Building Operator to perform Appendix H, step 2. | Examinee directs the lower Auxiliary Building Operator to perform Appendix H, step 2.<br><br>**CUE: The Lower Auxiliary Building Operator has completed step 2 of Appendix H.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2.** | Place all of the following control room circuits disconnect switches in "local" (located on the 100 foot control building switchgear room B).<br><br>• PHB-M3209, Battery Charger D PKD-H14.<br><br>• PHB-M3205, Control Room Circuits Disconnect switches (4 switches). | Examinee simulates placing the following control room circuits disconnect switches to "local"<br><br>• PHB-M3209, Battery Charger D PKD-H14.<br><br>• PHB-M3205, Control Room Circuits Disconnect switches (4 switches)<br><br>**If requested CUE: Evaluator may cue switches in "local" position either individually as manipulated, or as a group when complete.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | Ensure both of the following breakers are open:<br><br>• PHB-M3209, Battery Charger D PKD-H14.<br><br>• PHB-M3210, to voltage regulator for 120VAC Vital Distribution Panel PND-V28. | Examinee ensures both of the following breakers are open:<br><br>• PHB-M3209, Battery Charger D PKD-H14.<br><br>• PHB-M3210, to voltage regulator for 120VAC Vital Distribution Panel PND-V28.<br><br>**If requested CUE: Evaluator may cue breakers are open either individually as manipulated, or as a group when complete:**<br><br>• **PHB-M3209 is open.**<br><br>• **PHB-M3210 is open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **4.** | * | Place the following local/rem & local switches on DG Disc Cabinet DGB-C01 to "local" position as per **Attachment E-1**. | Examinee simulates placing the following handswitches in the "local" position:<br><br>**NOTE:** See CUEs below as switches are being manipulated. |
| | | • J-DGB-HS-2A to local. | J-DGB-HS-2A in local |
| | | • J-DGB-HS-2B to local. | J-DGB-HS-2B in local |
| | | • E-PEB-HS-2 to local. | E-PEB-HS-2 in local |
| | | • J-HDB-HS-14A to local. | J-HDB-HS-14A in local |
| | | • J-DFB-HS-22C to local. | J-DFB-HS-22C in local |
| | | | **If requested CUE: Evaluator may cue switches in "local" position either individually as manipulated, or as a group when complete.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 5. | * | Perform the Load Shed column in D/G 'B' Load Shed **Attachment E-2.** | Examinee **simulates** placing the following handswitches in LOCAL/OPEN: |
| | | Place disconnect (CS-3) in LOCAL & Breaker OPEN for PBB-S04B, D/G B breaker | Disconnect (CS-3) in LOCAL and the breaker handswitch (CS-1) for PBB-S04B verified OPEN.<br><br>**If requested CUE: PBB-S04B disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| | | Place disconnect (CS-3) in LOCAL & Breaker OPEN for PBB-S04C, Spray Pond Pump B breaker | Disconnect (CS-3) in LOCAL and the breaker handswitch (CS-1) for PBB-S04C verified OPEN.<br><br>**If requested CUE: PBB-S04C disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| | | Place disconnect (CS-3) in LOCAL & Breaker OPEN for PBB-S04G, Ess Chiller B breaker | Disconnect (CS-3) in LOCAL and the breaker handswitch (CS-1) for PBB-S04G verified OPEN.<br><br>**If requested CUE: PBB-S04G disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| | | Place disconnect (CS-3) in LOCAL & Breaker OPEN for PBB-S04K, PBB-S04 Norm Supply breaker | Disconnect (CS-3) in LOCAL and the breaker handswitch (CS-1) for PBB-S04K verified OPEN.<br><br>**If requested CUE: PBB-S04K disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| | | Place disconnect (CS-3) in LOCAL & | Disconnect (CS-3) in LOCAL and the breaker |

**COMMENTS:**

| | |
|---|---|
| Breaker OPEN for PBB-S04L, PBB-S04 Alternate Supply breaker | handswitch (CS-1) for PBB-S04L verified OPEN.<br><br>**If requested CUE: PBB-S04L disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| Place disconnect (CS-3) in LOCAL & Breaker OPEN for PBB-S04M, ESS Cooling Water Pump B breaker | Disconnect (CS-3) in LOCAL and the breaker handswitch (CS-1) for PBB-S04M verified OPEN.<br><br>**If requested CUE: PBB-S04M disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| Place disconnect (CS-3) in LOCAL & Breaker OPEN for PBB-S04S, AFW Pump B breaker | Disconnect (CS-3) in LOCAL and the breaker handswitch (CS-1) for PBB-S04S verified OPEN.<br><br>**If requested CUE: PBB-S04S disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| Place disconnect (CS-2/C4) in LOCAL & Breaker OPEN for PGB-L32C4, Charging Pump 2 Breaker | Disconnect (CS-2/C4) in LOCAL and the breaker L32C4 verified OPEN.<br><br>**If requested CUE: L32C4 disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| Place disconnect in LOCAL & Breaker OPEN for PHB-M3209, Battery Charger PKD-H14 Supply Breaker | Disconnect in LOCAL and PHB-M3209 breaker verified OPEN.<br><br>**If requested CUE: PHB-M3209 disconnect is in LOCAL, breaker indicates open by green light ON, red light OFF** |
| Open Voltage Regulator PND-V28 Supply | PHB-M3210 breaker open |

**COMMENTS:**

Breaker, PHB-M3210

**If requested CUE: PHB-M3210 indicates OPEN by green light ON, red light OFF**

**Inform CUE: All other breakers required to be load shed per attachment E-2 have been opened, continue on with procedure.**

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **6.** | * | Manually start D/G 'B' by pressing EMERGENCY START (SIMULATED LOP), DGB-HS-31, push button. | Examinee simulates starting 'B' D/G by depressing DGB-HS-31.<br><br>**Inform CUE: D/G 'B' did not start.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **7.** | * | If the Diesel generator did NOT start, cycle open and close the following breakers | |
| | | _ 72 DC1 (inside panel DGB-B01) | Examinee simulates positioning 72 DC1 to open then closed.<br>**If requested CUE: 72 DC1 has been cycled** |
| | | _ 72 DC2 (inside panel DGB-B01) | Examinee simulates positioning 72 DC2 to open then closed.<br>**If requested CUE: 72 DC2 has been cycled** |
| | | _ 72 CP1 (inside panel DGB-B02) | Examinee simulates positioning 72 CP1 to open then closed.<br>**If requested CUE: 72 CP1 has been cycled.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | * | Manually start D/G 'B' by pressing EMERGENCY START (SIMULATED LOP), DGB-HS-31, push button. | Examinee simulates starting 'B' D/G by depressing DGB-HS-31.<br><br>**Inform CUE: D/G 'B' has started. Voltage is 4240 vac. and frequency is 60 Hz.**<br><br>**NOTE:** Time critical portion starts here.<br><br>START Time _____ |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | | PERFORM Diesel Generator B Sequencing, **Attachment E-3.** | Examinee goes to **Attachment E-3.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **10.** | * | Close the D/G output breaker PBB-S04B using CS-1 control switch on PBB-S04B. | Examinee simulates positioning 'local' breaker PBB-S04B CS-1 handswitch to 'close'.<br><br>**Inform CUE: Red light is off, green light off. It is desired to close the breaker electrically.**<br><br>**NOTE:** JPM steps 8-17 are performed by Att. E-3. |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **11.** | * | Ensure GEN CONT PNL J-DGB-B02 DISC, E-PEB-HS-2 is in local. | Examinee checks E-PEB-HS-2 is in LOCAL.<br><br>**If requested CUE: E-PEB-HS-2 is in LOCAL**<br><br>**NOTE:** Located on DG Disc CAB, DGB-C01. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **12.** | * | Ensure Control Room disconnect breaker PBB-S04B, CS-3 on DG output breaker B in LOCAL. | Examinee checks CS-3 is in local.<br><br>**If requested CUE: CS-3 is in local on PBB-S04B.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **13.** | * | Open the 125V DC control power breaker in E-PBB-S04B. | Examinee simulates opening the 125V DC control power breaker.<br><br>**If requested CUE: 125V DC control power is OFF to PBB-S04B.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **14.** | * | Replace the 2-15 amp UC fuses and the 2-35 amp UT fuses. | Examinee demonstrates where to find fuses and how to replace them.<br><br>**NOTE:** Fuses located in Emergency Equipment Cabinet, E-FPN-C02 (B SWGR, NW corner)<br><br>**If requested CUE: All fuses have been replaced.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **15.** | * | Close 125V DC control power breaker in PBB-S04B. | Examinee simulates closing the control power bkr.<br><br>**If requested CUE: 125V DC control power is on, green light is ON and red light is OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **16.** | * | Close the D/G output breaker PBB-S04B using CS-1 control switch on PBB-S04B. | Examinee simulates positioning 'local' breaker PBB-S04B CS-1 handswitch to CLOSE.<br><br>**If requested CUE: Red light on, green light off on PBB-S04B. Voltage is 4240; frequency is 60 Hz.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **17.** | * | Start Spray Pond Pump 'B' by using control switch CS-1 at PBB-S04C. | Examinee simulates positioning 'local' breaker PBB-S04C CS-1 handswitch to START.<br><br>**If requested CUE: PBB-S04C indicates Red light ON, green light OFF**<br><br>**NOTE:** Spray pond pump must be started within 15 minutes following D/G start with no load.<br><br>**NOTE:** TIME CRITICAL PORTION ENDS HERE.<br><br>FINISH Time _____ |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **18.** | * | Start AFB-P01 by using control switch CS-1 at PBB-S04S. | Examinee simulates positioning 'local' breaker PBB-S04S CS-1 handswitch to 'start'.<br><br>**If requested CUE: PBB-S04S indicates red light ON, green light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **19.** | * | Start HDB-J01, D/G Bldg. ESS HVAC EXH Fan by using HDB-HS-14. | Examinee simulates positioning HDB-HS-14 handswitch, located on the D/G local panel to START.<br><br>**If requested CUE: HDB-J01 is running.**<br><br>**Inform CUE: The remaining sections of Attachment E-3 have been completed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **20.** | Ensure Jacket Water Make-up Valve, DGB-V013, is closed | Examinee verifies DGB-V013 is closed by simulating going to the closed direction on valve.<br><br>**If requested CUE: DGB-V013 is closed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 2 | 10/10/96 | 6 | New Format |
| 3 | 10/11/96 | 3,6 | More format changes per OTG-02 |
| 04 | 01/03/97 | 6 | Task Standard Change |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **The control room has been evacuated due to a fire.**
- **There has been a loss of offsite power. No automatic start and loading of the Emergency Diesel Generators, or load shed has occurred.**
- **The CRS directs you to complete Appendix E of 4XAO-XZZ44 as the D/G AO to manually start and load the "B" Diesel Generator.**
- **Assume you have a portable lantern.**

**SAFETY CONSIDERATIONS:**

- None

**THIS JPM CONTAINS A TIME CRITICAL ELEMENT.**

**RO Admin Task JPM A4**
**PVNGS JOB PERFORMANCE MEASURE**

## ADMIN TASK BASIS INFORMATION

TASK: 1290020301 Conduct On Shift Operations IAW Conduct of Shift Operations
TASK: 1290010301 Implement verification of plant activities.
TASK STANDARD: Determine qualification status as qualified. Determine proper REP and task, enter RCA and perform independent verification, determine entry into valve gallery is not allowed.

| | | | | | | |
|---|---|---|---|---|---|---|
| K/A | 2.3.10 | K/A RATING: | RO: | **2.9** | SRO: | **3.3** |
| K/A: | 2.3.4 | K/A RATING: | RO: | **2.5** | SRO: | **3.1** |
| K/A: | 2.1.29 | K/A RATING: | RO: | **3.4** | SRO: | **3.3** |

APPLICABLE POSITION(S): RO VALIDATION TIME: 30 minutes
REFERENCES: NGW01, Initial Radiation Worker Practices. REP 9-1002 A *, 02DP-0ZZ02, Verification of Plant Activities
SUGGESTED TESTING ENVIRONMENT: SIMULATOR _____ PLANT **X**

## APPROVAL

DEVELOPER: Joe Allison TECH REVIEW:
REVISION DATE: 4/11/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT **X**

TESTING METHOD: SIMULATE _____ PERFORM **X**

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**SIMULATOR SETUP:**

IC# : N/A

MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | N/A | |

SPECIAL INSTRUCTIONS:

- None

REQUIRED CONDITIONS:

- None

**SPECIAL TOOLS/EQUIPMENT:**

- A copy of the current Operations routine Shift Tasks REP (i.e. REP 9-1002 A)
- A copy of the current *(Monthly)* survey map for the Letdown HX, Valve Gallery, Seal Injection Tank Room.
- Current revision of 40OP-9CH01, Section 4.5.4, step 4.5.4.22, signed off to JPM conditions.

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**Given the following initial conditions:**

- **Unit is at 100% power.**
- **Letdown Control Valve CHE-LV-110P has been placed in service, and valve CHE-LV-110Q has been isolated.**
- **A second independent verification that Letdown Control Valve CHE-LV-110Q is isolated needs to be performed.**

**Your tasks are to:**

1. **Use a Qualification Check Station or PC to determine your GET qualification status for Radworker, RWP Dressout and Whole Body qualification status prior to entry into the RCA.**
2. **Observing all radiological requirements, enter the RCA to perform the second independent verification of the closed position of valves CHN-V340 and CHN-V343 in accordance with 40OP-9CH01, step 4.5.4.22.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set, then ensure the examinee has been briefed IAW NUREG 1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- **Examinee may discuss entry requirements with RP.**
- **To minimize entry and exit to/from the RCA administer this Admin Task in conjunction with JPM JP2.**
- **No entry into a High Radiation Area or Contaminated Area will be made.**

**SAFETY CONSIDERATIONS:**

- Slip/fall hazard on stairways.
- Pinch points at doorways.
- Radiological concerns (ALARA)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 1. | * | Enters employee information into Qualification Computer Station (or SWMS program on personal PC) to query qualification status. | Uses computer and determines qualification status of **"RAD WORKER TRAINING, RWP DRESSOUT, and WHOLE BODY as "Yes" or "Qualified".** (note: a personal PC may be used in lieu of the Qualification Check Station to access SWMS, SWMS Intranet web site or SWMS Warehouse to verify qualifications) |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 2. | * | Determine the correct REP and task number for the evolution. | Examinee selects appropriate REP for Operations Routine Shift Tasks and task number (e.g. REP 9-1002 A, Task 1) |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | Determine the REP Requirements.<br>• Exposure limits.<br>• Dosemetry requirements.<br>• RP coverage.<br>• Clothing/protection requirements. | Examinee determines the<br>1. REP radiological limitations (e.g. NO VHRA Entry, NO Entry INTO > 5,000 mREM/hr at 12 Inches)<br>2. Examinee determines EPD is required with settings as stated on the REP (e.g. set at 25 mRem dose and 500 mREM/hr Dose Rate.)<br>3. Examinee determines **INTERMITTENT** coverage is required.<br>4. Clothing/protection requirements are NONE for this task.<br><br>(Note: The Examinee may discuss REP requirements with RP) |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Discuss location and job scope with RP (Required on REP) | Examinee determines location of CHE-LV-110Q isolation valves to be in the 100' Letdown Valve Gallery.<br>Examinee informs RP of job to perform a verification of valve positions for isolation valves for CHE-LV-100Q outside the 100' letdown valve gallery.<br><br>If the Examinee requests RP to enter the room then provide the following CUE: **If requested CUE: The CRS directs you to perform the verification using the remote handwheels outside the valve room.**<br><br>**Note to evaluator: Once the REP requirements for the evolution have been addressed, entry into the RCA will be made.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **5.** | * | Enter the Auxiliary Building, proceed to the 100' Letdown valve gallery, and locate valve operating handwheels for CHN-V340 and CHN-V343. | Examinee enters the Auxiliary Building, and proceeds to the 100' Letdown valve gallery, and locates valve operating handwheels for CHN-V340 and CHN-V343. |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 6. | * | Perform second independent verification of valves CHN-V340 and CHN-V343. | Examinee demonstrates (simulates) proper technique to verify valves closed by:<br>• Checking position indicator, and/or<br>• rotating handwheel in the closed direction.<br><br>**If Examinee checks the position indicator.**<br>**If requested CUE: The position indicator pen for CHN-V340 is at the "Closed" position. The position indicator pen for CHN-V343 is between the "Open" and " Closed" position.**<br><br>**If Examinee demonstrates rotating handwheels in the closed direction.**<br>**If requested CUE: Valve CHN-V340 will not rotate in the clockwise direction. Valve CHN-V343 hand wheel rotates freely and has a disconnected reachrod.**<br><br>**Inform CUE : The CRS directs you to visually inspect the CHN-V343 valve and actuator in the room.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 7. | | Examinee locates the valve gallery entrance to perform visual verification. | Examinee locates valve gallery entrance to perform visual verification.<br><br>**Inform CUE: An RP sign at the entrance reads "Grave Danger-Very High Radiation Area".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 8. | * | Does not enter the 100' Letdown Valve Gallery and contacts RP. | Examinee determines that entry into the room cannot be made (due to REP limitations). Does not enter room. **Critical portion**<br><br>Examinee may contact RP or return to RP island.<br>**If requested CUE: RP has been contacted and you are directed to not enter and to return to the RP island. This completes this Admin Task.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 3/24/99 | 6 | New Admin Task JPM |
| 1 | 4/11/01 | 6 | Included step to verify qualifications. Modified location and REP data. |
| | | | |
| | | | |
| | | | |

REASON REVISED Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**Given the following initial conditions:**

- **Unit is at 100% power.**
- **Letdown Control Valve CHE-LV-110P has been placed in service, and valve CHE-LV-110Q has been isolated.**
- **A second independent verification that Letdown Control Valve CHE-LV-110Q is isolated needs to be performed.**

**Your tasks are to:**

3. **Use a Qualification Check Station or PC to determine your GET qualification status for Radworker, RWP Dressout and Whole Body qualification status prior to entry into the RCA.**
4. **Observing all radiological requirements, enter the RCA to perform the second independent verification of the closed position of valves CHN-V340 and CHN-V343 in accordance with 40OP-9CH01, step 4.5.4.22.**

**SAFETY CONSIDERATIONS:**

- Slip/fall hazard on stairways.
- Pinch points at doorways.
- Radiological concerns (ALARA)

**JPM JS2 (LOWER MODE)**
**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 1240002801 Perform LM to place Train A LPSI on SDC
TASK STANDARD: Place 'A' SDC in service
K/A: 4.2025AK3.04 K/A RATING: RO: 3.1 SRO: 3.4
K/A: 4.4E09EA2.2 K/A RATING: RO: 3.5 SRO: 4.0
APPLICABLE POSITION(S): RO/SRO VALIDATION TIME: 20 minutes
REFERENCES: 40EP-9EO10, Standard Appendices, Appendix 229, Revision 17
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

## APPROVAL

DEVELOPER: J. Hoover TECH REVIEW:
REVISION DATE: 03/31/99 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR X PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM X

## EVALUATION

EXAMINEE NAME: _____
(print)
EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
(SEE 15TD-0TR03)

**1. SIMULATOR SETUP:**

A. IC# : 4, Mode 5

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | Go to run on simulator | |
| **2.** | IMF ED11C | Deenergize PBB-S04 due to a bus fault |
| **3.** | MRF EG21 STOP | Emergency stop 'B' DG after it has started |
| **4.** | MRF MV09:SIAHV657 1 | Initiates leak by of SIA-HV-657 to match actual plant conditions |
| **5.** | Acknowledge alarms and freeze simulator | |
| **6.** | Provide initiating CUE then go to run. | |

C. SPECIAL INSTRUCTIONS:

- Hang yellow tags on 'A' and 'B' LPSI and CS pump recircs

D. REQUIRED CONDITIONS:

- Verify Mode 5 conditions
- PBB-S04 de-energized due to a bus fault
- 'B' DG has been emergency stopped
- Ensure SIA-HV-657 red light is NOT lit. If it is, throttle close SIA-HV-657 until red light is off

**2. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **Plant is in Mode 5**
- **PBB-S04 has been deenergized due to a bus fault**
- **The CRS is implementing the Lower Mode Functional Recovery Procedure**
- **'A' LPSI pump is aligned in standby for SDC**
- **You have been directed to Place 'A' LPSI in service on SDC per Appendix 229 and stabilize RCS temperature at its current value.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Obtains copy of Appendix 229. | Examinee obtains copy of Appendix 229 from LMFRP set at CRS desk, SM and STA console, or file cabinet. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2.** | If one SDC pump will be operating then check RCS level is 101' 6" or more. (Appendix 229 step 1) | Examinee verifies that RCS level is > 101' 6".<br><br>**If Requested CUE: Pressurizer level is 35%.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | If two SDC pumps will be operating the check RCS level is 104' 6". (Appendix 229 step 2) | Examinee determines that only one SDC pump will be in service by plant conditions or initiating Cue. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Inform Radiation Protection and RMS technician that train A SDC is being placed in service. (Appendix 229 step 3) | Examinee notifies RP and RMS that train A SDC will be placed in service.<br><br>**When Requested CUE: RP and RMS have been notified.**<br><br>**Note:** JPM steps 5-7 may be performed in any order. |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **5.** | * | Ensure that the following support systems are in service for 'A' SDC HX .<br>• SP<br>(Appendix 229 step 4) | Examinee starts 'A' SP pump by taking its handswitch to start and releasing back to auto.<br><br>**If Requested CUE: The 'A' SP pump has been started.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **6.** | * | Ensure that the following support systems are in service for 'A' SDC HX .<br>• EW<br>(Appendix 229 step 4) | Examinee starts 'A' EW pump by taking its handswitch to start and releasing back to auto.<br><br>**If Requested CUE: The 'A' EW pump has been started.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **7.** | * | Ensure that the following support systems are in service for 'A' SDC HX .<br>• EC<br>(Appendix 229 step 4) | Examinee starts 'A' EC pump by taking its handswitch to start and releasing back to auto.<br><br>**If Requested CUE: The 'A' EC pump has been started.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | * | If 'A' LPSI pump is in standby for SDC then start 'A' LPSI pump and go to step 7.<br>(Appendix 229 step 5) | Examinee determines 'A' LPSI is in standby for SDC by board indication or Initiating Cue and starts 'A' LPSI pump by taking its handswitch to start and releasing back to auto.<br><br>**If Requested CUE: 'A' LPSI pump has been started.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | | Check LPSI pump running current is less than 60 amps.<br>(Appendix 229 step 7) | Examinee verifies 'A' LPSI pump amps are less than 60 amps.<br><br>**If Requested CUE: 'A' LPSI pump amps are 45 amps.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **10.** | * | Throttle open SIA-HV-306 until flow rate is between 3780-4750 gpm.<br>(Appendix 229 step 8.b) | Examinee throttles open SIA-HV-306 until flow rate is between 3780-4750 gpm.<br><br>**If Requested CUE: Flow rate indicates 4150 gpm.**<br><br>**Note:** JPM steps 11-15 are intended to be repeated until SDC HX warm up is complete and RCS temperature is being controlled. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **11.** | | Perform all of the following to establish SDC flow:<br>• Adjust SIA-HV-306 as necessary to maintain desired SDC flow.<br>(Appendix 229 step 9.a) | Examinee adjusts SIA-HV-306 to maintain SDC flow rate between 3780-4750 gpm while establishing flow to RCS during JPM steps 12-15.<br><br>**If Requested CUE: Flow rate indicates 4150 gpm.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **12.** | Perform all of the following to establish SDC flow:<br>• Throttle open SIA-UV-635 to between 5 and 15%.<br>(Appendix 229 step 9.b) | Examinee throttles open SIA-UV-635 to between 5 and 15%.<br><br>**If Requested CUE: SIA-UV-635 is 10% open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **13.** | If at any time the SDC Hx heatup rate exceeds 19 degrees per minute then reduce the flow through the SDCHX.<br>(Appendix 229 step 9.c) | Examinee monitors SDC Hx heatup rate and if it exceeds 19 degrees per minute then throttles closed on SIA-UV-635 to reduce heatup rate.<br><br>**If requested CUE: SDC Hx heatup rate is 15 degrees per minute.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **14.** | When the SDC Hx heatup rate has been stabilized then throttle open SIA-UV-645 to between 5 and 15% open.<br>(Appendix 229 step 9.d) | Examinee throttles SIA-UV-645 to between 5 and 15% open while monitoring heatup rate.<br><br>**If Requested CUE: SIA-UV-645 is 10% open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **15.** | Adjust SIA-HV-657 as necessary to control RCS temperature.<br>(Appendix 229 step 9.e) | Examinee adjusts SIA-HV-657 as necessary to control RCS temperature to current value per initiating CUE.<br><br>**If Requested CUE: Stabilize RCS temperature at its current value.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **16.** | * | Perform the following to stop warmup bypass flow:<br>• Throttle SIA-UV-635 open<br>• Throttle SIA-UV-645 open<br>• Throttle SIA-HV-691 closed<br>(Appendix 229 step 10.a) | Examinee throttles SIA-UV-635 and SIA-UV-645 open and SIA-HV-691 closed and establishes SDC flow rate between 3780-4750 gpm.<br><br>**If Requested CUE: SIA-UV-635 and SIA-UV-645 are open and SIA-HV-691 is closed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **17.** | When SIA-HV-691 is closed then hold SIA-HS-691 for five seconds.<br>(Appendix 229 step 10.b.1) | Examinee holds SIA-HS-691 closed for 5 seconds.<br><br>**If Requested CUE: SIA-HS-691 has been held in closed position for 5 seconds.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **18.** | Direct a second operator to hold SIA-HS-691 closed for an additional five seconds.<br>(Appendix 229 step 10.b.2) | Examinee notifies CRS of need for an additional operator to hold SIA-HS-691 closed for 5 seconds.<br><br>**Inform CUE: SIA-HS-691 has been held closed for 5 seconds by a second operator.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **19.** | Perform the following:<br>Maintain desired SDC flow.<br>(Appendix 229 step 11.a) | Examinee maintains SDC flow rate between 3780-4750 gpm.<br><br>**If Requested CUE: SDC flow is 4150 gpm.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **20.** | * | Perform the following:<br>Throttle the following valves incrementally to fully open the LPSI injection valves.<br>• SIA-UV-635<br>• SIA-UV-645<br>• SIA-HV-306<br>• SIA-HV-657<br>(Appendix 229 step 11.b) | Examinee throttles SIA-UV-635 and SIA-UV-645 fully open while throttling SIA-HV-306 and SIA-HV-657 as necessary to control RCS temperature. Valves may already be in desired positions due to previous valve manipulations.<br><br>**If Requested CUE: SIA-UV-635 and SIA-UV-645 are fully open and RCS temperature is constant.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **21.** | If RWLIS is in service then perform the following:<br>(Appendix 229 step 12) | Examinee determines that RWLIS is not in service.<br><br>**If Requested CUE: RWLIS is not in service.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **22.** | Inform the CRS that LPSI Pump A is on SDC.<br>(Appendix 229 step 13) | Examinee informs the CRS that LPSI Pump A is on SDC.<br><br>**Inform CUE: Another operator will stabilize RCS temperature.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 03/31/99 | 0 | New JPM |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **Plant is in Mode 5**
- **PBB-S04 has been deenergized due to a bus fault**
- **The CRS is implementing the Lower Mode Functional Recovery Procedure**
- **'A' LPSI pump is aligned in standby for SDC**
- **You have been directed to Place 'A' LPSI in service on SDC per Appendix 229 and stabilize RCS temperature at its current value.**

**SAFETY CONSIDERATIONS:**

- None

# JPM BASIS INFORMATION

TASK: 1250340201 Respond to temperature instrument failures.
TASK STANDARD: Take actions, for Reactor Regulating System, with TLI-1 failed high with TLI selected to AVERAGE with CEDMC in Auto Sequential.
K/A: P-S01S-001-000-A1-02 K/A RATING: RO: 3.1 SRO: 3.4
K/A: K/A RATING: RO: SRO:
APPLICABLE POSITION(S): RO VALIDATION TIME: 10 min
REFERENCES: 40AO-9ZZ16, RRS MALFUNCTION, Rev 5
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT X

# APPROVAL

DEVELOPER: J. Shannon TECH REVIEW:
REVISION DATE: 4/25/01 APPROVAL:

# TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

# EVALUATION

EXAMINEE NAME: _____
(print)
EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**PVNGS JOB PERFORMANCE MEASURE**

**1. SIMULATOR SETUP:**

A. IC# : 20 (100% power, MOC)

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | | |
| **2.** | | |
| **3.** | | |
| **4.** | | |

C. SPECIAL INSTRUCTIONS:

- Reset to 100% power IC.
- Ensure TLI in “Average” at RRS Test Panel.
- IMF TR01:MTNPT11A 839 (fail TLI-1 High).
- Go to RUN on Simulator.
- Place CEDMCS in “STANDBY”.
- Acknowledge alarms and FREEZE simulator.
- Provide INITIATING CUE.
- Go to “RUN” on simulator.

D. REQUIRED CONDITIONS:

- 100% power, TLI-1 failed high, CEDMCS in STANDBY.

**2. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- The examiner will provide all responses and indications required from outside the control room.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A TLI instrument has failed high. TLI is selected to average. The plant is stable.**
- **The CRS directs you to perform the corrective actions necessary for a failed TLI input in accordance with 40AO-9ZZ16.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG 1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Supervisor of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- None

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **1.** | | Obtain procedure 40AO-9ZZ16. | Procedure 40AO-9ZZ16 is obtained. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **2.** | | Ensure CEDMCS is NOT in Auto Sequential. | Removes CEDMCS from Auto Sequential. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **3.** | * | If SBCS has responded or the CRS directs then:<br>a. Place SBCS in LOCAL AUTO:<br>• Adjust Local-Auto setpoint thumbwheel to match Remote Setpoint<br>• Place controller in MANUAL.<br>• Place Remote/Local Selector to LOCAL.<br>• Place the controller in AUTO<br><br>b. Restore SG pressure to the desired operating band as needed. | **Inform Cue: CRS directs you to place SBCS in "Local Auto".**<br><br>Examinee places SBCS in "LOCAL AUTO" (May be performed using 40OP-9SF05 in hand or skill of craft). Should not result in plant transient.<br><br>Examinee recognizes SG pressure is in the desired operating band, no adjustment necessary.<br><br>**If requested Cue: Steam Generator pressure is within the desired operating band.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| | | | |
|---|---|---|---|
| **4.** | * | Determine the failed instrument by comparing the DVM indications for TLI-1 and TLI-2 at the RRS test drawer. | Determines TLI-1 failed.<br><br>Note: At 100% power the DVM reads approximately 8 volts. |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **5.** | Determine the impact of the TLI-1 failure. Refer to Appendix B. | Examinee Refer to Appendix B (May list these to examiner). |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **6.** | Determine if RRS is selected to "Average". Perform both of the following: | Examinee determines RRS in "Average". |
| | a) Ensure SBCS is in ONE of the following:<br>• LOCAL AUTOMATIC<br>• MANUAL | Examinee ensures that SBCS is in "LOCAL AUTO".(performed at step 3). |
| * | b) Select the unaffected instrument at the RRS panel. | Examinee selects TLI-2 at the RRS panel. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **7.** | Check the $T_{avg}/T_{ref}$ mismatch is 3°F or less. | Examinee checks that the $T_{avg}/T_{ref}$. mismatch is less than or equal to 3°F.<br><br>**If Requested CUE: $T_{avg}/T_{ref}$. mismatch is 1°F.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **8.** | Place CEDMCS in the desired mode of operation. | **Inform CUE: The CRS requests you to place CEDMCS in "Auto Sequential".** |
| * | Place CEDMCS in "Auto Sequential". | Examinee places CEDMCS in "Auto Sequential". |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 9. | * | As the CRS directs then:<br>Place SBCS in "REMOTE AUTO":<br>• Place controller in MANUAL.<br>• Place Remote/Local Selector to REMOTE.<br>• When the steam pressure is less than SBCS modulation setpoint then, place the controller in AUTO<br>• Adjust Local-Auto setpoint to 1170 psia. | **Inform CUE: The CRS requests you to place SBCS in "Remote Auto".**<br><br>Examinee returns SBCS to "REMOTE AUTO" per 40OP-9SF05 or skill of craft. Should not result in plant transient. |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

# PVNGS JOB PERFORMANCE MEASURE

## RECORD OF REVISIONS

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 10 | 04/18/97 | 6 | New Format |
| 11 | 07/01/97 | 6 | Clarified Conditions |
| 12 | 4/25/01 | 3 | |
| | | | |
| | | | |
| | | | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- The examiner will provide all responses and indications required from outside the control room.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A TLI instrument has failed high. TLI is selected to average. The plant is stable.**
- **The CRS directs you to perform the corrective actions necessary for a failed TLI input in accordance with 40AO-9ZZ16.**

**SAFETY CONSIDERATIONS:**

- None

**JS3***

**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 1250010201 Respond to a condition requiring emergency boration and contingencies.
TASK STANDARD: Perform Emergency Boration using CHN-HV-514, Alternate Path.
K/A: 3.1-004-A2.14.01 K/A RATING: RO: 3.8 SRO 3.9
K/A: 4.2-024-AK3.01 K/A RATING: RO: 4.1 SRO: 4.4
APPLICABLE POSITION(S): RO/SRO VALIDATION TIME: 15 min
REFERENCES: 40AO-9ZZ01, Emergency Boration, Rev 8
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

## APPROVAL

DEVELOPER: J. Shannon TECH REVIEW:
REVISION DATE: 04/17/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
(SEE 15TD-0TR03)

**JS3***

**PVNGS JOB PERFORMANCE MEASURE**

**1. SIMULATOR SETUP:**

- IC# : Reset to any power IC. (IC 20 preferred)

A. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | IMF RD03G | CEA # Stuck |
| **2.** | IMF RD03B | CEA # Stuck |
| **3.** | IMF RD03C | CEA # Stuck |
| **4.** | IMF MV06:CHEHV536 | Mechanical seizure of CHE-HV-536 in closed position. |
| **5.** | | |
| **6.** | | |
| **7.** | | |

SPECIAL INSTRUCTIONS:

- Place simulator in RUN.
- Ensure malfunctions have actuated per Table A above.
- Manually trip the reactor and acknowledge alarms.
- Ensure CHE-HV-501 is OPEN.
- Ensure CHN-FIC-210X has GREATER THAN 0% output to make step 15 critical.
- FREEZE simulator.
- Provided INITIATING CUE.
- Place simulator in RUN.
- **Step 14 requires simulator driver actions.**

REQUIRED CONDITIONS:

- Reactor TRIPPED, plant in process of stabilization.
- 3 CEA's not fully inserted.
- CHE-HV-536 CLOSED and mechanically seized.

**2. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- The examiner will provide all responses and indications required from outside the control room.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **You are the Third RO. A reactor trip has occurred.**
- **Three CEA's are stuck out.**
- **The Primary Operator is performing Standard Post Trip Actions.**
- **The CRS has directed you to line up to borate the RCS per procedure, 40AO-9ZZ01, Emergency Boration. The RWT is not on PC Cleanup Pump recirculation.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.
- **Step 14 requires simulator driver actions.**

**SAFETY CONSIDERATIONS:**

- None

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Obtain procedure 40AO-9ZZ01, Emergency Boration. | Examinee obtains 40AO-9ZZ01, Emergency Boration and goes to section 4.0 |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2.** | Check that a charging pump is available for emergency boration. | Examinee determines two charging pumps are running.<br><br>**If requested CUE: Two charging pumps are running.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | Check that RWT level is >73% and that the RWT is available for emergency boration. | Operator checks that RWT level is >73% and that the RWT is available for emergency boration.<br><br>**If requested CUE: RWT level is >73% and available for emergency boration.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Ensure CHE-HV-532, RWT to Boric Acid Makeup Pumps, indicate open | Determines that CHE-HV-532 is open.<br><br>**If requested CUE: CHE-HV-532 indicates GREEN light "off", RED light "on"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **5.** | Perform all of the following to align CHN-UV-536:<br>• Refer to Appendix F.<br>• Ensures BAMPs are stopped.<br>• OPEN CHN-HV-536. | Examinee determines that CHN-HV-536 will not open; goes to contingency actions to align CHN-UV-514.<br><br>**If examinee requests local operation of valve,** Inform CUE: CHN-HV-536 will not open.<br><br>**If requested CUE: CHE-HV-536 will not open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **6.** | Perform all of the following to align CHN-UV-514: | Note: JPM steps 6 through 12 address procedure step 4 Contingency Actions. |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **7.** | | Refer to Appendix F, Simplified Drawings for a basic flow view. | Examinee refers to App. F. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | | Ensure CHN-HV-536, RWT to Charging Pumps is closed. | Examinee ensures CHN-HV-536 is closed. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | * | Open CHN-UV-514. | Examinee opens CHN-UV-514.<br><br>**If requested CUE: CHN-UV-514 indicates GREEN light "off", RED light "on"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **10.** | * | Close CHN-UV-510, BAMP Recirc. to the RWT | Examinee closes CHN-UV-510.<br><br>**If requested CUE: CHN-UV-510 indicates RED light "on", GREEN light "off".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **11.** | | If a BAMP is not available then perform both of the following: | Examinee determines that BAMPs are available; this step is not applicable.<br><br>**If requested CUE: A Boric Acid Makeup Pump is available.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **12.** | * | If a BAMP is available, start a BAMP. | Examinee ensures a BAMP is running.<br><br>**If requested CUE: BAMP indicates RED light "on", GREEN light "off".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **13.** | * | Place and hold CHN-HS-501, VCT Outlet to CLOSE. | Examinee closes and holds closed CHN-HS-501.<br><br>**If requested CUE: CHN-HS-501 indicates GREEN light "on", RED light "off"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **14.** | | Direct an operator to open NHN-M7208, CHN-UV-501.<br><br>WHEN NHN-M7208 is open, THEN release CHN-HS-501. | Directs an operator to open NHN-M7208. Releases CHN-UV-501 when breaker is open.<br><br>Note: Driver must execute the following command - MRF B401:CHNUV501 OPEN<br><br>**If requested CUE: Breaker NHN-M7208 is open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **15.** | | Ensure CHN-UV-527, VCT Bypass, is closed. | Ensures CHN-UV-527 is closed.<br><br>**If requested CUE: CHN-UV-527 indicates GREEN light "ON", RED light "OFF"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **16.** | * | Adjust CHN-FIC-210X, Reactor Makeup water to VCT Flow Control, to 0% output. | Examinee determines output is greater than zero; adjusts output to zero. CHN-FIC-210X in manual with 0% output<br><br>**If requested CUE: CHN-FIC-210X output is greater than 0%.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **17.** | IF a PC Cleanup Pump is recirculating the RWT AND three charging pumps will be used, THEN perform both of the following: | From INITIATING CUE, this Step is not applicable.<br><br>**Inform CUE: The RWT is not on a recirculation lineup.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **18.** | (Procedure step 8 Instructions)<br>If at least one charging pump is running AND it is desired to start additional charging pumps THEN GO TO step 13. | **Inform CUE: It is not necessary to start additional charging pumps. Another operator will complete the remaining steps.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

_____

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 4/25/01 | 6 | New JPM |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- The examiner will provide all responses and indications required from outside the control room.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **You are the Third RO. A reactor trip has occurred.**
- **Three CEA's are stuck out.**
- **The Primary Operator is performing Standard Post Trip Actions.**
- **The CRS has directed you to line up to borate the RCS per procedure, 40AO-9ZZ01, Emergency Boration. The RWT is not on PC Cleanup Pump recirculation.**

**SAFETY CONSIDERATIONS:**

- None

**JS3***

**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 1250010201 Respond to a condition requiring emergency boration and contingencies.
TASK STANDARD: Perform Emergency Boration using CHN-HV-514, Alternate Path.
K/A: 3.1-004-A2.14.01 K/A RATING: RO: 3.8 SRO 3.9
K/A: 4.2-024-AK3.01 K/A RATING: RO: 4.1 SRO: 4.4
APPLICABLE POSITION(S): RO/SRO VALIDATION TIME: 15 min
REFERENCES: 40AO-9ZZ01, Emergency Boration, Rev 8
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

## APPROVAL

DEVELOPER: J. Shannon TECH REVIEW:
REVISION DATE: 04/17/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
(SEE 15TD-0TR03)

**JS3***

**PVNGS JOB PERFORMANCE MEASURE**

**1. SIMULATOR SETUP:**

- IC# : Reset to any power IC. (IC 20 preferred)

A. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | IMF RD03G | CEA # Stuck |
| **2.** | IMF RD03B | CEA # Stuck |
| **3.** | IMF RD03C | CEA # Stuck |
| **4.** | IMF MV06:CHEHV536 | Mechanical seizure of CHE-HV-536 in closed position. |
| **5.** | | |
| **6.** | | |
| **7.** | | |

SPECIAL INSTRUCTIONS:

- Place simulator in RUN.
- Ensure malfunctions have actuated per Table A above.
- Manually trip the reactor and acknowledge alarms.
- Ensure CHE-HV-501 is OPEN.
- Ensure CHN-FIC-210X has GREATER THAN 0% output to make step 15 critical.
- FREEZE simulator.
- Provided INITIATING CUE.
- Place simulator in RUN.
- **Step 14 requires simulator driver actions.**

REQUIRED CONDITIONS:

- Reactor TRIPPED, plant in process of stabilization.
- 3 CEA's not fully inserted.
- CHE-HV-536 CLOSED and mechanically seized.

**2. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- The examiner will provide all responses and indications required from outside the control room.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **You are the Third RO. A reactor trip has occurred.**
- **Three CEA's are stuck out.**
- **The Primary Operator is performing Standard Post Trip Actions.**
- **The CRS has directed you to line up to borate the RCS per procedure, 40AO-9ZZ01, Emergency Boration. The RWT is not on PC Cleanup Pump recirculation.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG-1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Manager of in-plant JPM performance.
- **Step 14 requires simulator driver actions.**

**SAFETY CONSIDERATIONS:**

- None

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Obtain procedure 40AO-9ZZ01, Emergency Boration. | Examinee obtains 40AO-9ZZ01, Emergency Boration and goes to section 4.0 |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2.** | Check that a charging pump is available for emergency boration. | Examinee determines two charging pumps are running.<br><br>**If requested CUE: Two charging pumps are running.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | Check that RWT level is >73% and that the RWT is available for emergency boration. | Operator checks that RWT level is >73% and that the RWT is available for emergency boration.<br><br>**If requested CUE: RWT level is >73% and available for emergency boration.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Ensure CHE-HV-532, RWT to Boric Acid Makeup Pumps, indicate open | Determines that CHE-HV-532 is open.<br><br>**If requested CUE: CHE-HV-532 indicates GREEN light "off", RED light "on"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **5.** | Perform all of the following to align CHN-UV-536:<br>• Refer to Appendix F.<br>• Ensures BAMPs are stopped.<br>• OPEN CHN-HV-536. | Examinee determines that CHN-HV-536 will not open; goes to contingency actions to align CHN-UV-514.<br><br>**If examinee requests local operation of valve,** Inform CUE: CHN-HV-536 will not open.<br><br>**If requested CUE: CHE-HV-536 will not open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **6.** | Perform all of the following to align CHN-UV-514: | Note: JPM steps 6 through 12 address procedure step 4 Contingency Actions. |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **7.** | | Refer to Appendix F, Simplified Drawings for a basic flow view. | Examinee refers to App. F. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **8.** | | Ensure CHN-HV-536, RWT to Charging Pumps is closed. | Examinee ensures CHN-HV-536 is closed. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **9.** | * | Open CHN-UV-514. | Examinee opens CHN-UV-514.<br><br>**If requested CUE: CHN-UV-514 indicates GREEN light "off", RED light "on"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **10.** | * | Close CHN-UV-510, BAMP Recirc. to the RWT | Examinee closes CHN-UV-510.<br><br>**If requested CUE: CHN-UV-510 indicates RED light "on", GREEN light "off".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **11.** | | If a BAMP is not available then perform both of the following: | Examinee determines that BAMPs are available; this step is not applicable.<br><br>**If requested CUE: A Boric Acid Makeup Pump is available.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **12.** | * | If a BAMP is available, start a BAMP. | Examinee ensures a BAMP is running.<br><br>**If requested CUE: BAMP indicates RED light "on", GREEN light "off".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **13.** | * | Place and hold CHN-HS-501, VCT Outlet to CLOSE. | Examinee closes and holds closed CHN-HS-501.<br><br>**If requested CUE: CHN-HS-501 indicates GREEN light "on", RED light "off"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **14.** | | Direct an operator to open NHN-M7208, CHN-UV-501.<br><br>WHEN NHN-M7208 is open, THEN release CHN-HS-501. | Directs an operator to open NHN-M7208. Releases CHN-UV-501 when breaker is open.<br><br>Note: Driver must execute the following command - MRF B401:CHNUV501 OPEN<br><br>**If requested CUE: Breaker NHN-M7208 is open.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **15.** | | Ensure CHN-UV-527, VCT Bypass, is closed. | Ensures CHN-UV-527 is closed.<br><br>**If requested CUE: CHN-UV-527 indicates GREEN light "ON", RED light "OFF"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **16.** | * | Adjust CHN-FIC-210X, Reactor Makeup water to VCT Flow Control, to 0% output. | Examinee determines output is greater than zero; adjusts output to zero. CHN-FIC-210X in manual with 0% output<br><br>**If requested CUE: CHN-FIC-210X output is greater than 0%.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **17.** | IF a PC Cleanup Pump is recirculating the RWT AND three charging pumps will be used, THEN perform both of the following: | From INITIATING CUE, this Step is not applicable.<br><br>**Inform CUE: The RWT is not on a recirculation lineup.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **18.** | (Procedure step 8 Instructions)<br>If at least one charging pump is running AND it is desired to start additional charging pumps THEN GO TO step 13. | **Inform CUE: It is not necessary to start additional charging pumps. Another operator will complete the remaining steps.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

_____

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 4/25/01 | 6 | New JPM |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- The examiner will provide all responses and indications required from outside the control room.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **You are the Third RO. A reactor trip has occurred.**
- **Three CEA's are stuck out.**
- **The Primary Operator is performing Standard Post Trip Actions.**
- **The CRS has directed you to line up to borate the RCS per procedure, 40AO-9ZZ01, Emergency Boration. The RWT is not on PC Cleanup Pump recirculation.**

**SAFETY CONSIDERATIONS:**

- None

**JS-4** *

**PVNGS JOB PERFORMANCE MEASURE**

# JPM BASIS INFORMATION

TASK: 0100010401 Operate the Pressurizer Pressure Control System
TASK STANDARD: Pressurizer pressure restored to 2250 ± 25 psia using Auxiliary Spray.
K/A: 4.2-027-A1.01 K/A RATING: RO: **4.0** SRO: **3.9**
APPLICABLE POSITION(S): RO/SRO VALIDATION TIME: 10 Minutes
REFERENCES: 41AL-1RK4A, Panel B04A Alarm Responses, Rev 34
SUGGESTED TESTING ENVIRONMENT: SIMULATOR XX PLANT _____
ALTERNATE PATH

# APPROVAL

DEVELOPER: J. Shannon TECH REVIEW:
REVISION DATE: 4/25/01 APPROVAL:

# TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

# EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____

**JS-4** *

**PVNGS JOB PERFORMANCE MEASURE**

**1. SIMULATOR SETUP:**

A. IC#20: Or any normal operating pressure IC (IC 20 preferred).

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | IMF RC02A 0 | Fails Pressurizer Spray Valve 100E Closed |
| **2.** | IMF RC02B 0 | Fails Pressurizer Spray Valve 100F Closed |
| **3.** | IOR ZDRCNHS100 ASIS | Fails PPCS selector switch to the "X" position |
| **4.** | IMF TR01:RCNPT100X 1500 | Fails Pressurizer Pressure Control Channel "X" to 1500 psia |

**2. SPECIAL INSTRUCTIONS:**

- Reset to IC 20 (or any normal operating pressure IC, IC 20 preferred).
- With simulator in FREEZE, insert the Malfunctions and Overrides
- Go to RUN on the simulator.
- Ensure PPCS on channel X.
- On QSPDS call up page 223, RCS Pressure Control.
- As soon as PZR PRESS HI-LO alarm is received, acknowledge alarms and FREEZE the simulator.
- Provide INITIATING CUE.
- When examinee is ready to perform actions, go to RUN.

A. REQUIRED CONDITIONS:

- PZR Press Hi/Lo alarm received.
- QSPDS on page 223.

B. SPECIAL TOOLS/EQUIPMENT:

- NONE

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The Pressurizer Pressure HI/LO alarm has been received due to a high pressure condition and pressure is increasing. The CRS directs you to:**

- **Take alarm response procedure FIRST and SECOND PRIORITY actions for window 4A01B.**
- **Restore pressurizer pressure to 2250 psia.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- NOTE: Alternate Path JPM
- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG 1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Supervisor of in-plant JPM performance.

**SAFETY CONSIDERATIONS:**

- NONE

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 1. | | Obtain Annunciator Alarm Response Manual 41AL-1RK4A, Window 4A01B, Group B. | Examinee obtains 41AL-1RK4A, Group B for PZR PRESS HI-LO. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 2. | * | Trip reactor if high pressure trip is impending ($\geq$ 2383 psia) and proceed to 40EP-9EO01. | Examinee determines Pressurizer Pressure < 2383 psia, and high pressure trip is not pending. The Reactor is NOT manually tripped.<br><br>TERMINATE JPM, IF REACTOR IS TRIPPED. JPM would be UNSAT.<br><br>**If requested CUE: RCS pressure indicates 2300 psia on PT-100Y and increasing** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 3. | | Verify pressurizer pressure high alarm by observing RCN-PIC-100X and/or RCN-PIC-100Y or recorder RCN-PR-100 (B04). | Examinee determines actual high pressure condition exists.<br><br>**If requested CUE: RCS pressure indicates 2300 psia on PT-100Y and increasing** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Verify that the controlling channel transmitter has not failed. | Examinee determines the controlling channel, CH "X", has failed.<br><br>**If requested CUE: RCS pressure indicates <1500 psia on PT-100X** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **5.** | Switch to unaffected channel using RCN-HS-100. | Examinee selects Channel "Y "<br><br>**NOTE:** Will have no affect due to switch failure.<br><br>**If requested CUE: RCS pressure (PT-100Y) indicates > 2300 psia and increasing** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **6.** | Manually initiate pressurizer spray flow using:<br>• RCN-PIK-100<br>• RCN-HS-100-10, Spray Valve select switch as necessary.<br>to reduce pressure to normal band. | Examinee determines normal spray doesn't respond.<br><br>**If requested CUE:**<br>• **Spray Valve RC100E indicates green light on.**<br>• **Spray Valve RC100F indicates green light on.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 7. | * | Initiates Aux Spray to reduce RCS pressure to normal band using CHA-HS-205 and/or CHB-HS-203 on B03. | Examinee initiates Aux Spray Flow and observes pressurizer pressure lowering. Lowers and controls Pressurizer pressure to 2250 $\pm$25 psia.<br><br>**If requested CUE (for Aux Spray Valve opened):**<br>• **Aux Spray Valves HS-203 indicates red light on and RCS pressure is lowering.**<br>• **Aux Spray Valves HS-205 indicates red light on and RCS pressure is lowering.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| 8. | If a reactor trip is not required, minimize rate of load changes to facilitate pressure control, until the cause is determined and corrected. | Examinee ensures load changes are minimized.<br><br>**Inform CUE: The CRS has stated that there will be no load changes until the cause of the pressure failures is determined.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 9. | * | De-energize Pressurizer heaters as required to limit pressure increases. | Examinee de-energizes Pressurizer heaters to limit pressure increase. Pressure controlled at 2250 ±25 psia.<br><br>Inform QUE: Another operator will perform independent verification activities.<br><br>**If requested CUE: Pressurizer heaters are being energized (red light on) or deenergized (green light on) as required to maintain 2250 ± 25 psia.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**JS-4** *

**PVNGS JOB PERFORMANCE MEASURE**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 13 | 07/25/96 | 3,6 | New Format per OTG-02 |
| 14 | 10/10/96 | 6 | More Format changes per OTG-02 |
| 15 | 4/25/01 | 3 | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The Pressurizer Pressure HI/LO alarm has been received due to a high pressure condition and pressure is increasing. The CRS directs you to:**

- **Take alarm response procedure FIRST and SECOND PRIORITY actions for window 4A01B.**
- **Restore pressurizer pressure to 2250 psia.**

**SAFETY CONSIDERATIONS:**

- NONE

# JPM BASIS INFORMATION

TASK: 1240025601 - Cross-Tie Diesel Generator B to PBA-SO3.
TASK STANDARD: Energize PBA-SO3 using Diesel Generator "B"
K/A: 3.6-064-A4.01 K/A RATING: RO: **4.0** **4.3**
APPLICABLE POSITION(S): RO, SRO VALIDATION TIME: 15 Minutes
REFERENCES: 40AO-9ZZ12, Degraded Electrical Power, Rev 10
SUGGESTED TESTING ENVIRONMENT: SIMULATOR XX PLANT _____

# APPROVAL

DEVELOPER: J. Shannon TECH REVIEW:
REVISION DATE: 04/25/01 APPROVAL:

# TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

# EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
(SEE OTG-04)

**PVNGS JOB PERFORMANCE MEASURE**

**1. SIMULATOR SETUP:**

A. IC# : 04

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | MRF EG04 stop | Emergency Stop DG "A" |
| **2.** | | |
| **3.** | | |
| **4.** | | |

C. SPECIAL INSTRUCTIONS:

- Reset to IC-04.
- Go to RUN on the simulator.
- Manually open the following breakers:

  NBN-HS-S03A.

  NAN-HS-S03B.

  NAN-HS-S04B.

  NBN-S04A.
- Use Remote Function EG04 STOP, to Emergency stop DG "A".
- After Diesel Generator "B" is supplying PBB-S04, acknowledge alarms and FREEZE the simulator.
- Hang yellow caution tags on the LPSI and CS pump mini flow recirc valves.
- Provide INITIATING CUE.
- Go to RUN on the simulator.
- **Step 3 will require the driver to activate CAE EOP/attach58a to simulate Attachment G-1.**
- **Attachment G-1 needs to be completed by JPM step 8. The simulator driver will inform the examinee that the attachment is complete at step 8. Ensure completion of CAE EOP/attach58a.**

D. REQUIRED CONDITIONS:

- PBA-S03 de-energized
- Diesel Generator A tripped.

**2. SPECIAL TOOLS/EQUIPMENT:**

- NONE

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The plant is in Mode 5. PBA-S03 is NOT energized. Diesel Generator "A" is unavailable. The CRS directs you to energize PBA-S03 using Diesel Generator "B" in accordance with 40AO-9ZZ12, Degraded Electrical Power, Appendix "G".**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG 1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Supervisor of in-plant JPM performance.
- There are two termination points in this JPM. Either one is acceptable.

**SAFETY CONSIDERATIONS:**

- NONE

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Obtain a copy of 40AO-9ZZ12, Appendix G. | 40AO-9ZZ12 Appendix G is obtained. |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2.** | Ensure DG "B" running and supplying PBB-S04. | DG "B" checked running. |

SAT UNSAT (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **3.** | Direct operator to perform Attachment G-1, Disable PBA-S03 Breakers. | Directs AO to perform Attachment G-1, Disable PBA-S03 breakers.<br><br>**If requested CUE: An AO has been sent to perform Attachment G-1.**<br><br>**Note:** Simulator Driver activates a CAE for Attachment G-1. When the CAE is complete the Simulator Driver will provide the Cue that it is complete (see step 8) |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **4.** | Ensure all the following breakers are open:<br><br>NAN-SO3A, ESF Service Transformer XO3<br><br>PBA-S03K, 4.16Kv Bus S03 Alternate Supply<br><br>PBA-S03L, 4.16KV Bus S03 Normal Supply<br><br>NAN-S04A, ESF Service Transformer X04<br><br>PBB-S04L, 4.16 KV Bus S04 Alternate Supply<br><br>PBB-S04K, 4.16 KV Bus S04 Normal Supply | The following breakers are open.<br><br>NAN-SO3A, ESF Service Transformer XO3<br>PBA-S03K, 4.16Kv Bus S03 Alternate Supply<br>PBA-S03L, 4.16KV Bus S03 Normal Supply<br>NAN-S04A, ESF Service Transformer X04<br>PBB-S04L, 4.16 KV Bus S04 Alternate Supply<br>PBB-S04K, 4.16 KV Bus S04 Normal Supply<br><br>**If requested Cue:**<br>• **NAN-SO3 green light "ON".**<br>• **PBA-S03K green light "ON".**<br>• **PBA-S03L green light "ON".**<br>• **NAN-S04A green light "ON".**<br>• **PBB-S04L green light "ON".**<br>• **PBB-S04K green light "ON".** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **5.** | Ensure that PBA-S03B, Diesel Generator "A" 4.16 KV breaker, is open | Examinee ensures Diesel Generator "A" 4.16 KV breaker, is open.<br><br>**If requested Cue: PBA-S03B green light "ON"** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **6. *** | Place ALL of the following in "PULL TO LOCK":<br><br>Train A Containment Normal ACU's.<br><br>Train A CEDM ACU's. | Examinee places handswitches for Train A Containment Normal ACU's & Train A CEDM ACU's in "PULL TO LOCK".<br><br>**If requested Cue:**<br>• **Train A Containment Normal ACU's green light on, red light off.**<br><br>• **Train A CEDM ACU's green light on, red light off.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **7. *** | Perform the following:<br><br>Places synchronizing switch PBB-SS-S04K, 4.16 KV Bus S04 Normal Supply to ON.<br><br>Close breaker PBB-S04K, 4.16KV Bus S04 Normal Supply.<br><br>Place synchronizing selector switch, PBB-SS-S04K to "OFF". | Examinee places switch PBB-SS-S04K, selector switch to "ON".<br><br>**If requested Cue: Synchroscope is in the 12 o'clock position and not rotating.**<br><br>Examinee closes breaker PBB-S04K.<br><br>**If requested Cue**: **PBB-S04K red light is on.**<br><br>Examinee places Selector Switch PBB-SS-S04K to the "OFF" position. **(not critical)** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **8. *** | WHEN Attachment G-1 is complete, then complete the following:<br><br>Place synchronizing switch PBA-SS-S03K, 4.16 KV Bus S03 Alternate supply to "ON".<br><br>Close breaker PBA-S03K, 4.16 KV Bus S03 Alternate Supply.<br><br>Place synchronizing switch PBA-SS-S03K to "OFF". | Note: When CAE (EOP/attach58a) is complete then the Simulator Driver will provide the following Cue that Attachment G-1 is complete:<br><br>**Inform CUE: Attachment G-1 has been completed.**<br><br>Examinee places switch PBA-SS-S03K, selector switch to "ON".<br><br>**If requested Cue: Synchroscope is in the 12 o'clock position and not rotating.**<br><br>Examinee closes breaker PBA-S03K.<br><br>**If requested Cue**: **PBA-S03K red light is on.**<br><br>Examinee places Selector Switch PBA-SS-S03K to the "OFF" position **(not critical).** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **9. *** | Direct an operator to perform any of the following for the battery chargers that were initially aligned to the train A 125 VDC bus(es): | **Inform Cue: Another operator will align the battery chargers.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **10.** | Perform all of the following to energize other PBA-S03 loads:<br><br>Determine KW ratings of incoming loads.<br><br>Ensure that the incoming load will not cause the diesel to exceed its two hour rating.<br><br>Start needed loads. | **Inform Cue: Another operator will perform the remainder of this procedure.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 7 | 04/25/01 | 3 | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

**The plant is in Mode 5. PBA-S03 is NOT energized. Diesel Generator "A" is unavailable. The CRS directs you to energize PBA-S03 using Diesel Generator "B" in accordance with 40AO-9ZZ12, Degraded Electrical Power, Appendix "G".**

**SAFETY CONSIDERATIONS:**

- None

JS-7$^{L}$

**PVNGS JOB PERFORMANCE MEASURE**

## JPM BASIS INFORMATION

TASK: 0120030401 Restore Containment Spray and LPSI "A" to normal operating lineup.
TASK STANDARD: Containment Spray "A" lined up through shutdown cooling heat exchanger and LPSI "A" lined up for injection.
K/A: 3.5-103-A4.01 K/A RATING: RO: 3.2 SRO: 3.3
K/A: K/A RATING: : SRO
APPLICABLE POSITION(S): RO/SRO VALIDATION TIME: 20 minutes
REFERENCES: 40OP-9SI02, Recovery from Shutdown Cooling to Normal Lineup, Rev 38
SUGGESTED TESTING ENVIRONMENT: SIMULATOR X PLANT _____

## APPROVAL

DEVELOPER: J. Shannon TECH REVIEW:
REVISION DATE: 04/25/01 APPROVAL:

## TESTING METHOD

ACTUAL TESTING ENVIRONMENT: SIMULATOR _____ PLANT _____

TESTING METHOD: SIMULATE _____ PERFORM _____

## EVALUATION

EXAMINEE NAME: _____
(print)

EVALUATOR NAME: _____
(print)

SATISFACTORY _____ UNSATISFACTORY _____

Time Start _____ Time Stop _____

REMEDIAL TRAINING REQUIRED? YES _____ NO _____
(SEE OTG-04)

**PVNGS JOB PERFORMANCE MEASURE**

**1. SIMULATOR SETUP:**

A. IC#4

B. MALFUNCTIONS, OVERRIDES & REMOTE FUNCTIONS:

| EVENT | COMMAND | DESCRIPTION |
|---|---|---|
| **1.** | MRF b205:siap03 OUT | Cycle control power for CS pump "A" |
| **2.** | MRF b205:siap01 OUT | Cycle control power for LPSI pump "A" |
| **3.** | MRF B401:SIAUV672 CLOSE | Control power on for SIA UV 672 |
| **4.** | MRF B401:siahv683 OPEN | Supply breaker to SIA-HV-683 |

C. SPECIAL INSTRUCTIONS:

- Ensure control power is on for SIA-UV-672, containment spray header isolation valve.
- Ensure valve SIA-HV-678, CS "A" discharge, is closed.
- Place caution tags on train A LPSI & CS pump mini flow valve handswitches (SIA HS 669 & SIA HS 664).
- Place caution tags on train B LPSI & CS pump mini flow valve handswitches (SIB HS 668 & SIB HS 665).

D. REQUIRED CONDITIONS:

- Heat removal established with reactor coolant pumps and/or train "B" shutdown cooling.
- Train "A" SI in standby shutdown cooling lineup.
- "A" containment spray system lined up to bypass shutdown cooling heat exchanger.
- Shutdown cooling heat exchanger outlet temperature is less than 200 °F.

**2. SPECIAL TOOLS/EQUIPMENT:**

- None

# TASK CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant heatup is in progress. The CRS directs you to restore Safety Injection train "A" to its normal operating lineup per 40OP-9SI02, Recovery from Shutdown Cooling to Normal Operating Lineup, beginning at step 4.1.11.**
- **Shutdown purification is not aligned to train "A".**
- **A flush of the SDC piping has already been performed.**
- **All prerequisites are complete.**

## INFORMATION FOR EVALUATOR'S USE:

* Denotes Critical Step

- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Task Standard is met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.
- The complete load shed and manual sequencing of loads will not be performed.
- Any step marked UNSAT requires comments.
- If this is the first JPM of the set then ensure the examinee has been briefed IAW NUREG 1021.
- Step sequence is not critical unless noted or will prevent achieving the task standard.
- Notify unit Shift Supervisor of in-plant JPM performance.
- At the discretion of the Examiner/Evaluator, this JPM may be terminated when the Elements and Standards are met or adequate time has been allowed to complete the JPM. It shall be terminated when the Examinee has verbalized completion of the JPM.

**SAFETY CONSIDERATIONS:**

- None

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **1.** | Obtain procedure 40OP-9SI02. | Procedure 40OP-9SI02 obtained.<br>Examinee goes to step 4.1.11 |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **2.** | If it is desired to align train A safety injection for normal operation and both of the following conditions exists:<br>• The shutdown cooling loop temperature is less than 200 F,<br>• A flush of the SDC piping has been completed,<br>Then perform all of the following: | Examinee verifies<br>• shutdown cooling loop temperature is less than 200 F<br>• A flush of the SDC piping has been completed. (Given in QUE)<br><br>**If requested Cue: A flush of the SDC piping has been completed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **3.** | ***** | Direct an Area Operator to place the control power UC fuse for PBA-S03F, LPSI "A" supply breaker, in the OFF position. | Examinee directs Area Operator to place the LPSI "A" UC fuse to OFF.<br><br>**NOTE:** Simulator driver must input: MRF B205:siap01 OUT.<br><br>**After driver inputs command, Inform CUE: LPSI pump "A" control power UC fuses are in OFF.**<br><br>**If requested, CUE: Control power UC fuse for PBA-S03F is in the OFF position.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **4.** | * | Direct an Area Operator to place the control power UC fuse for PBA-S03D, CS "A" supply breaker, in the OFF position. | Examinee directs an Area Operator to place the CS "A" UC fuses to OFF.<br><br>**NOTE:** Simulator driver must input: MRF B205:siap03 OUT.<br><br>**After driver inputs command Inform CUE: Containment Spray Pump "A" control power UC fuses are OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 5. | * | Close SIA-UV-655, Loop 1 SDC-LPSI pump "A" suction valve. | Examinee closes SIA-UV-655.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 6. | * | Close SIA-HV-691, SDC loop "A" warmup bypass valve. | Examinee closes SIA-HV-691, SDC loop "A" warmup bypass valve.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 7. | | When closed indication for SIA-HV-691 is received then hold SIA-HV-691 in the closed position for 5 seconds. | Examinee holds SIA-HV-691 handswitch closed for 5 seconds.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **8.** | A second operator shall perform all of the following to obtain an independent verification per 02DP-0ZZ02, verification of plant activities, that SIA-HV-691 is closed. | **Inform QUE: The independent verification of SIA-HV-691 has been completed. The valve is verified closed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **9.** | Ensure SIA-UV-672, Containment spray "A" discharge to spray header 1 valve is closed. | Examinee ensures SIA-UV-672 is closed.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | ELEMENT | STANDARD |
|---|---|---|
| **10.** | Ensure SIA-V105, Containment spray "A" Suction Isolation valve is locked open per 40AC-0ZZ06, locked valve, breaker and component control. | Examinee ensures SIA-V105 is open by having an operator verify the valve condition locally.<br><br>**Inform Cue: A Nuclear Operator has verified that SIA-V105 is locked open per 40AC-0ZZ06.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 11. | | Ensure SIA-UV-664, CS pump "A" recirculation valve is open. | Examinee ensures SIA-UV-664 is open.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 12. | | Ensure SIA-UV-660, Train "A" combined recirculation valve is open. | Examinee ensures SIA-UV-660 is open.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 13. | * | Open SIA-HV-678, CS "A" discharge to shutdown cooling heat exchanger valve. | Examinee opens SIA-HV-678.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 14. | | Close SIA-HV-686, SDCHX "A" outlet valve to RC loops 1A/1B. | Examinee closes SIA-HV-686.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **15.** | | Ensure SIA-HV-657, SDCHX "A" outlet valve to RC loop 1A/1B is closed. | Examinee ensures SIA-HV-657 is closed.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **16.** | * | Open SIA-HV-687, LPSI-CS from SDCHX "A" crosstie valve. | Examinee opens SIA-HV-687.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **17.** | * | Close SIA-HV-685, LPSI-CS to SDCHX "A" crosstie valve. | Examinee closes SIA-HV-685.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 18. | * | Open SIA-HV-684, CS "A" discharge to SDCHX valve. | Examinee opens SIA-HV-684.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 19. | * | Close SIA-HV-688, CS "A" bypass around SDCHX valve. | Examinee closes SIA-HV-688.<br><br>**If requested CUE: Handswitch indicates green light ON, red light OFF.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 20. | | Ensure CHA-UV-531, RWT to SI train "A" valve is open. | Examinee ensures CHA-UV-531 is open.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 21. | * | Direct an Area Operator to restore the control power UC fuse for PBA-S03D, to the ON position. | Examinee directs an Area Operator to place the CS "A" UC fuse to ON.<br><br>NOTE: Simulator driver must input: MRF B205:siap03 in.<br><br>**After the driver inputs the command then inform CUE: The control power UC fuse for PBA-S03D is in the ON position.**<br><br>**If requested, CUE: UC fuse for PBA-S03D are in the ON position.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 22. | | Direct an Area Operator to independently verify that the control power fuse is in the "on" position per 02DP-0ZZ01, Verification of plant activities. | Examinee directs an Area Operator to independently verify that the control power fuse for PBA-S03D is in the "ON" position.<br><br>**Inform CUE: The control power UC fuse for PBA-S03D is in the ON position.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| 23. | * | Open SIA-HV-306, SDCHX "A" bypass valve. | Examinee opens SIA-HV-306.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **24.** | * | Open SIA-UV-669, LPSI "A" recirc to RWT valve. | Examinee opens SIA-UV-669.<br><br>**If requested about the Caution Tag on SIA-UV-669, CUE: The tag is an Operations tag and you have permission to operate SIA-UV-669.**<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **25.** | * | Close PHA-M3706, supply breaker to SIA-HV-683. | Examinee requests a Nuclear Operator to close PHA-M3706.<br><br>NOTE: Simulator driver must input: MRF B401:siahv683 CLOSE.<br><br>**After the driver inputs the command then, inform CUE: Breaker PHA-M3706 is closed.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**COMMENTS:**

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **26.** | * | Open SIA-HV-683, LPSI "A" RWT suction valve. | Examinee opens SIA-HV-683.<br><br>**If requested CUE: Handswitch indicates green light OFF, red light ON.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

| STEP | | ELEMENT | STANDARD |
|---|---|---|---|
| **27.** | * | Direct a Nuclear Operator to restore the control power fuse for PBA-S03F, to the ON position. | Examinee directs a Nuclear Operator to place the control power fuse for PBA-S03F to the ON position.<br><br>NOTE: Simulator driver must input: MRF B205:siap01 IN.<br><br>**After the driver inputs the command then, inform CUE: The control power UC fuse for PBA-S03F is in the ON position.**<br><br>**Inform Cue: Another operator will complete the rest of this section.** |

SAT _____ UNSAT _____ (UNSAT requires comments)

**NORMAL TERMINATION POINT**

**COMMENTS:**

**RECORD OF REVISIONS**

| REVISION NUMBER | REVISION DATE | REASON REVISED | COMMENTS |
|---|---|---|---|
| 0 | 02/19/97 | 6 | New |
| 1 | 04/25/01 | 3 | |

REASON REVISED — Enter the numbers corresponding to the reason revised in the Reason Revised column and brief description of changes in Comments Column. Comments are to be numbered consecutively in each revision.

1. Vendor reference document upgrade
2. Plant modification (include number)
3. Procedure upgrade
4. Internal or External Agency Commitment (indicate item number)
5. Technical Specification Change (indicate amendment number)
6. Other (explain in comments)

# INITIAL CONDITIONS

## INFORMATION PRESENTED TO EXAMINEE:

**SPECIAL CONSIDERATIONS:**

- Operation of in-plant equipment is to be **SIMULATED ONLY, DO NOT OPERATE** any equipment.
- Inform the control room staff of any discovered deficiencies.
- You may use any source of information normally available.

**INITIATING CUE:**

- **A plant heatup is in progress. The CRS directs you to restore Safety Injection train "A" to its normal operating lineup per 40OP-9SI02, Recovery from Shutdown Cooling to Normal Operating Lineup, beginning at step 4.1.11.**
- **Shutdown purification is not aligned to train "A".**
- **A flush of the SDC piping has already been performed.**
- **All prerequisites are complete.**

**SAFETY CONSIDERATIONS:**

- None