

INITIAL SUBMITTAL OF THE ADMINISTRATIVE JPMS

FOR THE DUANE ARNOLD EXAMINATION - NOVEMBER 2002

RO A.I. a



JOB PERFORMANCE MEASURE (JPM)

SITE: DAEC

TASK TITLE: PERFORM AN APRM GAIN ADJUST

JPM NUMBER: 2.1.7-02xx REV. 0

RELATED PRA
INFORMATION:

TASK NUMBERS: 97.11

K/A NUMBERS: 2.1.7 (3.7/4.4)
2.1.20 (4.3/4.2)
2.1.30 (3.9/3.4)
2.1.31 (4.2/3.9)

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒

EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐
Simulator: ☒ Other: ☐

Time for Completion: 15 Minutes

Time Critical: NO

Alternate Path /
Faulted: NO

TASK APPLICABILITY: RO/SRO

Developed by:	<i>AA</i>	9/16/02
	Instructor	Date
Validated by:	<i>[Signature]</i>	9/16/02
	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
Approved by:	<i>Dean Custard</i>	9/17/02
	Training Supervisor-Operations	Date

JPM 2.1.7-xx, Perform An APRM Gain Adjust, Rev. 0

JPM Number: 2.1.7-02

JPM Title: PERFORM AN APRM GAIN ADJUST

Examinee: _____ Evaluator: _____

Job Title: _____ Date: _____

Start Time _____ Finish Time _____

PERFORMANCE RESULTS:

SAT: ☐

UNSAT: ☐

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here:

i.e., This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- The plant is operating at power.
- You are the on-shift RO.
- "F" APRM gain is not within limits.

INITIATING CUES (IF APPLICABLE):

- The Shift Supervisor directs you to perform an APRM Gain Adjustment for APRM "F" (Foxtrot) per OI 878.4.

JPM PERFORMANCE INFORMATION

Required Materials:

1. OI 878.4 "Average Power Range Monitoring System"
2. Small Screwdriver.

General References: OI 878.4 Rev 27

Task Standards:

1. Bypass APRM "F".
2. Adjust "F" APRMs to within + or - 2%.
3. Restore APRM to normal bypass conditions.

Start Time: _____

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

OI 878.4 Section 8.0

Performance Step: Determine desired APRM setting from computer point C133 or reactor heat balance calculation.

Critical: N

Standard: Core power recorded from Computer Point C133 or reactor heat balance.

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments: Cue: If asked which power to use (computer point C133 or the reactor heat balance) tell them to use **computer point C133**.

JPM 2.1.7-xx, Perform An APRM Gain Adjust, Rev. 0

Performance Step:	If APRM adjustment is required, bypass the appropriate APRM per Section 6.1 of this procedure.
Critical: N	
Standard:	Go to Section 6.1 to bypass the APRM.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

OI 878.4 Section 6.1

Performance Step:	Verify the two remaining APRM channels in the RPS trip system are operable and not BYPASSED, otherwise comply with Tech Specs for inoperable RPS instrumentation.
Critical: N	
Standard:	Verifies remaining channels operable.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	Cue: if asked the remaining channels are operable. Cue: If permission to bypass "F" APRM is requested, give the candidate permission to bypass "F" (Foxtrot) APRM.

Performance Step:	Place the APRM BYPASS switch C51B-S3 (C51B-S6) on Panel 1C05 in the A, C, or E (B, D, or F) position for the channel to be bypassed.
Critical: Y	
Standard:	Operator bypasses "F" APRM by taking C51B-S6 to "F".
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

JPM 2.1.7-xx, Perform An APRM Gain Adjust, Rev. 0

Performance Step:	Observe that the bypass lights for the bypassed channel on Panel 1C37 and Panel 1C05 are both ON.	
Critical: N		
Standard:	Operator confirms the bypass light for "F" APRM on 1C37 and Panel 1C05 are both ON.	
Performance:	SATISFACTORY _____	UNSATISFACTORY _____
Comments:		

OI 878.4 Section 8.0

Performance Step:	At 1C37, adjust APRM AUX card (Z31) R16 as necessary to correspond to the desired APRM setting.	
Critical: Y		
Standard:	At 1C37, adjust APRM AUX card (Z31) R16 as necessary to correspond to the desired APRM setting.	
	Adjust "F" APRMs to within + or - 2% of computer point C133 or from the reactor heat balance.	
Performance:	SATISFACTORY _____	UNSATISFACTORY _____
Comments:		

Performance Step:	Confirm appropriate APRM computer point (B000 through B005) agrees with AS LEFT values on 1C37. If not, notify Reactor Engineering and the System Engineer.	
Critical: N		
Standard:	Operator confirms the "A" APRM computer point B005 agrees with AS LEFT values on 1C37.	
Performance:	SATISFACTORY _____	UNSATISFACTORY _____
Comments:		

JPM 2.1.7-xx, Perform An APRM Gain Adjust, Rev. 0

Performance Step:	Remove appropriate APRM from bypass per Section 6.2 if necessary.
Critical: N	
Standard:	Go to Section 6.2 to un-bypass the "F" APRM.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	<p>Cue: If requested give permission to un-bypass "F" (Foxtrot) APRM.</p> <p>Cue: If asked what APRMs to bypass tell the operator to return the APRMs conditions he found them.</p>

OI 878.4 Section 6.2

Performance Step:	Before returning a bypassed APRM to service, verify the following for that APRM:
Critical: N	
	The APRM channel Mode Selector Switch on Panel 1C37 is in OPERATE.
Standard:	Operator verifies the "F" APRM channel Mode Selector Switch on Panel 1C37 is in OPERATE.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Performance Step:	The APRM upscale, inoperative, and if greater than 5% reactor power, downscale trips on Panel 1C37 are reset.
Critical: N	
Standard:	Operator confirms "F" APRM downscale trips on Panel 1C37 are reset.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

JPM 2.1.7-xx, Perform An APRM Gain Adjust, Rev. 0

Performance Step: The IRM/APRM recorders on Panel 1C05 indicate approximately the same average power for the bypassed APRM as they do for the other APRM channels in operation.
Critical: N

Standard: Operator confirms "F" APRM recorder reads about the same as the other APRMs.

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments:

Performance Step: Place the APRM BYPASS switch C51B-S3 or C51B-S6 on Panel 1C05 in the neutral (unbypassed) position.
Critical: N

Standard: Operator places C51B-S6 on Panel 1C05 in the neutral (unbypassed) position.

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments:

Performance Step: Observe that the bypass light on Panel 1C05 is OFF.
Critical: N

Standard: Operator verifies "F" APRM bypass light on Panel 1C05 is OFF.

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments:

Performance Step: If desired, BYPASS a different APRM channel per section 6.1.
Critical: N

Standard: Go to section 6.1

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments:

OI 878.4 Section 6.1

Performance Step: Verify the two remaining APRM channels in the RPS trip system are operable and not BYPASSED, otherwise comply with Tech Specs for inoperable RPS instrumentation.

Standard: Verifies remaining channels operable.

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments: Cue: if asked the remaining channels are operable.

Cue: If ask which APRM to Bypass have the operator return it to the APRM bypassed at the start of the JPM.

Performance Step: Place the APRM BYPASS switch C51B-S6) on Panel 1C05 in the A, C, or E (B, D, or F) position for the channel to be bypassed.

Standard: Operator bypasses the APRM "B" or "D" depending on the original setup.

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments: **Note:** One APRM channel per RPS trip system is normally bypassed to prevent a full scram due to a single shared LPRM failure. During normal operation the preferred APRM channel bypass combinations are A & D or C & B.

Performance Step: Observe that the bypass lights for the bypassed channel on Panel 1C37 and Panel 1C05 are both ON.

Standard: Operator confirms the bypass light for "B" OR "D" APRM on 1C37 and Panel 1C05 are both ON. This will depend on which APRM is bypassed on the "A" side.

Performance: SATISFACTORY _____ UNSATISFACTORY _____

Comments:

Terminating Cues: Terminate the JPM when the candidate has Bypassed the "B" or "D" APRM

Stop Time: _____

SIMULATOR SET UP:

1. Reset to any power IC > 25 %.
2. When the plant is stable, ensure the APRMs are set as follows:
 - "F" APRM +4 % of core thermal power.
 - "A-E" APRMs set to approximately $\pm 0.5\%$ of core thermal power.
 - Verify APRM channel bypassed is either A & D or C & B.

SIMULATOR MALFUNCTIONS:

None

SIMULATOR OVERRIDES:

None

SIMULATOR REMOTE FUNCTIONS:

None

TURNOVER SHEET

INITIAL CONDITIONS:

- The plant is operating at power.
- You are the on-shift RO.
- "F" APRM gain is not within limits.

INITIATING CUES (IF APPLICABLE):


The Shift Supervisor directs you to perform an APRM Gain Adjustment for APRM "F" (**Foxtrot**) per OI 878.4.

ATTACHMENT 1**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All questions/statements must be answered "YES" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation shall sign and date this form.

 9/16/02
Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

SRO / ~~RO~~ A.2

JOB PERFORMANCE MEASURE (JPM)

SITE: DAEC

TASK TITLE: C71A-K3C Logic Print Exercise.

JPM NUMBER: 2.1.24-xx REV. 0

RELATED PRA
INFORMATION:

TASK NUMBERS: 50102 PR-07 Learning Objective and Enabling Objective 16.

K/A NUMBERS: Generic 2.1.24

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒EVALUATION LOCATION: In-Plant: ☒ Control Room: ☒Simulator: ☒ Other: ☐

Time for Completion: 30 Minutes

Time Critical: NO

Alternate Path /
Faulted: NO

TASK APPLICABILITY: RO/SRO

Additional signatures may be added as needed.

Developed by:		9/15/02
	Instructor	Date
Validated by:		9/15/02
	Validation Instructor	Date
	(See JPM Validation Checklist Attachment 1)	
Approved by:		9/17/02
	Training Supervisor	Date

JPM Number: 2.1.24-xx

JPM Title: C71A-K3C Logic Print Exercise.

Examinee: _____ Evaluator: _____

Job Title: _____ Date: _____

Start Time _____ Finish Time _____

PERFORMANCE RESULTS:

SAT:

UNSAT:

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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JPM BRIEFING/TURNOVER

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I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- The plant is at power.
- During a panel walk down Relay C71A-K3C "RPS TRIP CHANNEL A2 C LINE MSIV 90% OPEN" was found deenergized.
- There are no other indications that this relay is deenergized.
- The STA evaluated logic print APED C71 and reports the following:
 - There is a Fuse, F3C, in line with C71A-K3C and it could possibly be open and we also should have received a ½ Scram, an annunciator, and computer point alarm if this fuse is open.

INITIATING CUES:

- The OSM directs you to independently evaluate the logic print for this relay to determine if the STA is correct.

JPM PERFORMANCE INFORMATION

Required Materials: APED-C71-004 sheets 4, 6, 8, 14, and 15

General References: APED-C71-004 sheets 4, 6, 8, 14, and 15

Task Standards:

1. Determine Fuse F3C could possibly be the fuse and that the STA is correct
2. Determine there should not be a ½ scram and that the STA is NOT correct
3. Determine there should not be an annunciator and that the STA is NOT correct
4. Determine there should not be a computer point alarm and that the STA is NOT correct

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step:	Determine there is a fuse in the logic to C71A-K3C and that it is a possible reason for this condition.
Critical: Y	
Standard:	Fuse F3C is identified as the possible fuse.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Performance Step:	Determine using the logic prints that a ½ scam should not occur if this fuse is open.
Critical: Y	
Standard:	Determines that a ½ scam would not occur and the STA is incorrect.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Performance Step:	Determine using the logic prints that an annunciator should not occur if this fuse is open.
Critical: N	
Standard:	Determines that an annunciator would not occur and the STA is incorrect.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Performance Step:	Determine using the logic prints that a computer point alarm should not occur if this fuse is open.
Critical: N	
Standard:	Determines that a computer point alarm would not occur and the STA is incorrect.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Terminating Cues: When candidate has determined the STA is correct about the fuse but incorrect about the rest.

Stop Time: _____

TURNOVER SHEET

INITIAL CONDITIONS:

- The plant is at power.
- During a panel walk down Relay C71A-K3C "RPS TRIP CHANNEL A2 C LINE MSIV 90% OPEN" was found deenergized.
- There are no other indications that this relay is deenergized.
- The STA evaluated logic print APED C71 and reports the following:
 - There is a Fuse, F3C, in line with C71A-K3C and it could possibly be open and we also should have received a ½ Scram, an annunciator, and computer point alarm if this fuse is open.

INITIATING CUES:

- The OSM directs you to independently evaluate the logic print for this relay to determine if the STA is correct.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 9/14/02
Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

RO A.I.B



JOB PERFORMANCE MEASURE (JPM)

SITE: DAEC

TASK TITLE: Respond to a RBM Rod Block annunciator and safety limit violation.

JPM NUMBER: 2.2.22-xx REV. 0

RELATED PRA
INFORMATION:TASK NUMBERS: Task 82.00
Objective 71.00.00.08K/A NUMBERS: Generic 2.2.22 3.4/4.1
215002 A2.05 3.2/3.3

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐
Simulator: ☒ Other: ☐

Time for Completion: 10 Minutes Time Critical: NO

Alternate Path /
Faulted: NO

TASK APPLICABILITY: RO/SRO

Additional signatures may be added as needed.

Developed by:		9/15/02
	Instructor	Date
Validated by:		9/15/02
	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
Approved by:		9/17/02
	Training Supervisor	Date

Retention: Life of policy + 10yrs.
Retain in: Training Program File

Disposition: Reviewer and Approver

2.2.22-xx, Respond to a RBM Rod Block annunciator and safety limit violation. Rev 0

JPM Number: 2.2.22-xx

JPM Title: Respond to a RBM Rod Block annunciator and safety limit violation.

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT: ☐

UNSAT: ☐

Delete this table if not required

____ Procedure adequately addresses task elements.

Enter Identifier here: 82.00 Monitor the Rod Block Monitoring System.

____ Other document adequately describes necessary task elements.

Enter Identifier here: 71.00.00.08 interpret the data provided by the Official 3D Monicore output.

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

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I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- You are performing a control rod sequence exchange and have just withdrawn the selected control rod.
- The annunciators for "Rod Out Block" and "RBM Upscale or Inop" have just occurred.

INITIATING CUES (IF APPLICABLE):

- As the OSS I direct you to perform ARP 1C05B B-6 "RBM UPSCALE OR INOP".

JPM PERFORMANCE INFORMATION

Required Materials: ARP 1C05B A-6 Rev 9
ARP 1C05B B-6 Rev 10
Plant process computer
3D Case
T.S.
Copy of a sequence exchange including the selected rod.

General References: ARP 1C05B A-6 Rev 9
ARP 1C05B B-6 Rev 10
T.S.

Task Standards: Run 3D Case
Identify T.S. Safety Limit violation.

Start Time: _____

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step:	At Panel 1C-05, monitor RBM displays to determine the affected RBM channel.
Critical: N	
Standard:	Determine the Rod Block is due to both RBMs upscale.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Performance Step: 3.1 If UPSCALE light is ON and has not been anticipated as part of a sequence exchange:
Critical: N

a) Verify with the Reactor Engineer that the proper rod withdrawal sequence is being used.

Standard: Operator will request if this is the proper rod withdrawal sequence

Performance: **SATISFACTORY** _____ **UNSATISFACTORY** _____

Comments: Cue: If asked if this is the correct rod withdrawal sequence reply that **the Reactor Engineer has verified this to be the correct rod withdrawal sequence**

Performance Step: 3.2 b) Verify the proper rod is selected.
Critical: N

Standard: The operator verifies the correct control rod is selected.

Performance: **SATISFACTORY** _____ **UNSATISFACTORY** _____

Comments: Cue: If asked if this is the correct rod the answer is YES this is the correct control Rod.

Performance Step: 3.2 c) Run an OFFICIAL 3D CASE and follow with one of the below options:
Critical: Y

Standard: An OFFICIAL 3D CASE is ran by typing RUN3D on the PPC.

Performance: **SATISFACTORY** _____ **UNSATISFACTORY** _____

Comments: Once the 3D Case is requested and prints out give the candidate the JPM 3D Case to review.

2.2.22-xx, Respond to a RBM Rod Block annunciator and safety limit violation. Rev 0

Performance Step: 3.2 c)1)	If a thermal limit has value in excess of 1.000, inform the OSS and comply with the Technical Specification requirements for Power Distribution Limits
Critical: Y	
Standard:	<p>The operator will review the 3D Case and determine that MFLPD is reading 1.02 and the thermal limit is in excess of 1.000. Inform the OSS of the result.</p> <p>He should also mention we should review T.S. for Power Distribution Limits. However, this is not considered critical for satisfactory performance of this step.</p>
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Terminating Cues: T.S. Thermal Limit has been identified as being exceeded.

Stop Time: _____

SIMULATOR SET UP:

- Reset to **any** >30% power IC.
- Select a non-edge control rod.

SIMULATOR EVENT TRIGGERS::

None

SIMULATOR MALFUNCTIONS:

Malfunction	Discription	Severity Value	Ramp	Delay
nm09a	RBMCHANNE FAILS-CHNL A	100	0	0
nm09b	RBMCHANNE FAILS-CHNL B	100	0	0

On the VAX use SAIC Menu #8 then #3 and set MFLPD 1.02

SIMULATOR OVERRIDES:

None

SIMULATOR REMOTE FUNCTIONS:

None

TURNOVER SHEET

INITIAL CONDITIONS:

- You are performing a control rod sequence exchange and have just withdrawn the selected control rod.
- The annunciators for "Rod Out Block" and "RBM Upscale or Inop" have just occurred.

INITIATING CUES (IF APPLICABLE):

- As the OSS I direct you to perform ARP 1C05B B-6 "RBM UPSCALE OR INOP".


Heading
gives answer
to JPM!
Remove!

ATTACHMENT 1**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All questions/statements must be answered "YES" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation shall sign and date this form.

 9/18/02
Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

SRO/RO A.3

DUANE ARNOLD ENERGY CENTER

JOB PERFORMANCE MEASURE

NUMBER: 2.3.1-04

TASK NUMBER: HP-SELF.004

TITLE: Gain Access to a High Radiation Area

Rev. 2

DEVELOPED BY:

Michael Fisher
Instructor

10/09/01
Date

VALIDATED BY:

George F. Ludeke
SME/Instructor

10-31-01
Date

REVIEWED BY:

William J. [Signature]
Plant Reviewer

11/14/01
Date

APPROVED BY:

[Signature]
Training Supervisor-Operations

11/14/01
Date

DUANE ARNOLD ENERGY CENTER

JOB PERFORMANCE MEASURE

JPM No. 2.3.1-04	JPM Description: Gain access to a high radiation area		
Task No. HP-SELF.004	Task Description: Prepare for Self Coverage		
K/A Reference: 2.6/3.6 2.3.1			
APPLICABLE METHOD OF TESTING: RO/SRO			
Simulate Performance		X	Actual Performance
Simulator	In-Plant	X	Control Room
Time for Completion: 30 minutes			

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE

All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 7 through 10.

JPM No. 2.3.1-04 JPM Title Gain access to a high radiation area

- ☒ 1. Task description and number, JPM description and number are identified
- ☒ 2. Task elements identified and K/A references are included
- ☒ 3. Performance location specified
 - a. in-plant
 - b. control room
 - c. simulator
- ☒ 4. Initial conditions and cues identified
 - a. setup, required materials, and procedure
 - b. malfunctions and instructor actions
 - c. initiating and terminating cues
- ☒ 5. Task standards identified and verified by SME review
- ☒ 6. Critical tasks/steps identified meet criteria and identified with a "C"
- ☒ 7. Verify JPM steps fit the most current procedures
Procedure Rev. 10 Date 10/09/01 ACP 1411.22
- ☒ 8. Pilot test JPM 12 8/1/2002
 - a. verify cues both verbal and visual are free of conflict
 - b. ensure performance time is accurate
- ☒ 9. If the JPM cannot be performed as written with proper responses, then revise the JPM
- ☒ 10. When JPM is revalidated, SME/Instructor signs and dates JPM

[Signature] 9/15/02
SME/Instructor Date

SME/Instructor Date

SME/Instructor Date

SIMULATOR SETUP:

None

EVENT TRIGGERS:

None

MALFUNCTIONS:

None

OVERRIDES:

None

REMOTE FUNCTIONS:

None

INSTRUCTOR ACTIONS:

1. Verify that the CAVs area is currently posted as a High Rad Area.
2. Start this JPM in the Reactor Building.
3. Read initial conditions and initiating cues to the operator.

TASK STANDARDS:

1. Operator does not attempt to enter the High Rad Area improperly.
2. The need to sign in on another RWP (which will allow entry) is identified.
3. Current survey map reviewed.
4. HP briefing requested.

REQUIRED MATERIALS:

RWP 10, Job Step 2
RWP 10, Job Step 6
RWP 33, Job Step 1
Marked-up copy of P&ID Bech-M189<3>
Digital picture of the CAVs area
CAVs Area Survey Map

GENERAL REFERENCES:

ACP 1411.22, Control of Access to Radiological Areas

Read to the operator the following information:

NOTE:

Start this JPM in the Reactor Building.

INITIAL CONDITIONS:

1. The plant is in normal full power operation.
2. Assume you are a (Senior) Reactor Operator in the Reactor Building doing maintenance planning.
3. You are to demonstrate the proper verification techniques while performing this JPM.

INITIATING CUES:

As Shift Supervisor, I direct you to go to the CAVs Area and verify the out-of-service CAV vessel 1T-415A isolation valves V-89-150, V-89-151, V-89-154, V-89-155 are closed, bypass valve V-89-153 and drain valve V-89-152 are open.

This task is not time critical.

Inform the evaluator when you have completed the task.

PERFORMANCE INFORMATION

NOTE:

Critical steps are denoted with a "C". Failure to meet the standard for this step constitutes failure.

Time Start _____

CAUTION

DO NOT allow the examinee to cross the roped-off boundary of the High Rad Area. Use physical restraint if necessary. If an improper entry is attempted, the JPM will have been performed unsatisfactorily and should be ended by reading the Terminating Cue.

PERFORMANCE STEP: Critical: C	Operator identifies the need to enter a High Rad area.
STANDARD:	Operator does not attempt to enter the High Rad Area improperly.
COMMENTS: The examinee need not enter the Reactor Building 786' level area if he recognizes that the CAV vessel valves are in a High Rad Area and begins to work on gaining access. (After the need to enter a High Rad Area is identified), CUE: The intent of this JPM is to demonstrate the actions necessary to enter a High Rad Area. An actual entry will not be performed but you are to continue to walkthrough your actions as if it were. I will role play plant support personnel as necessary.	

Note:

Do not allow the on-shift HPs to become involved with this JPM other than to provide the book of survey maps.

PERFORMANCE STEP: Critical: C	Operator returns to Access Control to review and identify an RWP which will allow entry.
STANDARD:	The need to sign in on another RWP (which will allow entry) is identified.
COMMENTS: The correct RWP for operations duties in HRA/LHRA areas is RWP 10, Job Step 6. Role Play the On-Shift Health Physics Technician (HP) as necessary. It is preferable for the candidate to identify the correct RWP but this information may be given by the HP/evaluator upon request.	

PERFORMANCE STEP: Critical: C	Review a current survey for specific locations of high dose and low dose standby areas.
STANDARD:	Current survey map reviewed.
COMMENTS: (If not stated in the review of the survey map) CUE: Identify the maximum dose rates in the CAVs area. (≈ 80 to 100 mR/hr.)	

PERFORMANCE STEP: Critical: C	Request a pre-job briefing by the HP.
STANDARD:	HP briefing requested.
COMMENTS: CUE: Instruct the student to provide a reverse brief. The student should provide a reverse brief that contains the following items: Review of the RWP. Wearing Electronic Dosimetry. Obtaining a dose rate instrument. Wearing proper protective clothes. May discuss locating low dose standby areas outside the CAVs area.	

Note:

The operator should have already demonstrated the ability to sign in on a RWP, so signing in on the new RWP is not necessary.

Time Stop _____

TERMINATING CUES: The intent of this JPM was to demonstrate the actions necessary to enter a High Rad Area. This JPM is complete.

VERIFICATION OF COMPLETION

JPM No.: 2.3.1-04_____ JPM Description: Gain access to a high radiation area

Operator: _____ Evaluator: _____

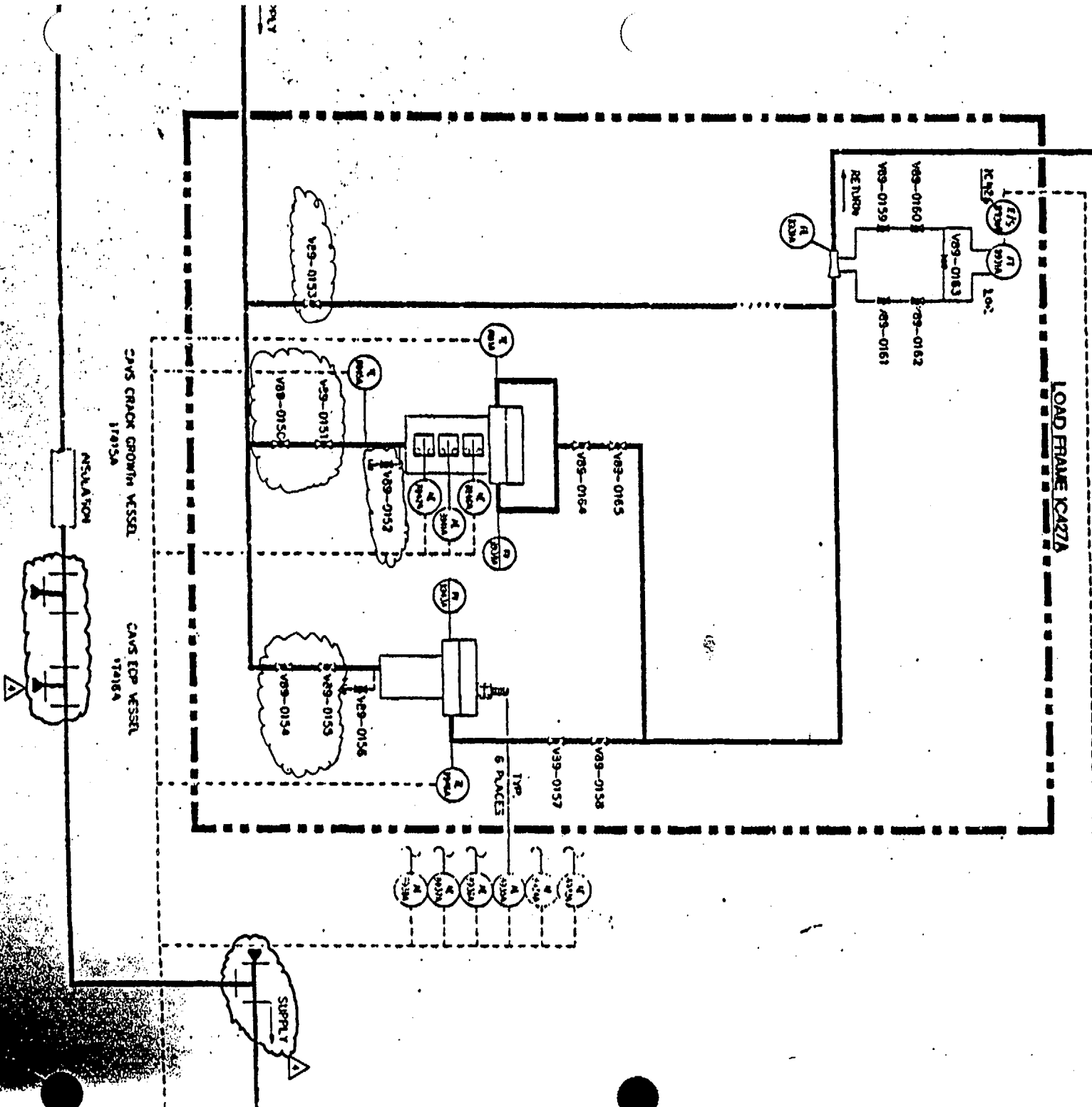
Licensee: ☐ RO ☐ SRO ☐ SRO Cert
☐ STA ☐ NSPEO

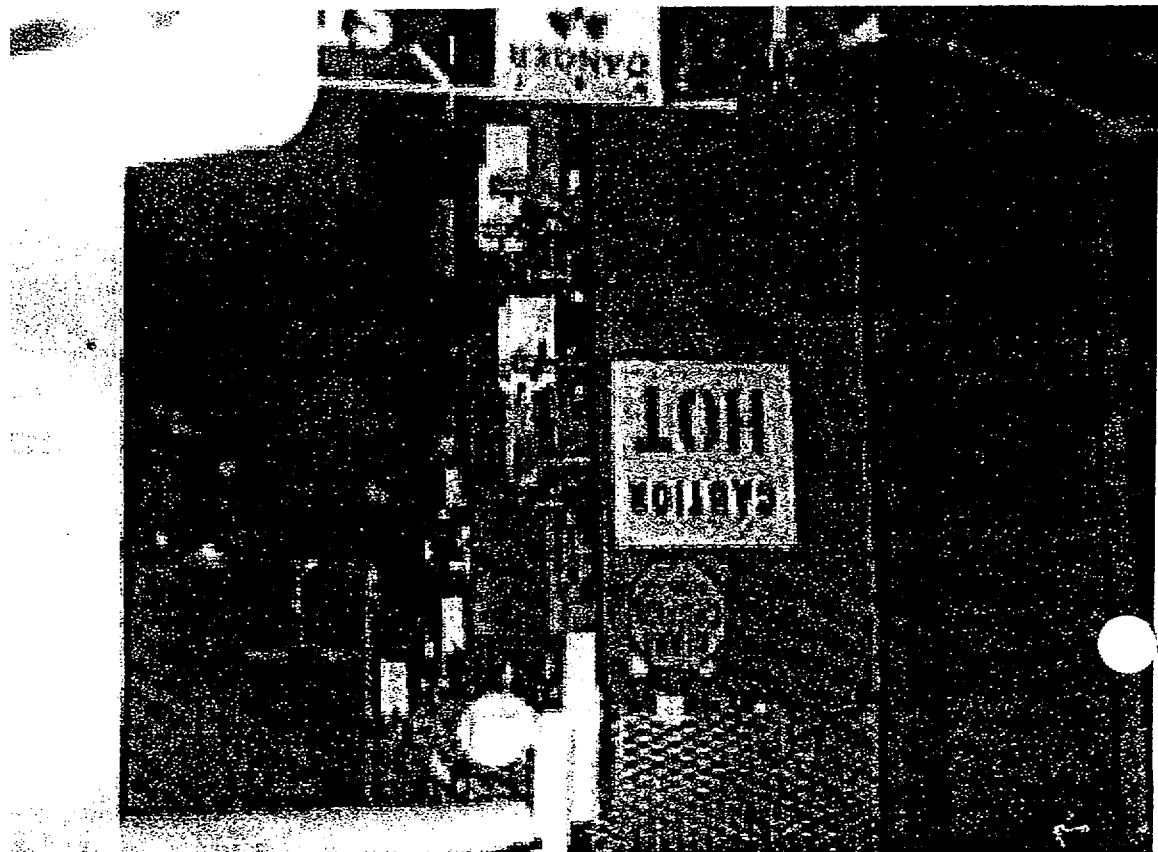
Result: ☐ SATISFACTORY ☐ UNSATISFACTORY

COMMENTS/FEEDBACK: (Note any trainee discrepancies or misperformed steps.)

Evaluator's Signature

Date _____





Duane Arnold Energy Center HP Survey

ORIGINAL
If stamped in
RED

Survey # 01-457

Key	Low Dose Area	Alerts Caution	Caution Hot Spot	Danger Hot Spot
Smears	XXX	Radiological Boundary	Contact @ 30 cm	Dose Rate mm/m/hr DDE
#	#	#	#	#

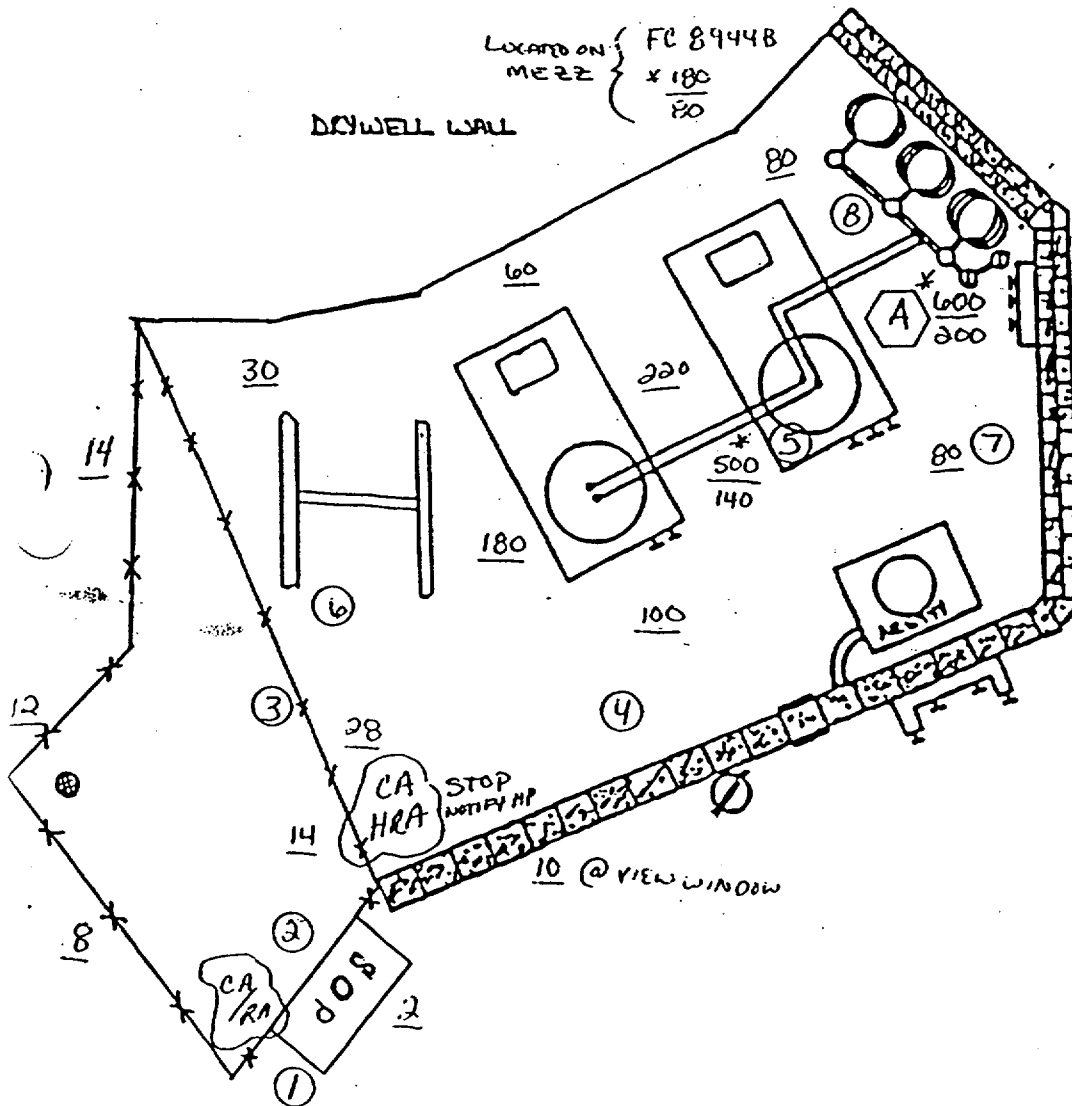
Map# Location/Description Date: 2-23-01

Freq. Radiological Ranges RWP - JS

RB223	RB 786' C.A.V. AREA	2x4	Dose 2-220	2-6
	ROUTING		Cont. <1K-2K	

Rx Power: 100 % HWC injection rate: 6.3 scfm

LOCATED ON MEZZ
FC 89448
x 180
80
DRYWELL WALL



#	Location	dpm 100cm ²
1	SOP	<1K
2	FLOOR	<1K
3		1K
4	↓	1K
5	CAY. UNIT	<1K
6	FLOOR	1K
7	↓	1K
8	↓	2K
9		
10		
11	NA	
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ADMINISTRATIVE CONTROL PROCEDURE	ACP 1411.22
CONTROL OF ACCESS TO RADIOLOGICAL AREAS	Rev. 12 Page 6 of 10

- (a) RWP numbers for scheduled work activities can be obtained directly from the schedule. These RWP numbers are assigned and entered by Radiation Protection personnel.
- (b) RWP numbers for routine tours are the default RWPs for all personnel on-site.
- (c) If the correct RWP number is not known for the entry, contact Health Physics at Access Control to obtain the correct RWP number and review the RWP if not already authorized.
- (5) If the access control system indicates that you are not currently authorized for the RWP you are trying to sign in on, contact Health Physics to review the correct RWP and be authorized in the access control system.
- (6) Health Physics will provide specific instructions for entries into highly contaminated or airborne areas.

3.2.4 PERSONNEL ACCESS TO A HIGH RADIATION AREA

NOTE

Personnel entering a high radiation area shall be monitored by TLD in accordance with 10 CFR 20.1502.

- (1) Personnel requiring access to a high radiation area shall:
 - (a) Participate in a pre-job briefing with Health Physics prior to entry. The briefing shall review radiological information based on a representative survey of the area.

 Exception: A situation due to a plant transient may occur where the immediate entry into a HRA or LHRA by Operations personnel could prevent further plant degradation. The Operations Shift Supervisor may authorize a Plant Equipment Operator - Nuclear or Reactor Operator to bypass the HP briefing and make the emergency entry. The Operator shall be knowledgeable of the radiological conditions within the area, follow direction given in the associated RWP, and be equipped with an electronic dosimeter or a survey meter. The duty HP should be notified as soon as possible that the entry is being made. The Operator shall take precautions to maintain exposures ALARA. The duty HP shall provide Health Physics support as determined appropriate. The Health Physics Supervisor shall be notified of each emergency HRA or LHRA entry.
 - (b) Review the RWP and follow instructions/requirements set forth.
 - (c) Wear electronic dosimetry. Personnel shall ensure that they recognize the alarm sounds and know the appropriate actions to take when the alarm is received. If personnel are entering an area where noise in the area may interfere with hearing an

ADMINISTRATIVE CONTROL PROCEDURE	ACP 1411.22
CONTROL OF ACCESS TO RADIOLOGICAL AREAS	Rev. 12 Page 7 of 10

ED alarm, consideration should be given for the use of an ED alarm aid (e.g., earpiece, alarm light) or additional controls. Unusual circumstances may prohibit the use of Electronic Dosimetry, in this event, personnel shall follow the dosimetry requirements of the RWP or Health Physics direction.

(d) Be provided with or accompanied to the work area by one or more of the following:

- A radiation-monitoring device which continuously indicates the dose rate in the area .
- A radiation-monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received (i.e., Electronic Dosimetry). Entry into HRAs utilizing Electronic Dosimetry may be made after the dose rate level in the area has been established and entrants have been made knowledgeable of them.
- An HP Technician with a radiation dose rate instrument who is responsible for providing Positive Exposure Control over activities in the area and performs periodic radiation surveys at the frequency specified by the H. P. Supervisor, on the RWP.

(2) Non-HP personnel that have provided self-coverage should report discrepancies in briefed upon radiological conditions to the on-shift or control point HP Technician. The HP Technician will document that conditions were discrepant in the HP Shift Log or designated HP form. The HP will take corrective actions as necessary.

(3) Health Physics job coverage details are provided in HPP 3104.01.

3.2.5 PERSONNEL ACCESS TO A LOCKED HIGH RADIATION AREA

(1) Personnel accessing a locked high radiation area shall comply with the requirements of Section 3.2.4.

NOTE

The keys to the Locked High Radiation Areas shall be issued only to individuals identified on the Self-Coverage Qualification Matrix.

(a) Obtain a key. Personnel who are issued a key are responsible for assuring that the area is locked upon exit and the key returned at the end of the work.

(2) Refer to ACP 1411.13, "Control of Locked High Radiation Areas" for additional instructions for LHRA key and area controls.

(3) Health Physics job coverage details are provided in HPP 3104.01.

RO A.4



JOB PERFORMANCE MEASURE (JPM)

SITE: DAEC

TASK TITLE: Site Evacuation While Escorting A Visitor.

JPM NUMBER: 2.4.39-xx REV. 0

RELATED PRA
INFORMATION:

TASK NUMBERS:

K/A NUMBERS: Generic 2.4.39

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☒ Perform: ☒
 EVALUATION LOCATION: In-Plant: ☒ Control Room: ☒
 Simulator: ☐ Other: ☐

Time for Completion: 30 Minutes

Time Critical: YES

Alternate Path /
Faulted: NO

TASK APPLICABILITY: RO/SRO

Additional signatures may be added as needed.

Developed by:		9/15/02
	Instructor	Date
Validated by:		9/15/02
	Validation Instructor	Date
	(See JPM Validation Checklist, Attachment 1)	
Approved by:		9/17/02
	Training Supervisor	Date

2.4.39-xx, Site Evacuation While Escorting A Visitor, Rev 0

JPM Number: 2.4.39-xx

JPM Title: Site Evacuation While Escorting A Visitor.

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT: ☐

UNSAT: ☐

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here:

i.e., This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- I am a visitor on site.
- I am properly badged and have been briefed by Security and Health Physics.
- I have been touring the plant with another operator.
- The current escort has an emergency at home and must leave.
- You are the Auxiliary Operator and the OSS has directed you to take over escort duties until someone else can relieve you.
- Security has authorized the exchange of escorts.

INITIATING CUES:

- Take time to review the "Visitor and escort Security Regulations" card provided by the operator you are relieving.
- Inform me when you have completed the review of the "Visitor and escort Security Regulations" and are ready to continue with the tour.

JPM PERFORMANCE INFORMATION

Required Materials: Duane Arnold Energy Center – Visitor and Escort Security Regulation card

General References: EPIP 1.3 Rev 9

Task Standards:

1. Escort the visitor to the Security Control Point.
2. Report to the Control Room for accountability.

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step:	The candidate receives indication of a plant assembly. (Attachment 2)
Critical: N	
Standard:	The candidate recognizes that a plant assemble has been ordered.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	<p>Cue: Hand the candidate Attachment 2 containing the plant announcement.</p> <p>Note: Due to not having a visitor badge the passage through doors will not be the same as if the visitor had a visitor badge. This is not being evaluated and Attachment 2 explains this to the candidate.</p> <p>Note: The time critical portion of this JPM starts after the candidate acknowledges he understands Attachment 2 or starts performing actions based on attachment 2.</p>

Time Critical

Start Time: _____

2.4.39-xx, Site Evacuation While Escorting A Visitor, Rev 0

Performance Step:	Escort the visitor to the Security Control Point and inform Security you are turning over the visitor to the due to the evacuation alarm.
Critical: Y	
Standard:	The candidate takes the visitor to the SCP and turns him over to Security.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	When you reach the SCP act as Security and when an attempt to turn over the visitor is made inform the candidate that "Security has taken responsibility for me as the visitor and you are no longer acting as my escort. Continue with any further actions that you would take for this event."

Performance Step:	As the Auxiliary operator the candidate should report to the Control Room for accountability.
Critical: Y	
Standard:	Report to the Control Room.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	If the candidate calls the control room, for the purposes of this JPM, he would have been accounted for and would satisfy this JPM step.
	The candidate has to have the visitor to the SCP and returned to the control room <u>or</u> has notified the control room of his whereabouts within 30 minutes of the evacuation alarm to complete this step satisfactorily.

Terminating Cues: . . . When the control room has been reached or has been contacted for accountability and the visitor is at the SCP.
The candidate and visitor have to be accounted for within 30 minutes to meet the EP requirements.

Time Critical and JPM
Stop Time: _____

time critical!

TURNOVER SHEET

INITIAL CONDITIONS:

- I am a visitor on site.
- I am properly badged and have been briefed by Security and Health Physics.
- I have been touring the plant with another operator.
- The current escort has an emergency at home and must leave.
- You are to take over escort duties.
- Security has authorized the exchange of escorts.

INITIATING CUES:

- Take time to review the "Visitor and escort Security Regulations" card provided by the operator you are relieving.
- Inform me when you have completed the review of the "Visitor and escort Security Regulations" and are ready to continue with the tour.

*I thought we were
going to go in as
visitors, if so we
need to change rule, and
JPM steps.*

ALSO


TIME CRITICAL

ATTACHMENT 1**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All questions/statements must be answered "YES" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation shall sign and date this form.

 9/16/02
Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

ATTACHMENT 2

You hear a plant alarm for 5 to 10 seconds followed by the following announcement:

"Attention all personnel, an Alert has been declared. Emergency Response Personnel shall report to their designated Emergency Response Facilities. Emergency Personnel assigned to the EOF shall depart the site via the South access and report to the EOF. All other personnel shall report to their designated onsite Assembly locations."

The alarm and announcement is made two more times.

NOTE:

Passage through plant doors is NOT being evaluated during this JPM.

It is understood that the evaluator does NOT have a visitor badge and that passing through doors would be performed differently if they were wearing a visitors badge.

Egress through plant doors the same way as before this JPM began.

DUANE ARNOLD ENERGY CENTER	
Visitor and Escort Security Regulations	
VISITOR: (READ AND GIVE TO ESCORT)	
1)	As a visitor at the Duane Arnold Energy Center (DAEC) you will be required to submit to established search procedures prior to gaining access to the Protected Area, which may include a "hands-on" search. In addition, all hand-carried items, and vehicles requiring access will be searched. No weapons, illegal drugs, alcohol, or contraband of any kind are allowed inside the Protected Area, except by authorized persons for authorized purposes. Cameras require authorization.
2)	You are required to remain with your designated escort at all times while within the Protected Area (fenced-in area). This includes all areas past the Security Control Point, to include inside the fence at the intake structure.
3)	If you become separated from your escort, request assistance from anyone in the area, or call Security on the page or phone 7254, and remain where you are until someone comes to escort you back to the Security Control Point. Do not wander around.
4)	Visitor badges must be worn on the upper part of the body (chest area) on your outer clothing, and must be visible at all times. These badges must be turned in at the front window of the Security Control Point along with radiation monitoring devices, each time you exit the Protected Area.
5)	In the event an evacuation alarm sounds, remain with our escort and follow instructions given over the paging system. It is the escort's responsibility to escort the visitor to the Security Control Point.
6)	Hard hats and safety glasses must be worn in all areas, with the exception of lunchrooms, and Administrative areas. The escort is responsible to supply visitors with hard hats and safety glasses.
Thank You	
DAEC Security Department	

SRO A.1.a



JOB PERFORMANCE MEASURE (JPM)

SITE: DAEC

TASK TITLE: DETERMINE REPORTABILITY (GROUP 1 ISOLATION)

JPM NUMBER: 2.1.14-02 REV. 1

RELATED PRA
INFORMATION:

TASK NUMBERS: SRO 1.03

K/A NUMBERS: 2.1.14 (SRO 3.3)

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☒ Perform: ☒

EVALUATION LOCATION: In-Plant: ☐ Control Room: ☒
 Simulator: ☒ Other: ☐

Time for Completion: 30 Minutes Time Critical: NO

Alternate Path /
Faulted: NO

TASK APPLICABILITY: SRO

Developed by:		9/15/02
	Instructor	Date
Validated by:		9/15/02
	Validation Instructor	Date
	(See JPM Validation Checklist, Attachment 1)	
Approved by:		9/17/02
	Training Supervisor-Operations	Date

SRO

JPM 2.1.14-02, Determine Reportability (Group 1 Isolation), Rev. 1

JPM Number: 2.1.14-02

JPM Title: DETERMINE REPORTABILITY (GROUP 1 ISOLATION)

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time: _____

Finish Time: _____

PERFORMANCE RESULTS:

SAT: ☐

UNSAT: ☐

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here:

i.e., This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

Evaluator:

 **Provide the operator with the STUDENT COPY of this information and ATTACHMENT 1: AR information Sheets 1, 2 and 3.**

INITIAL CONDITIONS:

- Today is 11/18/2002 at approximately 1700.
- The plant was operating at 1000 MWT with the C Main Steam line isolated due the "C" outboard MSIV failing to close within its T.S. required time limits.
- The "C" outboard MSIV has been closed and de-activated per T.S. and ACP 1410.7
- The only LCO in effect at the time was for the C Outboard MSIV (CV-4419), 3.6.1.3. Condition A.
- The surveillance began at 1620. During this surveillance, while Turbine SV-2 was being closed, the "A" and "B" steam line flows increased dramatically and a Group 1 isolation occurred at 1630.
- The cause of the flow problem is under investigation.
- All control rods inserted on the resulting scram.
- RPV water level dropped below 170 inches and was recovered with the Condensate and Feed system.
- HPCI and RCIC were manually started in CST-CST mode for pressure control. Neither system injected into the RPV.
- Plant management decided not to declare an EAL per EPIP 1.1.

- A preliminary review of this event questions the ability of the equalizing header to redistribute flow to the available turbine valves during testing. There is NO evidence of a steam leak in the Turbine building.
- The plant is now stable at normal RPV level and 900-950 psig.
- This event occurred 30 minutes ago.

INITIATING CUES (IF APPLICABLE):

As the OSM determine the reportability of this event by completing the "Event Review" Section of the Action Request provided. **(Attachment 1 sheet 3.)**

Also state the requirements for:

- Reporting Time limits
- Who should be notified

STUDENT COPY

INITIAL CONDITIONS:

- Today is 11/18/2002 at approximately 1700.
- The plant was operating at 1000 MWT with the C Main Steam line isolated due the "C" outboard MSIV failing to close within its T.S. required time limits.
- The "C" outboard MSIV has been closed and de-activated per T.S. and ACP 1410.7
- The only LCO in effect at the time was for the C Outboard MSIV (CV-4419), 3.6.1.3. Condition A.
- The surveillance began at 1620. During this surveillance, while Turbine SV-2 was being closed, the "A" and "B" steam line flows increased dramatically and a Group 1 isolation occurred at 1630.
- The cause of the flow problem is under investigation.
- All control rods inserted on the resulting scram.
- RPV water level dropped below 170 inches and was recovered with the Condensate and Feed system.
- HPCI and RCIC were manually started in CST-CST mode for pressure control. Neither system injected into the RPV.
- Plant management decided not to declare an EAL per EPIP 1.1.
- A preliminary review of this event questions the ability of the equalizing header to redistribute flow to the available turbine valves during testing. There is NO evidence of a steam leak in the Turbine building.
- The plant is now stable at normal RPV level and 900-950 psig.
- This event occurred 30 minutes ago.

INITIATING CUES:

As the OSM determine the reportability of this event by completing the "Event Review" Section of the Action Request provided. (**Attachment 1 sheet 3.**)
(Note: This will normally be done on computer but manually fill out the form for the purposes of this exam)

Also state the requirements for:

- Reporting Time limits
- Who should be notified by title

take header
off all
Student Copies

JPM PERFORMANCE INFORMATION

Required Materials: DAEC Technical Specifications (ITS)
ACP 1402.3, "Plant Regulatory Reporting Activities"
ACP 114.5, "Action Request System"
10CFR50
ACP 101.6, "Fitness for Duty"
NGD 114.5, AR Form 294001-17 (Attachment A of this JPM)
EPIP 1.1

General References: DAEC Technical Specifications (ITS)
ACP 1402.3, Rev. 16
ACP 114.5, Rev. 22
10CFR50
ACP 101.6, Rev. 05
EPIP 1.1, Rev. 18

Task Standards:

1. INE checked Yes.
2. RE checked Yes.
3. Four-Hour Report identified.

Start Time: _____

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step:	Determine if this event should be an Immediate Notification Event (INE)
Critical:	Y
Standard:	INE Selected.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	<p>10CFR 50.72(b)(2)(iv)(B) is the correct reference for the 4 hour reportability. It is not necessary for successful completion of this step.</p> <p>10CFR 50.72(b)(3)(iv)(A) is the correct reference for the 8 hour reportability. It is not necessary for successful completion of this step.</p> <p>This is a <u>VALID</u> ESF actuation per ACP 1402.3, Section 2.0 and Section 3.2.1. and a valid RPS actuation.</p> <p>Per ACP 1402.3 Section 2.0, an INE is any incident that requires a 1, 4, 24 ENS telephone notification to the NRC.</p>

Performance Step:	Determine if this event should be a Reportable Event. (RE)
Critical:	Y
Standard:	RE Selected.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	<p>10CFR 50.73(a)(2)(iv)(A) is the correct reference. It is not necessary for successful completion of this step.</p> <p>Per ACP 1402.3 Attachment 2, Page 1 of 6.</p>

Performance Step:	Determine if this event should be reported as an Emergency Class Event.
Critical: N	
Standard:	EAL either selected or not selected. (Probably not selected)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	There is no EPIP classification for this event. If the OSM/OSS declares an Unusual Event HU5 based on his own judgment, then the answer can be Yes.

Performance Step:	Determine if this event resulted in a Limiting Condition for Operation (LCO).
Critical: N	
Standard:	LCO not selected.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Performance Step:	Determine if this event resulted in a Technical Specification Violation.
Critical: N	
Standard:	TSV either selected or not selected. (Probably not selected)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	A possible reference to T.S. 5.4.1 could be made but more information would probably be required.

Performance Step:	Determine if the requirements of ACP 101.6 "Fitness for Duty" is applicable to this event.
Critical: N	
Standard:	FFD either selected or not selected. (Probably not selected)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	This is a judgment call on the part of the OSM/OSS per ACP 101.6, Section 3.1.11.

Performance Step:	Determine the requirements for time of notification.
Critical: Y	
Standard:	Four Hour Report identified.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	Per ACP 1402.3 Attachment 3, Page 5 of 9. There is also an 8-hour ESF actuation report but it is not the most limiting and not a critical step.

Performance Step:	Notify designated plant management personnel as soon as time/resources permit.
Critical: N	
Standard:	The required personnel are notified: <ul style="list-style-type: none"> • Operations Manager • Manager, Licensing • Plant Manager • Site Vice President • NRC Resident Inspector • NRC Telephone via FTS-2000
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Terminating Cues: Applicable portions of the AR Event Review is complete.

Stop Time: _____

TURNOVER SHEET

INITIAL CONDITIONS:

- Today is 11/18/2002 at approximately 1700.
- The plant was operating at 1000 MWT with the C Main Steam line isolated due the "C" outboard MSIV failing to close within its T.S. required time limits.
- The "C" outboard MSIV has been closed and de-activated per T.S. and ACP 1410.7
- The only LCO in effect at the time was for the C Outboard MSIV (CV-4419), 3.6.1.3. Condition A.
- The surveillance began at 1620. During this surveillance, while Turbine SV-2 was being closed, the "A" and "B" steam line flows increased dramatically and a Group 1 isolation occurred at 1630.
- The cause of the flow problem is under investigation.
- All control rods inserted on the resulting scram.
- RPV water level dropped below 170 inches and was recovered with the Condensate and Feed system.
- HPCI and RCIC were manually started in CST-CST mode for pressure control. Neither system injected into the RPV.
- Plant management decided not to declare an EAL per EPIP 1.1.
- A preliminary review of this event questions the ability of the equalizing header to redistribute flow to the available turbine valves during testing. There is NO evidence of a steam leak in the Turbine building.
- The plant is now stable at normal RPV level and 900-950 psig.
- This event occurred 30 minutes ago.

INITIATING CUES (IF APPLICABLE):

As the OSM determine the reportability of this event by completing the "Event Review" Section of the Action Request provided. (**Attachment 1 sheet 3.**)

Also state the requirements for:

- Reporting Time limits
- Who should be notified by title

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All questions/statements must be answered "YES" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation shall sign and date this form.


Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

ATTACHMENT 1
AR Information Sheet 1 of 3

27123 - Action Request Information					
Initiation	Initiation (Cont.)	Event Review	Assignment History	Resolution/Approval	
<div>AR # 27123 Parent AR 0</div>					
Initiator: (Required) ED HARRISON	Department: OPERATIONS	Group: NONE	<input checked="" type="radio"/> CAQ <input type="radio"/> CA <input type="radio"/> CNAQ		
Initiated Date: 11/18/2002	Status: Open	Significance Level: 3			
Topic: Group 1 Isolation during turbine testing					
Full Description: (Required) While operating with "C" Main Steam Line isolated, Turbine Stop Valve Testing was attempted. When #2 Stop Valve was tested, A and B Main Steam Line flow increased to the isolation setpoint. A Group 1 isolation and Reactor scram occurred at 1630 this date.					
Immediate Actions Taken: (Required) IPOI 5 completed. Commenced Cool down per IPOI 4.					
Keywords: GROUP 1 REACTOR SCRAM					
Assigned Person:		Assigned Department:		Due/Closed Date:	

ATTACHMENT 1
AR Information Sheet 2 of 3

27123 - Action Request Information							_ [] X
Initiation	Initiation (Cont.)	Event Review	Assignment History	Resolution/Approval			
Comments: <div style="border: 1px solid black; height: 100px; width: 100%;"></div>							
Associated Work Orders <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	Associated Documents <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	AR Types ▶ CAQ ▼		Change Requests <div style="border: 1px solid black; height: 100px; width: 100%;"></div>			
Associated Equipment							
ID	Name	SUS	QL	ISI	IST	EQ	
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>							
Electronic Attachments		<div style="border: 1px solid black; padding: 5px;">+ Add Attachment - Delete Attachment</div>					
<div style="border: 1px solid black; height: 80px; width: 100%;"></div>							

ATTACHMENT 1
AR Information Sheet 3 of 3

27123 - Action Request Information _ □ ×																																							
Initiation	Initiation (Cont.)	Event Review	Assignment History																																				
Resolution/Approval																																							
<div style="display: flex; justify-content: space-between; align-items: flex-start;"><div><input type="checkbox"/> Daily Review Complete <input type="checkbox"/> Operability Review Required <input type="checkbox"/> Review on hold for Operations</div><div style="display: flex; justify-content: space-between; width: 100%;"><div>Mode RUN ▼</div><div>MWTH 1000</div><div>Current LCOs 3.6.1.3 A Outboard MSIV inoperable</div></div></div>																																							
<div style="display: flex; flex-wrap: wrap;"><div style="width: 33%;"><input type="checkbox"/> INE </div><div style="width: 33%;"><input type="checkbox"/> RE </div><div style="width: 33%;"><input type="checkbox"/> EAL </div><div style="width: 33%;"><input type="checkbox"/> LCO </div><div style="width: 33%;"><input type="checkbox"/> TSV </div><div style="width: 33%;"><input type="checkbox"/> FFD </div><div style="width: 33%;"><input type="checkbox"/> MR R/Y </div><div style="width: 33%;"><input type="checkbox"/> Part 21 </div></div>																																							
<div>Immediate Actions</div> <div style="border: 1px solid black; height: 60px; margin-top: 5px;"></div>																																							
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;">Title</th><th style="width: 25%;">Person Contacted</th><th style="width: 25%;">Date/Time</th><th style="width: 25%;">Comments</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>				Title	Person Contacted	Date/Time	Comments																																
Title	Person Contacted	Date/Time	Comments																																				
<div style="display: flex; justify-content: space-between; align-items: flex-start;"><div>OSS/AR Admin: ▼</div><div>Date/Time: </div><div style="text-align: right;">Operability Review Attachment Add Attachment</div></div> <div style="border: 1px solid black; height: 40px; margin-top: 5px; width: 100%;"></div>																																							

SRO A.1.b



JOB PERFORMANCE MEASURE (JPM)

SITE: DAEC

TASK TITLE: CORE ALTERATION-DETERMINE ACTIONS FOR A MISPLACED FUEL ASSEMBLY DURING A CORE RE-LOAD

JPM NUMBER: 2.2.27-01 REV. 0

RELATED PRA INFORMATION:

TASK NUMBERS: SRO 1.04

K/A NUMBERS: GENERIC 2.2.27 (2.6/3.5)

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☐ Perform: ☒EVALUATION LOCATION: In-Plant: ☐ Control Room: ☐Simulator: ☒ Other: ☐

Time for Completion: 40 Minutes

Time Critical: NO

Alternate Path / Faulted: NO

TASK APPLICABILITY:

Developed by:	<i>[Signature]</i>	9/16/02
	Instructor	Date
Validated by:	<i>[Signature]</i>	9/16/02
	Validation Instructor	Date
	(See JPM Validation Checklist Attachment 1)	
Approved by:	<i>[Signature]</i>	9/17/02
	Training Supervisor-Operations	Date

JPM 2.2.27-01, Core Alterations-Determine Actions
for a Misplaced Fuel Assembly
During a Core Re-load, Rev. 0

JPM Number: 2.2.27-01

JPM Title: CORE ALTERATION-DETERMINE ACTIONS FOR A MISPLACED FUEL
ASSEMBLY DURING A CORE RE-LOAD

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT: ☐

UNSAT: ☐

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

JPM 2.2.27-01, Core Alterations-Determine Actions
for a Misplaced Fuel Assembly
During a Core Re-load, Rev. 0

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here:

i.e., This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

Evaluator: Give the candidate the following:



ATTACHMENT 1: RF-016 Fuel Moving Plan



Spent Fuel Pool map



Core map

INITIAL CONDITIONS:

- It is 12:10 hours
- The plant is in a re-fueling outage and a core off-load/shuffle has just begun.
- The CORE ALTERATIONS PREREQUIST CHECKLIST ATTACHMENT 1 has been completed satisfactorily.
- You have just received a turnover and are the SRO in charge of the refueling activities on the refuel floor.
- You are currently on step 14 of the Fuel Moving Plan.
- The first 13 steps were moves from the Core to the Spent Fuel Pool.
- Fuel Assembly YJ9902, in the Core at coordinates 13-10 has been verified and grappled, and being pulled from the core.

INITIATING CUES (IF APPLICABLE):

- Given the Fuel Moving Plan, the Spent Fuel Pool and Core map, walk the evaluator through the next Five (5) fuel moving steps.

JPM 2.2.27-01, Core Alterations-Determine Actions
for a Misplaced Fuel Assembly
During a Core Re-load, Rev. 0

JPM PERFORMANCE INFORMATION

Required Materials: RFP 403

General References: RFP 403, Rev. 6

Task Standards:

1. When the error is discovered, Stop Core Alterations
2. Identify the step when the error occurred.
3. Review and does not approve the Correction Fuel Moving plan.

Start Time: _____

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

JPM 2.2.27-01, Core Alterations-Determine Actions
for a Misplaced Fuel Assembly
During a Core Re-load, Rev. 0

Performance Step:

Critical: Y

SRO will review the fuel-moving plan and determine that there is a Fuel Assembly in the position where the currently grappled bundle is going. (17-04). He will then perform the following:

- **Stop** core alterations, (fuel move)
- Direct that the current bundle be set back in its previous position. (13-10).
- Notify the SM in the control room

Standard:

- **Stop** core alterations, (fuel move)
- Direct that the current bundle be set back in its previous position. (13-10). *He may ask for the REs concurrence. (Due to the situation the below prompt may be given to remind the Candidate that 13-10 is being moved. If prompted and he gives the correct response, the **task is SAT.**)*
- Notify the SM in the control room

Performance:

SATISFACTORY _____ **UNSATISFACTORY** _____

Comments:

If the SRO does not mention the Fuel Assembly that is currently grappled: As the SM, ask the SRO what he intends to do with the grappled Fuel Assembly?

Response: Fuel Assembly should go back where it originally came from

Evaluator

In this space write the response given by the SRO if it is different than the Standard.

If the SRO does not identify why he is taking actions:

Role-Play as the RE and ask why we are stopping the fuel move. When he indicates an error has been made ask him to show you the error so he can prepare a corrected Fuel Moving plan.

JPM 2.2.27-01, Core Alterations-Determine Actions
for a Misplaced Fuel Assembly
During a Core Re-load, Rev. 0

Performance Step:	SRO will review the Fuel Moving Plan and determine that in step 4, Fuel Assembly 17-14 was taken, and it should have been 17-04.
Critical: Y	
Standard:	Identify the error occurred in step #4
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	<p>Cue: When the error has been located, inform the SRO that the RE has developed a Fuel Moving Plan that will correct the error. Ask the SRO to review the new Fuel Moving Plan.</p> <p>CUE: Provide the candidate with <u>ATTACHMENT 2: Fuel Moving Plan</u> correction sheet.</p>

Performance Step:	SRO will review the new plan, and determine an error in the plan. The fuel assembly that will be taken back will have the wrong SFP coordinates on it
Critical: Y	
Standard:	Error in the correction plan discovered (SFP Coordinate 04-12-00 should be 03-12-00)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	<p>While the Candidate is reviewing the corrected fuel plan, if he asks if YJ4501 is the correct number on the wrong assembly, inform him that the number has been verified to be correct.</p> <p>After the SRO reviews the new plan:</p> <ul style="list-style-type: none"> • If he finds the error, inform him that the RE will correct the error and return with another copy of the plan then terminate the JPM.

Terminating Cues: Terminate the scenario when RE leaves to correct the error in the new plan.

Stop Time: _____

JPM 2.2.27-01, Core Alterations-Determine Actions
for a Misplaced Fuel Assembly
During a Core Re-load, Rev. 0

TURNOVER SHEET

- **ATTACHMENT 1: RF-016 Fuel Moving Plan**
- Spent Fuel Pool
- Core map

INITIAL CONDITIONS:

- It is 12:10 hours
- The plant is in a re-fueling outage and a core off-load/shuffle has just begun.
- The CORE ALTERATIONS PREREQUIST CHECKLIST ATTACHMENT 1 completed satisfactorily.
- You have just received a turnover and are the SRO in charge of the refueling activities on the refuel floor.
- You are currently on step 14 of the Fuel Moving Plan.
- The first 13 steps were moves from the Core to the Spent Fuel Pool.
- Fuel Assembly YJ9902, in the Core at coordinates 13-10 has been verified and grappled, and being pulled from the core.

INITIATING CUES (IF APPLICABLE):

- Given the Fuel Moving Plan, the Spent Fuel Pool and Core map, walk the evaluator through the next five (5) fuel moving steps.

JPM 2.2.27-01, Core Alterations-Determine Actions
for a Misplaced Fuel Assembly
During a Core Re-load, Rev. 0

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All questions/statements must be answered "YES" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation shall sign and date this form.

J.R. Pullen 9/14/02
Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

ATTACHMENT 1

Page 1		Of		38													
RF-016 Fuel Moving Plan																	
Plan Number		98003															
Step Num.	Serial Number	Comp type	ICA	Move from Coord	Orient	ICA	Move to Coord	Orient	Blade Guide Orient	Cont Rod W/I	Date Of Xfer	Time of Xfer	Z-pos	RPE	SRO	Assemb Chan	Assemb Dechan
1	YJF372	FA	COR	29-08	SW	SFP	03-13-02	ANY	N/A	I	Today	0950	140.2	7	SRG		
2	YJ9865	FA	COR	23-10	NE	SFP	05-15-02	NE	N/A	I	Today	1000	140.3	7	SRG		
3	YJ9839	FA	COR	21-24	SW	SFP	05-15-07	NE	N/A	I	Today	1010	140.1	7	SRG		
4	YJ5405	FA	COR	17-04	SW	SFP	03-12-00	ANY	N/A	I	Today	1020	140.2	7	SRG		
5	YJ5374	FA	COR	15-34	NE	SFP	03-12-01	ANY	N/A	I	Today	1030	140.3	7	SRG		
6	YJ5462	FA	COR	05-28	SW	SFP	03-12-02	ANY	N/A	I	Today	1040	140.1	7	SRG		
7	YJ5434	FA	COR	05-32	SW	SFP	03-12-03	ANY	N/A	I	Today	1050	140.2	7	SRG		
8	YJ5469	FA	COR	17-06	SE	SFP	03-12-04	ANY	N/A	I	Today	1105	140.3	7	SRG		
9	YJ5441	FA	COR	13-06	SE	SFP	03-12-05	ANY	N/A	I	Today	1115	140.1	7	SRG		
10	YJ5377	FA	COR	15-12	NW	SFP	03-12-06	ANY	N/A	I	Today	1130	140.2	7	SRG		
11	YJ5428	FA	COR	31-22	NE	SFP	03-12-07	ANY	N/A	I	Today	1140	140.3	7	SRG		
12	YJ5373	FA	COR	11-16	NW	SFP	03-13-00	ANY	N/A	I	Today	1150	140.1	7	SRG		
13	YJ5437	FA	COR	05-14	SE	SFP	03-13-01	ANY	N/A	I	Today	1200	140.2	7	SRG		

NOTE: BEGINNING IN-CORE MOVES

14	YJ9902	FA	COR	13-10	SE	COR	17-04	SW	N/A	I							
15	YJF273	FA	COR	11-28	NW	COR	15-34	NE	N/A	I							
16	YJL501	FA	SFP	04-20-05	SW	COR	11-28	NW	N/A	I							
17	YJF344	FA	COR	09-30	SE	COR	05-28	SW	N/A	I							
18	YJL437	FA	SFP	04-17-00	SW	COR	09-30	SE	N/A	I							
19	YJ9807	FA	COR	09-28	SW	COR	05-32	SW	N/A	I							

COMMENTS

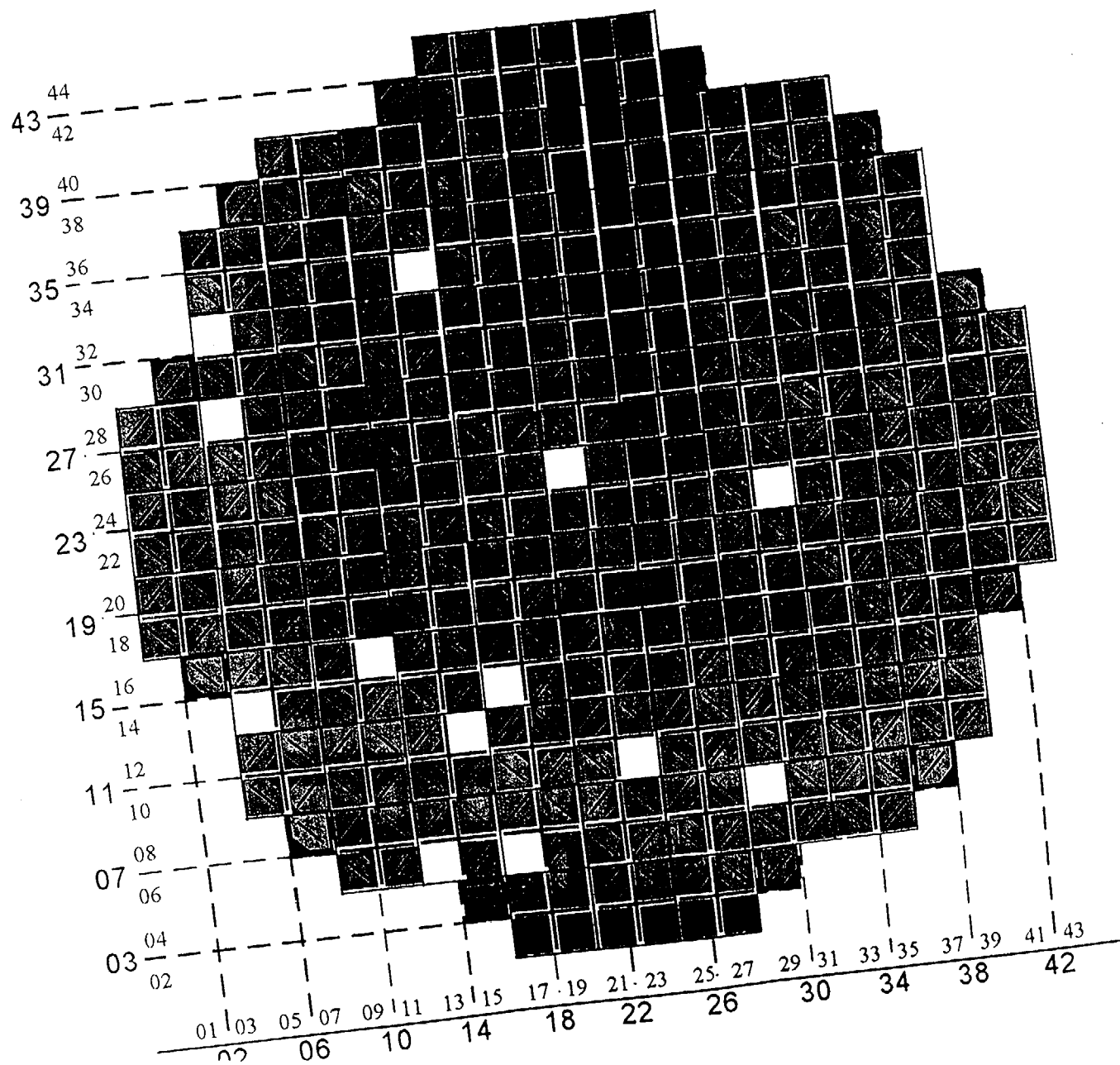
ATTACHMENT 2

Page 1a		Of		38		Fuel Moving Plan correction sheet											
Plan Number		9800 3a															
Step Num.	Serial Number	Com p type	ICA	Move from Coord	Orient	ICA	Move to Coord	Orient	Blade Guide Orient	Cont Rod W/I	Date Of Xfer	Time of Xfer	Z- pos	RPE	SRO	Assem b Cha n	Assemb Dechan
13a	YJ5401	FA	SFP	04-12-00	SW	COR	17-14	SE	N/A	I							
13b	YJ5405	FA	COR	17-04	SW	SFP	03-12-00	ANY	N/A	I							

COMMENTS

The serial number of the incorrectly moved Fuel Assembly was YJ5401. This bundle has been verified at Position 03-12-00 in the Spent Fuel Pool. This is where the correction Fuel Moving Plan will begin. It will end when the Fuel Assembly at 17-04 is placed in the Spent Fuel Pool in position 03-12-00. Then this plan will be exited and the original plan will be continued at step 14.

APPROVED:



Spent Fuel Pool Map

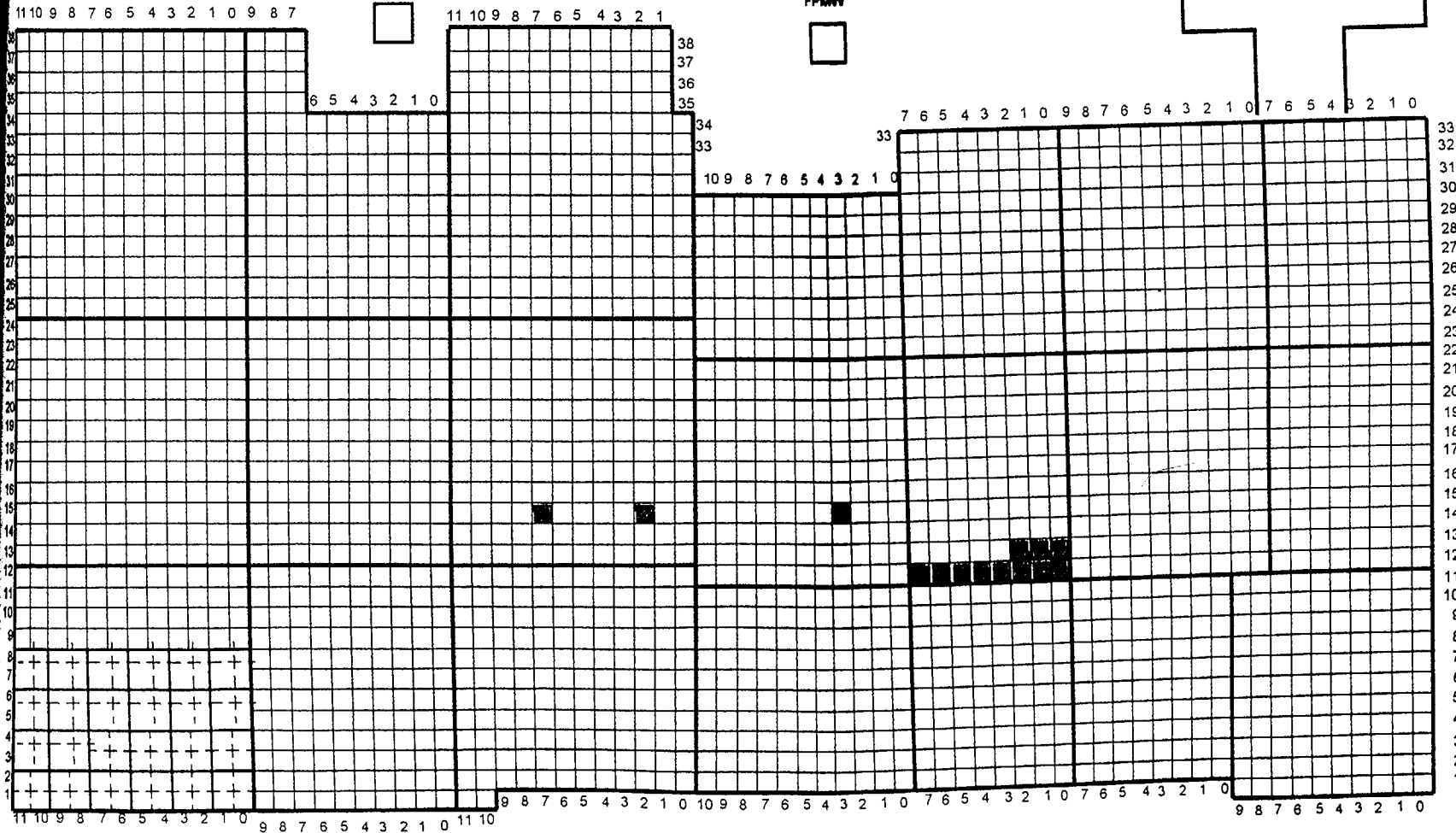
Locations within the spent fuel pool are referred to by the following scheme: section number-row-column. For example, the location reference for the shaded box shown on the map below would be 04-15-03.



CASK POOL

FPME

FPMM



SRO A.4



JOB PERFORMANCE MEASURE (JPM)

SITE: DAEC

TASK TITLE: Dispatch An Operator Into The Plant When The TSC/OSC Are Not Activated

JPM NUMBER: 2.4.38-02

REV. 3

RELATED PRA
INFORMATION:

TASK NUMBERS: SRO 3.01

K/A NUMBERS: 2.4.38 SRO 4.0

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☒ Perform: ☐EVALUATION LOCATION: In-Plant: ☐ Control Room: ☒Simulator: ☒ Other: ☐

Time for Completion: 20 Minutes


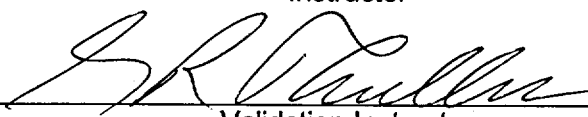
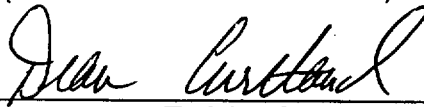
Time Critical: N

Alternate Path /
Faulted:

N

TASK APPLICABILITY: SRO

Additional signatures may be added as needed.

Developed by:		9/16/02
	Instructor	Date
Validated by:		9/16/02
	Validation Instructor	Date
	(See JPM Validation Checklist, Attachment 1)	
Approved by:		9/17/02
	Training Supervisor	Date

JPM 2.4.38-02, Dispatch an operator into the plant when the TSC/OSC are not activated., Rev. 3

JPM Number: 2.4.38-02

JPM Title: Dispatch an operator into the plant when the TSC/OSC are not activated.

Examinee: _____

Evaluator: _____

Job Title: _____

Date: _____

Start Time _____

Finish Time _____

PERFORMANCE RESULTS:

SAT: ☐

UNSAT: ☐

COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here:

i.e., This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.



EVALUATOR: Provide Candidate with **ATTACHMENT A: DOSE PROJECTION & ARM DATA SHEET**



EVALUATOR: Provide Candidate with **SEP 305 ATTACHMENT 1 marked up to step 7(c).**

INITIAL CONDITIONS:

- You are on weekend duty as the Shift Manager.
- An Alert emergency FA-1 has been declared due to a Loss of Coolant accident.
- The Evacuation alarm has been sounded and a Plant Assembly has been initiated.
- RPV level is being maintained at approximately 20 inches with both Core Spray pumps, aligned to the CSTs, and the A Loop of RHR in the LPCI mode.
- There is no indication of fuel damage at this time, but radiation levels are rising in the Reactor Building. Refuel Floor ARM readings have doubled and some readings on the Reactor Bldg. 3rd floor have risen by a factor of 10. At present, there are no EOP-3 entry conditions. Operators are continuing to monitor in-plant and effluent radiation levels. **See Attachment A of this JPM.**

JPM 2.4.38-02, Dispatch an operator into the plant when the TSC/OSC are not activated., Rev. 3

- There are indications of RHR suction strainer blockage on the B Loop of RHR. Operators are performing "ECCS Suction Strainer Blockage" SEP 305 Attachment 1. The Radwaste operator confirmed that V-19-9 was closed. Operators have completed up to Step 7(c) and are prepared to back flush around the D RHR pump as soon as an operator can be dispatched.
- The TSC and OSC are not yet operational.
- I will role-play the operator being dispatched.

INITIATING CUES (IF APPLICABLE):

- Dispatch an operator to back flush around the D RHR pump in this plant condition.

This task is NOT time critical.

Inform the evaluator when you have completed the task.

JPM PERFORMANCE INFORMATION

Required Materials: EPIP 2.5
SEP 305
Provide a copy of Attachment A, In-Plant Radiation Level.
Provide a copy of SEP 305 Attachment 1 marked up to Step 7(c).

General References: EPIP 2.5
SEP 305

Task Standards: 1. Determines that the OSM/OSS has the authority to dispatch operators.
2. Operator briefed on radiological concerns.

Start Time: _____

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Performance Step: Critical Y	(TSC and OSC not operational) If suspected abnormal radiological conditions exist, dispatch of Operations personnel will be at the discretion of the OSM/OSS.
Standard:	Determines that the OSM/OSS has the authority to dispatch operators. (Consider this step completed if the operator is dispatched.)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	Abnormal radiological conditions exist per handout Attachment A and per an SEP 305 Caution.

JPM 2.4.38-02, Dispatch an operator into the plant when the TSC/OSC are not activated., Rev. 3

Performance Step:	Operators should be briefed on associated precautions and pertinent operational information utilizing ATTACHMENT 2, "In-Plant Briefing Form",
Critical N	
Standard:	As part of the briefing, instruct the operator he will be performing SEP 305 "ECCS Suction Strainer Blockage".
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	A brief of how to perform SEP 305 is NOT required but that the task to be performed is SEP 305 should be part of the briefing.

Performance Step:	Emergency Coordinator informed during his Control Room briefing utilizing Form CR-04, 'Control Room to TSC Command and Control Transfer Checklist'.
Critical N	
Standard:	Logs or notes that the operator is being sent to perform SEP 305 on Form CR-04.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	It is not critical to log these on Form CR-04 but it needs to identified some way to provide the information to the oncoming EC.

Performance Step: Critical Y	Operators should be briefed on associated precautions and pertinent operational information utilizing Attachment 2, "In-Plant Operator Briefing Form", to include:
	<ul style="list-style-type: none"> (1) Expected radiological conditions (2) Stay times (3) Access routes (4) Associated precautions (5) Increased exposure limits (6) Estimates of total exposure
Standard:	<p data-bbox="503 588 974 619">Expected radiological conditions</p> <ul style="list-style-type: none"> • e.g.: High Rads in upper elevations of RB • e.g.: Rad levels may change when backflow has been initiated³ • • • • • <p data-bbox="503 913 665 945">Stay times</p> <ul style="list-style-type: none"> • e.g.: Sets a time limit for this operation • e.g.: Exit if/when ED alarms • • • • <p data-bbox="503 1197 714 1228">Access routes</p> <ul style="list-style-type: none"> • e.g.: Enter the RB through Access Control • e.g.: "Don't go out the back door" • e.g.: Return/exit through Access Control • • • • <p data-bbox="503 1522 844 1554">Associated precautions</p> <ul style="list-style-type: none"> • e.g.: Don't go to upper elevations of RB • e.g.: Take a Dose Rate instrument • e.g.: Monitor ED • • • •

(Continued on next page)

JPM 2.4.38-02, Dispatch an operator into the plant when the TSC/OSC are not activated., Rev. 3

(Continued from previous page)

Increased exposure limits

- e.g.: Use an Emergency ED (with higher limits)
- e.g.: Sets an exposure limit

●

●

●

Estimates of total exposure

- e.g.: Determine exposure based on the estimated time required for the job and dose rates in the area.
- An area dose rate of 20 mR/hr would give 1mr per 5 minutes and would be consistent with the expected exposure

●

●

Performance:

SATISFACTORY _____ **UNSATISFACTORY** _____

Comments:

CUE: If asked about area dose rates inform the candidate that the HP has determined that general area rad levels in the area are 20 mR/hr.

Performance Step:

Personnel dispatched should don protective clothing, dosimetry, respiratory equipment as necessary, and obtain a high range survey instrument.

Critical: N

Standard:

Determine dosimeter and high range survey instruments must be used.

Performance:

SATISFACTORY _____ **UNSATISFACTORY** _____

Comments:

OSS may direct the operator to stop at access to get the appropriate equipment or assign an HP to assist in determining the required protective equipment. Sending or assigning the HP to assist satisfies the satisfactory performance of this step.

JPM 2.4.38-02, Dispatch an operator into the plant when the TSC/OSC are not activated., Rev. 3

Performance Step:	Health Physics Technician informed of the operator actions and instruct him to provide assistance as necessary.
Critical: N	
Standard:	HP informed of the operator actions and to provide assistance.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	CUE: Role play as the HP and inform the OSM/OSS that you are standing by at access ready to support the operator. If HP is brought to the Control Room for the briefing to support the task then this step should be marked as satisfactory.

Performance Step:	Personnel closely monitor in-plant and effluent radiation levels (trends/changes).
Critical: N	
Standard:	May verify that someone is monitoring in-plant and effluent radiation levels. (Given in Initiating Cue)
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	If asked someone is still tracking plant radiation readings.

Performance Step:	All personnel dispatched should exit through Access Control.
Critical: N	
Standard:	Direct the operator to enter and exit the plant through access control.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	

Performance Step:	Dispatch the operator into the plant.
Critical: N	
Standard:	Operator dispatched into the plant.
Performance:	SATISFACTORY _____ UNSATISFACTORY _____
Comments:	_____

Terminating Cues:

Stop Time: _____

TURNOVER SHEET

INITIAL CONDITIONS:

- You are on weekend duty as the Shift Manager.
- An Alert emergency FA-1 has been declared due to a Loss of Coolant accident.
- The Evacuation alarm has been sounded and a Plant Assembly has been initiated.
- RPV level is being maintained at approximately 20 inches with both Core Spray pumps, aligned to the CSTs, and the A Loop of RHR in the LPCI mode.
- There is no indication of fuel damage at this time, but radiation levels are rising in the Reactor Building. Refuel Floor ARM readings have doubled and some readings on the Reactor Bldg. 3rd floor have risen by a factor of 10. At present, there are no EOP-3 entry conditions. Operators are continuing to monitor in-plant and effluent radiation levels. **See Attachment A of this JPM.**
- There are indications of RHR suction strainer blockage on the B Loop of RHR. Operators are performing "ECCS Suction Strainer Blockage" SEP 305 Attachment 1. The Radwaste operator confirmed that V-19-9 was closed. Operators have completed up to Step 7(c) and are prepared to back flush around the D RHR pump as soon as an operator can be dispatched.
- The TSC and OSC are not yet operational.
- I will role-play the operator being dispatched.

INITIATING CUES (IF APPLICABLE):

- Dispatch an operator to back flush around the D RHR pump in this plant condition.

This task is NOT time critical.

Inform the evaluator when you have completed the task.

ATTACHMENT 1**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All questions/statements must be answered "YES" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation shall sign and date this form.

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

Validation Personnel /Date

Validation Personnel/Date

DOSE PROJECTION & ARM DATA SHEET

MONITOR #	MONITOR LOCATION	UNITS	ALARM LEVEL	MAX NORM	MAX SAFE	TIME :00	TIME :15	TIME :30	TIME :45
RT-9180	RB 747' WASTE COLL.	mR/hr	250.0			1	1		
RT-9166	RB 716' SW, RW PUMP ROOM	mR/hr	50.0			3	3		
* RT-9178	RB 855' SPENT FUEL STORAGE AREA	mR/hr	19.0	100	1000	3	6		
* RT-9163	REFUEL FLOOR NORTH	mR/hr	10.0	10	100	1.5	3		
* RT-9176	RB 757' TIP	mR/hr	100.0	60	600	5	6		
* RT-9170	CRD REPAIR ROOM	mR/hr	22.0	15	150	3	4		
* RT-9167	RB 757' RR ACCESS	mR/hr	12.0	10	100	1.5	2		
	RT-9162	CONTROL ROOM	mR/hr	3.0		1	1		
* RT-9173	RB 786' RESIN HANDLING	mR/hr	80.0	100	1000	50	60		
* RT-9177	RB 786' CU PH. SEPARATOR	mR/hr	100.0	20	200	10	15		
* RT-9155	RB 812' JUNGLE ROOM, C/U DEMIN AREA	mR/hr	2500.0	60	600	25	25		
* RT-9156	RB 786' RWCU PUMP ROOM	mR/hr	1000.0	1000	10000	22	30		
* RT-9157	RB 786' RWCU HEAT EXCH.	mR/hr	2000.0	1000	10000	30	37		
* RT-9171	RB 812' VENTILATION EQUIP.	mR/hr	2.2	60	600	2	4		
* RT-9153	Rx B 855 NEW FUEL STORAGE AREA	mR/hr	10.0	10	100	2	7		
* RT-9168	RB 757' CRD NORTH	mR/hr	10.0	10	100	3	4		
	RT-9175	RB 833' COND. PH. SEPARATOR TANK	mR/hr	150.0		3	25		
* RT-9169	RB 757' CRD SOUTH	mR/hr	10.0	10	100	1	2		
* RT-9164	REFUEL FLOOR SOUTH	mR/hr	20.0	10	100	1	2		
	RT-9159	TB 734' FEED PUMP AREA	mR/hr	2.3		.3	.3		
	RT-9158	TB 734' COND. PUMP AREA	mR/hr	5.0		.5	.5		
	RT-9160	TB 734' LUBE OIL AREA	mR/hr	10.0		.5	.5		
	RT-9174	TB 734' SUMP AREA	mR/hr	2.5		.4	.4		
	RT-9172	HOT LAB	mR/hr	2.5		.2	.4		
	RT-9179	TB 780' TURBINE FRONT STANDARD	mR/hr	25.0		10	10		
	RT-9161	MACHINE SHOP	mR/hr	5.0		.06	.07		
	RT-9151	RW CONTROL ROOM	mR/hr	2.7		.3	1.0		
	RT-9152	RW 786' RW, SAMPLE TANK CORRIDOR	mR/hr	20.0		.6	2		
	RT-9154	RW 757' RW, DRUMMING AREA	mR/hr	15.0		.5	.6		
	RT-9165	ACCESS CONTROL	mR/hr	2.5		.03	.03		

CR-03

REV.0 01/16/98

ATTACHMENT A

SEP 305
ECCS SUCTION STRAINER BLOCKAGE

ATTACHMENT 1
BACKFLUSHING "B" RHR STRAINER

CAUTION

The instructions provided below should only be performed when directed by the OSS. Operators should take precautions and coordinate Reactor Building entry with Health Physics when possible due to the potential for high radiological conditions in the plant.

(1) Ensure that "A" RHR Loop is pressurized by either of the following: 8

(a) RHR Pumps 1P-229A/C per OI-149. 8

(b) EOP Alternate Injection Systems: 8

<u>System</u>	<u>Procedure</u>
RHRSW	AIP 401
ESW	AIP 402
GSW/WW	AIP 403
Fire Water	AIP 404
Cond SW	AIP 405

(2) Secure RHR Pumps 1P-229B and 1P-229D. 8

(3) At Panel 1C03, verify that the following valves are closed: 8

<u>Valve</u>	<u>Description</u>
MO-1903	OUTBD DRYWELL SPRAY
MO-1904	OUTBD LPCI INJECT
MO-1932	OUTBD TORUS COOLING/SPRAY
MO-1920	D PUMP SHUTDOWN CLG SUCTION
MO-1912	B PUMP SHUTDOWN CLG SUCTION

SEP 305
ECCS SUCTION STRAINER BLOCKAGE

ATTACHMENT 1

BACKFLUSHING "B" RHR STRAINER

- (4) At Panel 1C03, verify that the following valves are open:

8

<u>Valve</u>	<u>Description</u>
MO-1940	B HEAT EXCH BYPASS
MO-1989	TORUS SUCTION

NOTE

V-19-9, RHR DRAIN HEADER TO RW SURGE TANK ISOLATION, is normally closed. The position of V-19-9 may be verified by either of the following methods:

- Locally verify position, V-19-9 is located at Bay 14 in the Torus Room.
- After the flowpath to the suction strainers is established, the Radwaste operator can be contacted to determine if the valve is open by observing Radwaste Surge Tank levels in lieu of physically checking valve position.

- (5) Verify V-19-9, RHR DRAIN HEADER TO RW SURGE TANK ISOLATION, closed.

8

- (6) At Panel 1C03, verify open MO-2010, RHR CROSSTIE, to pressurize the "B" RHR Loop.

8

NOTE

The backflush flowpath can be established around either or both RHR Pumps, 1P-229B or 1P-229D. A backflush flowpath around RHR Pump 1P-229D is preferred because the manual isolation valves are more accessible.

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ECCS SUCTION STRAINER BLOCKAGE

ATTACHMENT 1
BACKFLUSHING "B" RHR STRAINER

CAUTION

Secure backflushing if torus level increases above 16 feet.

- (7) **To backflush around RHR Pump 1P-229D**, proceed as follows: 8
- (a) At Panel 1C03, open MO-1921, D PUMP TORUS SUCTION. 8
- (b) At Panel 1C03, close MO-1913, B PUMP TORUS SUCTION, if backflush around RHR Pump 1P-229B will not be performed. 8
- (c) In the NW Corner Room, open V-19-7, 1P-229D SUCTION HEADER DRAIN TO RADWASTE ISOL. _____
- (d) In the NW Corner Room, throttle open V-19-12, 1P-229D DISCHARGE HDR TO RW SURGE TANK ISOLATION, to start the backflush. _____
- (8) **To backflush around RHR Pump 1P-229B**, proceed as follows: _____
- (a) At Panel 1C03, open MO-1913, B PUMP TORUS SUCTION. _____
- (b) At Panel 1C03, close MO-1921, D PUMP TORUS SUCTION, if backflush around RHR Pump 1P-229D will not be performed. _____
- (c) In the NW Corner Room, open V-19-10, 1P-229B SUCTION HDR TO RW SURGE TANK ISOLATION. _____
- (d) In the NW Corner Room, throttle open V-19-13, 1P-229B DISCHARGE HDR TO RW SURGE TANK ISOLATION, to start the backflush. _____

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ATTACHMENT 1 BACKFLUSHING "B" RHR STRAINER

- (9) Backflush "B" RHR suction strainer for one-two minutes, then close the respective isolations: _____
- (a) If backflushing via RHR Pump 1P-229D, close V-19-7 and V-19-12. _____
- (b) If backflushing via RHR Pump 1P-229B, close V-19-10 and V-19-13. _____
- (10) Coordinate with the OSS to either: _____
- (a) Repeat the backflush per Steps (1) through (9). _____
- (b) Restore the RHR System to the mode of operation specified by the OSS per OI-149. _____