

FINAL AS-ADMINISTERED ADMINISTRATIVE JPMS

FOR THE PALISADES EXAMINATION - DECEMBER 2001

Facility: PALISADES		Date of Examination: DEC 2001
Examination Level : RO		Operating Test Number: 1
Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	CONDUCT OF OPERATIONS	Determine FW Reserve Inventory
		Perform a Heat Balance Calculation Using the PPC
A.2	EQUIPMENT CONTROL	Complete the SHO-1 Surveillance
A.3	RADIATION CONTROL	Two ALARA/Radiation Protection Questions
A.4	EMERGENCY PLAN	Obtain Met. Data for Emerg. Notification Form

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM RO - A.1-1

TITLE: Determine Feedwater Reserve Inventory

CANDIDATE: _____

EXAMINER: _____

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Determine Feedwater Reserve Inventory

Alternate Path: N/A

Facility JPM #: TBAA-01

K/A: E06EA2.1 Importance: SRO: RO: 2.8

K/A Statement: Ability to determine and interpret the following as they apply to the Loss of Feedwater: Facility conditions and selection of appropriate procedures during abnormal and emergency conditions.

Task Standard: Accurate calculation of available feedwater reserve inventory.

Preferred Evaluation Location: Simulator In Plant

Preferred Evaluation Method: Perform Simulate

References: EOP Supplement 2

Validation Time: 15 minutes Time Critical: NO

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT UNSAT

Comments:

Examiner: _____

Signature

Date: _____

READ TO CANDIDATE

DIRECTION TO CANDIDATE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

While the plant was at 100% power a condensate system piping rupture occurred. The reactor was manually tripped and the operators transitioned to EOP 8.0. The following plant conditions exist:

- MCC 6 is out of service for a ground.
- It is 4 hours after shutdown.
- T-81 to T-2 transfer is available, but not in progress.
- Bus 1A and 1B did NOT fast transfer. All other buses are energized and available.
- T-2 is at 80%, T-81 is at 60%, and T-939 is at 68%.
- Tc's are stable at 530°F

INITIATING CUES:

The Shift Supervisor has directed you to complete EOP Supplement 2, PCS Cooldown Strategy. Calculation of minimum cooldown rate is NOT required at this time (Section 6.0)

START TIME: _____

STEP / STANDARD		Grading
<p>Step 1: Enter "T-2 Inventory" curve with Condensate Storage Tank T-2 level and determine available T-2 inventory.</p> <p>Standard: T-2 inventory is listed as 90,000 gallons. (89-91 allowed).</p> <p>Notes: <i>Critical step to accurately determine inventory.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>	
<p>Step 2: Determine other sources that can be taken credit for as a source of available inventory.</p> <p>Standard: T-939 is available.</p> <p>Notes: <i>Critical step to ensure that only available sources are considered.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>	
<p>Step 3: Determine "T-939 Inventory"</p> <p>Standard: T-939 inventory determined to be 190,000 gal. (188-192 allowed.)</p> <p>Notes: <i>Critical step to accurately determine inventory.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>	
<p>Step 4: Add the results of Steps 1 and 2.</p> <p>Standard: Total determined as 280,000 gal. (277-283 allowed.)</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>	

STEP / STANDARD		Grading
<p>Step 5: Determine present highest PCS Loop Tc (Tc initial).</p> <p>Standard: Tc initial is ~530°F.</p> <p>Notes:</p> <p>Comments:</p>	<p>S ___</p> <p>U ___</p>	
<p>Step 6: Enter "Sensible Heat Removal" curve with data from above step and determine inventory required to remove sensible heat.</p> <p>Standard: Inventory required is 41,000 gal. (40-42 allowed).</p> <p>Notes: <i>Critical step to accurately determine required inventory.</i></p> <p>Comments:</p>	<p>S ___</p> <p>U ___</p>	
<p>Step 7: Determine inventory available to remove decay heat.</p> <p>Standard: Inventory available is 239,000 gal. (237-241 allowed).</p> <p>Notes: <i>Critical step to accurately determine inventory required.</i></p> <p>Comments:</p>	<p>S ___</p> <p>U ___</p>	
<p>Step 8: Enter applicable "Decay Heat Removal" curve for number of PCPs operating with elapsed time after shutdown and result of step above to determine Time Interval for heat removal.</p> <p>Standard: Time interval is >32 hrs. (Interpolation not required.)</p> <p>Notes: <i>Critical step to accurately determine time interval.</i></p> <p>Comments:</p>	<p>S ___</p> <p>U ___</p>	

STEP / STANDARD	Grading
<p>Step 9: Notify Shift Supervisor of completion.</p> <p>Standard: Notifies Shift Supervisor that the time interval is > 32 hrs.</p> <p>Notes:</p> <p>Comments:</p> <p style="text-align: center;">END OF TASK</p>	<p>S _____</p> <p>U _____</p>

STOP TIME: _____

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER TO UPON COMPLETION OF TASK)

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

While the plant was at 100% power a condensate system piping rupture occurred. The reactor was manually tripped and the operators transitioned to EOP 8.0. The following plant conditions exist:

- MCC 6 is out of service for a ground.
- It is 4 hours after shutdown.
- T-81 to T-2 transfer is available, but not in progress.
- Bus 1A and 1B did NOT fast transfer. ALL other buses are energized and available.
- T-2 is at 80%, T-81 is at 60%, and T-939 is at 68%.
- Tc's are stable at 530°F

INITIATING CUES:

The Shift Supervisor has directed you to complete EOP Supplement 2, PCS Cooldown Strategy. Calculation of minimum cooldown rate is NOT required at this time (Section 6.0)

SIMULATOR OPERATOR INSTRUCTIONS

No special simulator setup required.

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM SRO/RO - A.1-2

**TITLE: Perform a Heat Balance Calculation
 Using the PPC**

CANDIDATE: _____

EXAMINER: _____

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Perform a Heat Balance Calculation Using the PPC.

Alternate Path: N/A

Facility JPM #: NEW

K/A: 2.1.23 Importance: SRO: 4.0 RO: 3.9

K/A Statement: Ability to perform specific system and integrated plant procedures during all modes of plant operation.

Task Standard: Accurate Heat Balance power is determined for given plant parameters.

Preferred Evaluation Location: Simulator In Plant

Preferred Evaluation Method: Perform Simulate

References: GOP-12, section 6.1.1

Validation Time: 15 minutes Time Critical: NO

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT UNSAT

Comments:

Examiner: _____

Date: _____

Signature

READ TO CANDIDATE

DIRECTION TO CANDIDATE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The plant is at full power and has been at steady state for 11 days. S/G Blowdowns actual values are 19K each.

INITIATING CUES:

A Heat Balance Calculation using the PPC is required to be performed, per GOP-12.

START TIME: _____

STEP / STANDARD		Grading
<p>Step 1: Obtains current procedure.</p> <p>Standard: Candidate obtains GOP-12 and refers to Section 6.1.1.</p> <p>Notes:</p> <p>Comments:</p>		<p>S ____</p> <p>U ____</p>
<p>Step 2: Obtain PPC Page 521.</p> <p>Standard: PPC Page 521 is showing on the PPC screen.</p> <p>Notes: SUBSTEPS:</p> <ol style="list-style-type: none"> 1. SELECT the current display number in upper left corner of display. 2. TYPE in desired display number (521). 3. DEPRESS "UPDATE" key. Observe "Parametering Done" next to entered typing. 4. DEPRESS the right mouse button. Display will change to desired. 		<p>S ____</p> <p>U ____</p>
<p>Step 3: Ensure UFM Correction factors are correct.</p> <p>Standard: Refers to Tech Data Book, Figure 14.1 and determines that UFM Correction factors are correct.</p> <p>Notes: Steps 3 and 4 may be performed in any order.</p> <p>Comments: CUE: UFM Correction Values are as show on PPC.</p>		<p>S ____</p> <p>U ____</p>

<p>Step 4: Update S/G Blowdowns.</p> <p>Standard: Candidate determines that a change to S/G Blowdown flow IS required.</p> <p>Notes: Critical Step</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 5: Select data.</p> <p>Standard: Data key is selected.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 6: Enter new value.</p> <p>Standard: Enters 19000 lbm/hr for each S/G Blowdown flow.</p> <p>Notes:</p> <p>Comments: Critical step to ensure accurate Heat Balance Power is calculated.</p>	<p>S____</p> <p>U____</p>
<p>Step 7: Press UPDATE hardkey.</p> <p>Standard: UPDATE is pressed. S/G Blowdown flow values change to 19000 lbm/hr each.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>

<p>Step 8: Print Heat Balance form.</p> <p>Standard: Depresses PRINTER hardkey and obtains printout from printer.</p> <p>Notes:</p> <p>Comments: Critical Step</p>	<p>S____</p> <p>U____</p>
<p>Step 9: Sign the printout.</p> <p>Standard: Candidate signs anywhere on the printout form.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 10: Request SRO review.</p> <p>Standard: Requests SRO review and signature.</p> <p>Notes: Cue: When requested as the SS, inform candidate that all readings are within 1% of each other, and that NO adjustments are required.</p> <p>Comments:</p> <p style="text-align: center;">END OF TASK</p>	<p>S____</p> <p>U____</p>

STOP TIME: _____

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER TO UPON COMPLETION OF TASK)

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The plant is at full power and has been at steady state for 11 days. S/G Blowdowns actual values are 19K each.

INITIATING CUES:

A Heat Balance Calculation using the PPC is required to be performed, per GOP-12.

SIMULATOR OPERATOR INSTRUCTIONS

1. Reset to IC-19
2. Ensure NI indications on TMMs are all < 100.0 %.
3. Ensure TDB Figure 14.1, Revision 0 is correct. Use attached Figure 14.1 and insert it into the TDB for this JPM.
4. After each candidate has completed this JPM and prior to the next candidate starting, ensure that S/G Blowdowns (as indicated on PPC page 521) are as follows:
 - * **E-50A BLOW FLOW** **20200 lbm / hr**
 - * **E-50B BLOW FLOW** **20000 lbm / hr**

NOTE: Step 4 requirements can be accomplished by resetting the simulator to IC-19 each time.

5. Ensure Tech Data Book 14.1 reflects UFM correction factors.

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM RO - A.2

TITLE: Complete the SHO-1 Surveillance

CANDIDATE: _____

EXAMINER: _____

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Complete the SHO-1 Surveillance

Alternate Path: Candidate will be provided a partially completed Shiftly TechSpec surveillance and told to complete it. During the performance of completing the surveillance, candidate will discover several out-of-spec readings.

Facility JPM #: NEW

K/A: 2.2.12 Importance: SRO: RO: 3.0

K/A Statement: Knowledge of surveillance procedures.

Task Standard: Identification of three out-of-spec readings.

Preferred Evaluation Location: Simulator In Plant

Preferred Evaluation Method: Perform Simulate

References: SHO-1, Shift Surveillance Data Sheet

Validation Time: 25 minutes Time Critical:

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT _____ UNSAT _____

Comments:

Examiner: _____
Signature

Date: _____

EVALUATOR SPECIAL INSTRUCTIONS:

- Provide candidate with a Working Copy of SHO-1, Attachment 1, "Shift Surveillance Data Sheet".
- Ensure a red pen is available

READ TO CANDIDATE

DIRECTION TO CANDIDATE:

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Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The plant is at 100% power.

INITIATING CUES:

You have been directed to take the readings of SHO-1, Items 1 through and including 13 on pages 1,2,3, and 4 for 'A' Shift. ALL remaining readings have already been taken by another NCO.

START TIME: _____

STEP / STANDARD	Grading
<p>Step 1: (Item #1) Check the 4 safety channels of NI power within 1% of each other.</p> <p>Standard: Records readings in "Shift A Readings" column.</p> <p>Notes: <i>Surveillance steps may be performed in any order.</i></p> <p>Comments:</p>	
<p>Step 2: (Item #2) Check 4 TMM ΔT Power indications within 1% of each other.</p> <p>Standard: Records readings in "Shift A" column, and initials "Recrd By"</p> <p>Notes:</p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>
<p>Step 3: (Item #3) Check NI / ΔT Comparator meter varying as expected.</p> <p>Standard: Records a ✓ or "OK" , and initials "Recrd By"</p> <p>Notes:</p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>
<p>Step 4: (Item #4) Check Axial Shape Index display OK.</p> <p>Standard: Checks either the "System Status" or "Power Density" screen for OK indication; records a ✓ or "OK" , and initials "Recrd By"</p> <p>Notes:</p>	<p>S ____</p> <p>U ____</p>

<p>Step 5: (Item #5) Check PCS Cold Leg Temperatures <543.5°F.</p> <p>Standard: Checks TMM "System Status" screen Trip Status Box indicating OK; records a ✓ or "OK" , and initials "Recrd By"</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 6: (Item #6) Check Wide Range NIs readings and that they agree within 1 ½ decades.</p> <p>Standard: Records readings in "Shift A Readings" column.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 7: Determine out of tolerance data.</p> <p>Standard: Notes that NI-1/3A is NOT within 1 ½ decades of the other Wide Range NI.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 8: Identifies out of tolerance reading.</p> <p>Standard: Circles in RED NI-1/3A reading, initials "Recrd By" column and notifies Shift Supervisor of out of tolerance reading.</p> <p>Notes: CUE: When notified as SS, direct candidate to continue the surveillance.</p> <p>Comments: Critical Step to identify out of tolerance data on Tech Spec surveillance.</p>	<p>S____</p> <p>U____</p>

<p>Step 9</p> <p>Standard:</p>	<p>Provide explanation in Comments Section, SHO-1, Att. 1, p. 15.</p> <p>Special NOTE: Since no detailed explanation is available , this step is NOT required.</p>	<p>S____</p> <p>U____</p>
<p>Step 10:</p> <p>Standard:</p> <p>Notes:</p> <p>Comments:</p>	<p>(Item #7) Check Quadrant Power Tilt.</p> <p>Checks NI Channels 5,6,7,8 deviation lights NOT lit and no alarms (EK-06C3); records a ✓ or "OK" , and initials "Recrd By"</p>	<p>S____</p> <p>U____</p>
<p>Step 11:</p> <p>Standard:</p> <p>Notes:</p> <p>Comments:</p>	<p>(Item #8) Check Steam Generator pressure indications within 40 psi of each other.</p> <p>Records readings in "Shift A Readings" column.</p>	<p>S____</p> <p>U____</p>
<p>Step 12:</p> <p>Standard:</p> <p>Notes:</p> <p>Comments:</p>	<p>Determine out of tolerance data.</p> <p>Notes PIC-0752C indication for "B" S/G is >40 psi out of agreement with the other 3 for "B" S/G.</p>	<p>S____</p> <p>U____</p>

<p>Step 13: Identifies out of tolerance reading.</p> <p>Standard: Circles in RED PIC-0752C reading, initials "Recrd By" column and notifies Shift Supervisor of out of tolerance reading.</p> <p>Notes: CUE: When notified as SS, direct candidate to continue the surveillance.</p> <p>Comments: Critical Step to identify out of tolerance data on Tech Spec surveillance</p>	<p>S ____</p> <p>U ____</p>
<p>Step 14: Provide explanation in Comments Section, SHO-1, Att. 1, p. 15.</p> <p>Standard: Special NOTE: Since no detailed explanation is available , this step is NOT required.</p>	<p>S ____</p> <p>U ____</p>
<p>Step 15: (Item #9) Check Steam Generator levels sigmas within 4% of each other.</p> <p>Standard: Records readings in "Shift A Readings" column.</p> <p>Notes:</p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>
<p>Step 16: (Item #10) Check Primary Coolant Flow indications within 5% of scale agreement.</p> <p>Standard: Records readings in "Shift A Readings" column.</p> <p>Notes:</p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>

<p>Step 17: (Item #11) Check PZR Code Safety Temperatures</p> <p>Standard: Records three readings ranging from approx. 130° to 145°F</p> <p>Notes: <i>These readings are ambient and consistent with plant conditions.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 18: (Item #12) Check PORV temperature.</p> <p>Standard: Checks TIA-0106 for a reading.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 19: Determine out of tolerance data.</p> <p>Standard: Notes TIA-0106 is failed low (reading 0).</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 20: Identifies out of tolerance reading.</p> <p>Standard: Circles in RED TIA-0106; initials "Recrd By" column and notifies Shift Supervisor of out of tolerance reading.</p> <p>Notes: <i>CUE: When notified as SS, direct candidate to continue the surveillance.</i></p> <p>Comments: <i>Critical Step to identify out of tolerance data on Tech Spec surveillance</i></p>	<p>S____</p> <p>U____</p>

<p>Step 21: Provide explanation in Comments Section, SHO-1, Att. 1, p. 15.</p> <p>Standard: Special NOTE: Since no detailed explanation is available , this step is NOT required.</p>	<p>S____</p> <p>U____</p>
<p>Step 22: (Item #13 - FINAL ITEM FOR THIS JPM) Check PZR pressure.</p> <p>Standard: Check 4 channel sigmas within agreement by 40 psi; AND check pressure between 2010 - 2100 psia.</p> <p>Notes: Records readings in "Shift A Readings" column.</p> <p>Comments: END OF TASK</p>	<p>S____</p> <p>U____</p>

STOP TIME: _____

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER TO UPON COMPLETION OF TASK)

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The plant is at 100% power.

INITIATING CUES:

You have been directed to take the readings of SHO-1, Items 1 through and including 13 on pages 1,2,3, and 4 for 'A' Shift. ALL remaining readings have already been taken by another NCO.

SIMULATOR OPERATOR INSTRUCTIONS

1. Reset to any full power IC.
2. OVERRIDE NI-1/3A Wide Range Log Meter indication to failed low (NI-3 - PWR-1 @ 0.75)
3. OVERRIDE PIC-0752C to indicate ~860# (Value = 0.71)
4. TIA-0106 fail low (discharge temp for PORVs) (Value = 0.0)
5. Ensure a RED PEN is available to candidate.

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM SRO/RO - A.3

TITLE: Radiation Control (Questions)

CANDIDATE: _____

EXAMINER: _____

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Knowledge of Radiation Protection (405 003 01 01)

Alternate Path: N/A

Facility JPM #: NEW

K/A: 2.3.4 / 2.3.1 Importance: SRO: RO: 2.5 / 2.6

K/A Statement: Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized.

Knowledge of 10CFR: 20 and related facility radiation control requirements.

Task Standard: Correctly respond to administrative questions.

Preferred Evaluation Location: Simulator _____ In Plant _____

Preferred Evaluation Method: Perform ___N/A___ Simulate _____

References: Admin Proc 7.13 and 7.15

Validation Time: __10__ minutes Time Critical: NO

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT _____ UNSAT _____

Comments:

Examiner: _____ Date: _____

Signature

JPM QUESTION #1

REFERENCE ALLOWED: $\frac{\underline{X}}{\text{YES}} / \frac{\underline{\quad}}{\text{NO}}$

Question: During an outage in December, a Consumers Energy employee is required to perform a job in an area that has a general area radiation dose rate of 40 mR/Hr.

The worker's current Total Effective Dose Equivalent (TEDE) exposure for the year is 980 mRem.

WITHOUT requiring an annual dose review, may this worker complete the work if it is expected to take 16 hours to complete?

Why, or why not?

Answer: NO, because Annual Dose Review level is 1500 mRem. Worker currently has 980 mRem TEDE as an annual exposure. He is permitted to receive an additional 520 mRem before reaching 1500 mRem. $520/40 = 13$ hrs.

CANDIDATE'S RESPONSE

Time: 5 minutes

JPM QUESTION #2

REFERENCE ALLOWED: $\frac{\underline{X}}{\text{YES}}$ / $\frac{\underline{\quad}}{\text{NO}}$

Question: A small fire has been discovered in the Radwaste Panel C-40 area. As a member of the Fire Brigade, what is the **MINIMUM** dosimetry required for you to wear to access the area under these conditions?

Answer: Per Admin Proc 7.13, Section 8.4.1, the minimum required is a Primary TLD.

CANDIDATE'S RESPONSE

Time: 5 minutes

JPM QUESTION #1

CANDIDATE COPY

REFERENCE ALLOWED: $\frac{\text{X}}{\text{YES}}$ / $\frac{\quad}{\text{NO}}$

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: During an outage in December, a Consumers Energy employee is required to perform a job in an area that has a general area radiation dose rate of 40 mR/Hr.

The worker's current Total Effective Dose Equivalent (TEDE) exposure for the year is 980 mRem.

WITHOUT requiring an annual dose review, may this worker complete the work if it is expected to take 16 hours to complete?

Why, or why not?

JPM QUESTION #2

CANDIDATE COPY

REFERENCE ALLOWED:

$\frac{\text{X}}{\text{YES}}$ / $\frac{\quad}{\text{NO}}$

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: A small fire has been discovered in the Radwaste Panel C-40 area. As a member of the Fire Brigade, what is the **MINIMUM** dosimetry required for you to wear to access the area under these conditions?

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM RO - A.4

**TITLE: Obtain Meteorological Data for
Emergency Notification Form**

CANDIDATE: _____

EXAMINER: _____

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Obtain Meteorological Data for Emergency Notification Form

Alternate Path: N/A

Facility JPM #: JPM RO-A.4/2000NRC

K/A: 2.4.39 Importance: SRO: RO: 3.3

K/A Statement: Knowledge of the RO's responsibilities in emergency plan implementation.

Task Standard: EI-3.0, Attachment 1, Section 6, Items A, B, and C are completed.

Preferred Evaluation Location: Simulator In Plant

Preferred Evaluation Method: Perform Simulate

References: EI-3.0, Communications and Notifications
EI-6.0, Offsite Dose Calculation and Recommendations for Protective Actions

Validation Time: 5 minutes Time Critical: NO

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT UNSAT

Comments:

Examiner: _____
Signature

Date: _____

READ TO CANDIDATE

DIRECTION TO CANDIDATE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The Shift Supervisor, acting as the Site Emergency Director, has declared an Alert condition. A thunderstorm is in progress

INITIATING CUES:

The Shift Supervisor has directed you to obtain Meteorological Data by completing Attachment 1 of EI-6.7.

START TIME: _____

STEP / STANDARD		Grading
<p>Step 1: Obtains current copy of attachment.</p> <p>Standard: Obtains copy of EI-6.7, Attachment 1, Plant Site Met. System Worksheet</p> <p>Notes: <i>Evaluator provides candidate with a Working Copy.</i></p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>	
<p>Step 2: Locates PPC display containing Meteorological Data.</p> <p>Standard: Goes to PPC Page 351 to obtain data.</p> <p>Notes:</p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>	
<p>Step 3: Notes MWS10 invalid and uses MWS60 X 0.77</p> <p>Standard: Records Wind Speed as 10 mph (or current correct value) and checks 60 meters box.</p> <p>Notes: <i>Critical step to enter proper wind speed.</i></p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>	
<p>Step 4: Notes MWD10 invalid and uses MWD60.</p> <p>Standard: Records Wind as from 330°, and checks 60 meters box.</p> <p>Notes: <i>Critical step to enter proper wind direction.</i></p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>	

STEP / STANDARD		Grading
<p>Step 5: Records proper Stability Class.</p> <p>Standard: Records Stability Class as Class D (or current, per PPC), and checks "DT ().</p> <p>Notes: <i>Checking of "DT () is not required when PPC is used.</i></p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>	
<p>Step 6: Completes entering data in Attachment 1.</p> <p>Standard: Dates, times, and signs Attachment 1.</p> <p>Notes:</p> <p>Comments:</p> <p style="text-align: center;">END OF TASK</p>	<p>S ____</p> <p>U ____</p>	

STOP TIME: _____

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER TO UPON COMPLETION OF TASK)

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The Shift Supervisor, acting as the Site Emergency Director, has declared an Alert condition. A thunderstorm is in progress.

INITIATING CUES:

The Shift Supervisor has directed you to obtain Meteorological Data by completing Attachment 1 of EI-6.7.

SIMULATOR OPERATOR INSTRUCTIONS

1. Reset to IC-11.
2. MWD10
MWS10

Remove these 2 points from service for this JPM only - then put them back. These MFs will cause a "V" or invalid display from the Met Tower 10 meter height. Candidate will have to use the 60 meter readings and use a conversion factor of 0.77 to obtain appropriate data.

3. Provide a Working Copy of EI-6.7, Att. 1 to evaluator.

Facility: PALISADES		Date of Examination: DEC 2001
Examination Level : SRO		Operating Test Number: 1
Administrative Topic/Subject Description	Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions	
A.1	CONDUCT OF OPERATIONS	Determine a Risk Achievement Worth (RAW)
		Perform a Heat Balance Using the PPC
A.2	EQUIPMENT CONTROL	Perform Administrative Review of a Temporary Mod
A.3	RADIATION CONTROL	Two ALARA/Radiation Protection Questions
A.4	EMERGENCY PLAN	Complete the Emergency Actions/Notifications Form

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM SRO - A.1-1

TITLE: Determine a Risk Achievement Worth (RAW)

CANDIDATE:

EXAMINER:

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Determine a Risk Achievement Worth (RAW)

Alternate Path: N/A

Facility JPM #: NEW

K/A: 2.1.19 Importance: SRO: 3.0 RO: N/A

K/A Statement: Ability to use plant computer to obtain and evaluate parametric information on system or component status.

Task Standard: A Risk Achievement Worth value is achieved for given plant conditions.

Preferred Evaluation Location: Simulator In Plant

Preferred Evaluation Method: Perform Simulate

References: Admin Proc. 4.02, Att. 9; Maintenance Rule Policy

Validation Time: 15 minutes Time Critical: NO

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT UNSAT

Comments:

Examiner: _____
Signature

Date: _____

READ TO CANDIDATE

DIRECTION TO CANDIDATE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

Today is December 19, 2001. Auxiliary Feedwater Pump P-8C is out of service for maintenance. Outside air temperature is 42°F.

Atmospheric conditions are as follows: clear skies.

High Pressure Safety Injection Pump P-66A is to be removed from service for a motor PM.

INITIATING CUES:

The Control Room Supervisor has directed you to calculate a Risk Achievement Worth (RAW) for this maintenance on "LOCAL MODEL" and LOCAL EOOS" computer, using the password "WORK" and user name "WCC". Based on the resulting RAW score, determine if P-66A can be removed from service.

START TIME: _____

STEP / STANDARD		Grading
<p>Step 1: Initiate EOOS Program from computer main screen.</p> <p>Standard: Either clicks on icon for EOOS OR from pull down menu: EOOS Program showing on computer screen.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>	
<p>Step 2: Ensure "Local At-Power Model" and "Local EOOS" selected.</p> <p>Standard: Both items are selected (highlighted).</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>	
<p>Step 3: Select "OK".</p> <p>Standard: Candidate selects "OK".</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>	

<p>Step 4: Ensure User Name is "WCC".</p> <p>Standard: User Name is "WCC".</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
----------------------------------------------------------------------------------------------------------------------	---------------------------

STEP / STANDARD	Grading
<p>Step 5: Type in password, "WORK".</p> <p>Standard: Password "WORK" is typed in cue window.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 6: Select "OK".</p> <p>Standard: "OK" is selected.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 7: Check "Environmental Variances" = "Normal"</p> <p>Standard: "Environmental Variances" noted to be "Normal".</p> <p>Notes: <i>Candidate may not perform since this will already be normal.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>

<p>Step 8: Check "Trains In-Service" = "< 75°F Outside Air"</p> <p>Standard: "Trains In-Service" = "<75°F Outside Air" noted.</p> <p>Notes: <i>Candidate may not perform since this will already be normal.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
STEP / STANDARD	Grading
<p>Step 9: Select GREEN graphic box for P-66A. ----- OR ----- Locate and select "P-66A" from the component list.</p> <p>Standard: P-66A graphic box is selected.</p> <p>Notes: <i>(Either method is acceptable.)</i></p> <p>Comments: <i>Critical step to enter correct component.</i></p>	<p>S____</p> <p>U____</p>
<p>Step 10: Select "OK".</p> <p>Standard: "OK" is selected.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 11: Select calculator graphic icon to calculate the RAW.</p> <p>Standard: RAW calculation is initiated.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>

Step 12: Obtain RAW score.	
Standard: RAW score of 3.68 is determined.	S _____
Notes: (3.65 - 3.75 is acceptable.)	U _____
Comments: <i>Critical step to obtain correct Risk Achievement Worth</i>	

STEP / STANDARD		Grading
Step 13:	Determine if P-66A can be removed from service.	
Standard:	Determines that P-66A can be removed from service, based on RAW score being of Medium risk.	S ____ U ____
Notes:		
Comments:	END OF TASK	

STOP TIME: _____

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER TO UPON COMPLETION OF TASK)

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

Today is December 19, 2001. Auxiliary Feedwater Pump P-8C is out of service for maintenance. Outside air temperature is 42°F.

Atmospheric conditions are as follows: clear skies.

High Pressure Safety Injection Pump P-66A is to be removed from service for a motor PM.

INITIATING CUES:

The Control Room Supervisor has directed you to calculate a Risk Achievement Worth (RAW) for this maintenance on "LOCAL MODEL" and LOCAL EOOS" computer, using the password "WORK" and user name "WCC". Based on the resulting RAW score, determine if P-66A can be removed from service.

SIMULATOR OPERATOR INSTRUCTIONS

1. Ensure P-8C is entered as O.O.S in EOOS.
2. No other special simulator setup required.
3. After each JPM, reset EOOS to a RAW of 1.00 (no equipment OOS).
4. Then, enter P-8C OOS.

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM SRO - A.2

**TITLE: Perform Administrative Review of a
Temporary Modification**

CANDIDATE: _____

EXAMINER: _____

JOB PERFORMANCE MEASURE
DATA PAGE

Task: Perform Administrative Review of a Temporary Modification

Alternate Path: N/A

Facility JPM #: NEW

K/A: 2.2.11 Importance: SRO: 3.4 RO: N/A

K/A Statement: Knowledge of the process for controlling temporary changes.

Task Standard: Temporary Modification is NOT suitable for installation. Candidate should NOT approve the modification for installation.

Preferred Evaluation Location: Simulator In Plant

Preferred Evaluation Method: Perform Simulate

References: Admin Proc 9.31, section 7.2.2
Admin Proc 9.31, Attachment 2, Attachment 4
M-207, sh. 1B

Validation Time: 20 minutes Time Critical:

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT _____ UNSAT _____

Comments:

Examiner: _____
Signature

Date: _____

READ TO CANDIDATE

- * Provide a Working Copy of Admin Proc. 9.31, Attachment 4, p.1 of 1 to candidate.

DIRECTION TO CANDIDATE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The plant is at full power steady state. A problem has developed with seal cooling for Condensate Pump P-2B. It is desired to provide temporary cooling to the seal by using Primary System Makeup Tank T-81 water via the filter F-51B drain valve, MV-PMU507.

INITIATING CUES:

You have been given Admin Proc 9.31, Attachment 2, "Temporary Modification Form 3621", to review in accordance with Section 7.2.1 and determine if you should approve the TM for installation. NO Control Room drawings or procedures require revision.

START TIME: _____

STEP / STANDARD		Grading
<p>Step 1: Obtain current procedure.</p> <p>Standard: Candidate refers to Admin Proc 9.31, 7.2.1.</p> <p>Notes:</p> <p>Comments:</p>	<p>S___</p> <p>U___</p>	
<p>Step 2: Documentation of Administrative Review.</p> <p>Standard: Candidate refers to Admin Proc, Attachment 4.</p> <p>Notes: <i>Provide Working Copy of Attachment 4 to candidate.</i></p> <p>Comments:</p>	<p>S___</p> <p>U___</p>	
<p>Step 3: Perform Administrative Review of the Temporary Mod.</p> <p>Standard: Candidate reviews all items on the provided and filled out Form 3621 and notes the Technical Review has NOT been performed (signature missing).</p> <p>Notes:</p> <p>Comments: <i>Critical Step</i></p>	<p>S___</p> <p>U___</p>	
<p>Step 4: Continue Administrative Review of the Temporary Mod.</p> <p>Standard: Candidate notes that MV-PMU507 position is listed as CLOSED, and that there are NO instructions on opening the valve to initiate cooling flow.</p> <p>Notes:</p> <p>Comments: <i>Critical Step</i></p>	<p>S___</p> <p>U___</p>	

STEP / STANDARD	Grading
<p>Step 5: Complete Admin Proc 9.31, Attachment 4</p> <p>Standard: Candidate determines that this Temporary Modification should NOT be approved for installation, based on incorrect valve lineup and incomplete instructions for MV-PMU507.</p> <p>Notes:</p> <p>Comments: <i>Critical Step to determine that Temp Mod should not be approved.</i></p> <p style="text-align: center;">END OF TASK</p>	<p>S ____</p> <p>U ____</p>

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER TO UPON COMPLETION OF TASK)

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

The plant is at full power steady state. A problem has developed with seal cooling for Condensate Pump P-2B. It is desired to provide temporary cooling to the seal by using Primary System Makeup Tank T-81 water via the filter F-51B drain valve, MV-PMU507.

INITIATING CUES:

You have been given Admin Proc 9.31, Attachment 2, "Temporary Modification Form 3621", to review in accordance with Section 7.2.1 and determine if you should approve the TM for installation. NO Control Room drawings or procedures require revision.

SIMULATOR OPERATOR INSTRUCTIONS

1. Provide a Working Copy of Admin Proc. 9.31, Attachment 4, p.1 of 1 to examiner to provide to candidate.
2. This JPM does not require use of the Simulator. However, Initial Conditions are given to the candidate as the plant is at full power. Therefore, if practicable, any full power IC should be used, though this is NOT required.

TEMPORARY MODIFICATION FORM 3621

TEMPORARY MODIFICATION FORM 3621

DESCRIPTION NOTE: SEE AP 9.31 FOR INSTRUCTIONS ON COMPLETING THIS FORM.

Index No TM- **2001 - 999**

System Condensate	UFI	Equipment P-2B	UFI	Q-Listed X Yes <input type="checkbox"/> No	Expected Removal Date/Mechanism Refout 2003/24018888
Temporary Modification Description-Fill in First Three Columns of Installation/Removal Section (*)					
Provide temporary cooling to Condensate Pump P-2B seal from Primary System Makeup Tank T-81 via Primary System Makeup Filter F-51B drain valve MV-PMU-507.					
Reason for Temporary Modification Extend life of seal of Condensate Pump P-2B.					
Affected Drawings/Procedures M-207, sh. 1B					
Initiator		Date Dec. 17, 2001			

REVIEW

Technical Review	Date
PRC Review (if Q-Listed)	Date Dec. 17, 2001

INSTALLATION/REMOVAL

Work Order Number for Installation 24017777	Shift Supervisor Authorization for Installation (ATTACHMENT 4 COMPLETE AND ATTACHED)	Date	Caution Tags Placed <input type="checkbox"/> Yes <input type="checkbox"/> No
Work Order Number for Removal 24018888	Shift Supervisor Authorization for Removal	Date	Caution Tag Log Number

NOTE: If installation of this TM is delayed or interrupted after the Shift Supervisor's approval has been received, notify the Shift Supervisor immediately.

*Item-eg, Jumper, Link, Wire, Blank Flange	*Location-eg, Panel, Terminal Strip No, Link No, Room No, J Box No	*Operation-eg, Open, Removed, Placed	Installation Performed By/Date	Installation Verification By/Date	Removal Performed By/Date	Removal Verification By/Date
Red Rubber Hose	MV-PMU507	Connect hose				
with Chicago fitting	P-2B Seal Area	Aim nozzle at seal				
on one end and	MV-PMU507	CLOSED				
appropriate throttle	Throttle Valve	Open to establish				
valve and nozzle on		cooling flow.				
other end.						
Temporary Modification Tags Placed By		Date	Drawings Revised at Removal Initiator Signature		Date	
Temporary Modification Tags Removed By		Date	Closeout Administrative Review Discipline Design Engineering Supervisor		Date	

REGION III
INITIAL LICENSE EXAM
JOB PERFORMANCE MEASURE

JPM SRO/RO - A.3

TITLE: Radiation Control (Questions)

CANDIDATE: _____

EXAMINER: _____

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Knowledge of Radiation Protection (405 003 01 01)

Alternate Path: N/A

Facility JPM #: NEW

K/A: 2.3.4 / 2.3.1 Importance: SRO: RO: 2.5 / 2.6

K/A Statement: Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized.

Knowledge of 10CFR: 20 and related facility radiation control requirements.

Task Standard: Correctly respond to administrative questions.

Preferred Evaluation Location: Simulator _____ In Plant _____

Preferred Evaluation Method: Perform ___N/A___ Simulate _____

References: Admin Proc 7.13 and 7.15

Validation Time: __10__ minutes Time Critical: NO

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT _____ UNSAT _____

Comments:

Examiner: _____ Date: _____
Signature

JPM QUESTION #1

REFERENCE ALLOWED: X /
 YES NO

Question: During an outage in December, a Consumers Energy employee is required to perform a job in an area that has a general area radiation dose rate of 40 mR/Hr.

The worker's current Total Effective Dose Equivalent (TEDE) exposure for the year is 980 mRem.

WITHOUT requiring an annual dose review, may this worker complete the work if it is expected to take 16 hours to complete?

Why, or why not?

Answer: NO, because Annual Dose Review level is 1500 mRem. Worker currently has 980 mRem TEDE as an annual exposure. He is permitted to receive an additional 520 mRem before reaching 1500 mRem. $520/40 = 13$ hrs.

CANDIDATE'S RESPONSE

Time: 5 minutes

JPM QUESTION #2

REFERENCE ALLOWED: X /
 YES NO

Question: A small fire has been discovered in the Radwaste Panel C-40 area. As a member of the Fire Brigade, what is the **MINIMUM** dosimetry required for you to wear to access the area under these conditions?

Answer: Per Admin Proc 7.13, Section 8.4.1, the minimum required is a Primary TLD.

CANDIDATE'S RESPONSE

Time: 5 minutes

JPM QUESTION #1

CANDIDATE COPY

REFERENCE ALLOWED: $\frac{\text{X}}{\text{YES}}$ / $\frac{\quad}{\text{NO}}$

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: During an outage in December, a Consumers Energy employee is required to perform a job in an area that has a general area radiation dose rate of 40 mR/Hr.

The worker's current Total Effective Dose Equivalent (TEDE) exposure for the year is 980 mRem.

WITHOUT requiring an annual dose review, may this worker complete the work if it is expected to take 16 hours to complete?

Why, or why not?

JPM QUESTION #2

CANDIDATE COPY

REFERENCE ALLOWED: $\frac{\text{X}}{\text{YES}}$ / $\frac{\quad}{\text{NO}}$

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: A small fire has been discovered in the Radwaste Panel C-40 area. As a member of the Fire Brigade, what is the **MINIMUM** dosimetry required for you to wear to access the area under these conditions?

REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM SRO - A.4

**TITLE: Classify an Emergency Event AND
Determine Protective Action
Recommendations**

CANDIDATE: _____

EXAMINER:

**JOB PERFORMANCE MEASURE
DATA PAGE**

Task: Classify and Emergency Event AND Determine Protective Action
 Recommendations

Alternate Path: N/A
Facility JPM #: JPM SRO-A.4

K/A: 2.4.41, 2.4.44 Importance: SRO: 4.1, 4.0 RO:

K/A Statement: (2.4.41) Knowledge of the emergency action level thresholds and
 classifications.
 (2.4.44) Knowledge of emergency plan protective action
 recommendations.

Task Standard: EI-3, Attachment 1, Section 7, Protective Action Recommendations, is
satisfactorily completed in less than 15 minutes.

Preferred Evaluation Location: Simulator ___X___ In Plant _____

Preferred Evaluation Method: Perform ___X___ Simulate _____

References: EI-1, Emergency Classifications and Actions
 EI-3, Communications and Notifications
 EI-6.13, Protective Action Recommendations for Offsite Populations

Validation Time: ___20___ minutes Time Critical: YES

NOTE: Time critical element is notification within 15 minutes of event declaration

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT _____ UNSAT _____

Comments:

Examiner: _____

Signature

Date: _____

READ TO CANDIDATE

DIRECTION TO CANDIDATE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

1. A LOCA is in progress.
2. PZR level is offscale low.
3. PCS pressure is 100 psia.
4. CETs have indicated greater than 700°F for 22 minutes.
5. Total LPSI/HPSI flow is inadequate per EOP Supplement 4.
6. SIRWT level is 38% and lowering slowly.
7. Containment High Range Monitors are indicating 3E3R/hr.
8. Failed fuel analysis is in progress with no results to report.
9. An actual release is NOT occurring through the plant stack or steam dumps.
10. Weather outside is clear with no precipitation.
11. Obtained Meteorological Data is as follows:
 - QN = 0.0
 - QI = 0.0
 - Wind Speed = 1.1
 - Stability Class = G
 - Wind Direction = 235 (from)

INITIATING CUES:

During activation of the Site Emergency Plan, you are the Shift Supervisor (acting as the SED).

You are to classify the event given the above information AND determine the Protective Action Recommendations required for this event. No previous event declaration has been made.

START TIME: _____

STEP / STANDARD		Grading
<p>Step 1: Locates procedure to determine Emergency Classification.</p> <p>Standard: Locates EI-1 and refers to Attachment 1.</p> <p>Notes:</p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>	
<p>Step 2: Refers to "Primary Coolant System Integrity" section to determine Emergency Classification.</p> <p>Standard:</p> <p>Notes:</p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>	
<p>Step 3: Declares correct Emergency Classification.</p> <p>Standard: Determines Emergency Classification is GENERAL EMERGENCY based on indications of LOCA, SI flow inadequate, and indications of failed fuel.</p> <p>Notes:</p> <p>Comments: Critical Step</p>	<p>S ____</p> <p>U ____</p>	

<p>Step 4:</p> <p>Standard:</p> <p>Notes:</p> <p>Comments:</p>	<p>Prepares Notification Form by entering meteorological data in offsite dose program.</p> <p>Enters following meteorological data in offsite dose program</p> <ul style="list-style-type: none"> • QN = 0.0 • QI = 0.0 • Wind Speed = 1.1 • Stability Class = G • Wind Direction = 235 (from) <p>and verifies 0.7 Mev/dis, 0.0 m release height, and 2 hour release duration default information in program.</p> <p><i>Critical to ensure correct information is relayed to offsite agencies.</i></p> <p><i>NOTE: With no release in progress, may elect to manually enter data in Emergency Implementation-6.13. This is acceptable.</i></p>	<p>S____</p> <p>U____</p>
<p>Step 5:</p> <p>Standard:</p> <p>Notes:</p> <p>Comments:</p>	<p>Enters required information in Notification Form (EI-3, Att.1).</p> <p>Checks box labeled "From CR".</p>	<p>S____</p> <p>U____</p>
<p>Step 6:</p> <p>Standard:</p> <p>Notes:</p> <p>Comments:</p>	<p>Enters required information in Notification Form, Section 1</p> <p>Checks boxes labeled "To County", "To State", and "To NRC"</p> <p><i>Critical step to ensure correct offsite agencies are notified.</i></p>	<p>S____</p> <p>U____</p>

<p>Step 7: Enters required information in Notification Form, Section 2A</p> <p>Standard: Enters "1" in "Plant Message Number"</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 8: Enters required information in Notification Form, Section 3</p> <p>Standard: Checks box labeled "General Emergency" in 3D, enters current time and date in 3E, and gives a general description of plant conditions in 3F (LOCA inside containment, etc.).</p> <p>Notes: <i>Critical to ensure correct information is relayed to offsite agencies.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 9: Enters required information in Notification Form, Section 4</p> <p>Standard: Checks box labeled "Stable" in 4A OR checks box labeled "Degrading" in 4B and enters "Attempts are being made to restore cooling flow to the reactor core" (or similar) in 4D.</p> <p>Notes: <i>Critical to ensure correct offsite agencies are notified.</i></p> <p><i>NOTE: This section is a judgement call. Either box 4A or 4B is acceptable to check and 4D should contain information pertinent to event conditions.</i></p> <p>Comments:</p>	<p>S____</p> <p>U____</p>

<p>Step 10: Enters required information in Notification Form, Section 5.</p> <p>Standard: Checks box labeled "NO" due to no release in progress.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 11: Enters required information in Notification Form, Section 6.</p> <p>Standard: Checks box labeled "NO" and verify dose projection program has completed items 6A through 6D.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>
<p>Step 12: Locates procedure to perform Protective Action Recommendations.</p> <p>Standard: Locates EI-6.13 and refers to Attachment 1.</p> <p>Notes:</p> <p>Comments:</p>	<p>S____</p> <p>U____</p>

<p>Step 13: Enters required information in Notification Form, Section 7</p> <p>Standard: Checks box labeled "YES" for 7A due to PARs required, checks box labeled "Plant Status" for 7B, enters "NA" (or leaves blank) item 7C, and enters "2 mile radius and 5 miles in areas 1 and 2" in item 7D</p> <p>Notes: <i>Critical to ensure correct information is relayed to offsite agencies.</i></p> <p>Comments:</p>	<p>S ____</p> <p>U ____</p>
<p>Step 14: Hands Notification Form to communicator for transmission.</p> <p>Standard: Give Notiifcation Form to communicator.</p> <p>Notes:</p> <p>Comments:</p> <p style="text-align: center;">END OF TASK</p>	<p>S ____</p> <p>U ____</p>

STOP TIME: _____

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER TO UPON COMPLETION OF TASK)

Special Note: Assume that all Plant Requirements and Precautions and Limitations have been reviewed and complied with. You are NOT expected, nor are you required to consult the Plant Requirements and Precautions and Limitations section of any procedure for this JPM.

INITIAL CONDITIONS:

1. A LOCA is in progress.
2. PZR level is offscale low.
3. PCS pressure is 100 psia.
4. CETs have indicated greater than 700°F for 22 minutes.
5. Total LPSI/HPSI flow is inadequate per EOP Supplement 4.
6. SIRWT level is 38% and lowering slowly.
7. Containment High Range Monitors are indicating 3E3R/hr.
8. Failed fuel analysis is in progress with no results to report.
9. An actual release is NOT occurring through the plant stack or steam dumps.
10. Weather outside is clear with no precipitation.
11. Obtained Meteorological Data is as follows:
 - QN = 0.0
 - QI = 0.0
 - Wind Speed = 1.1
 - Stability Class = G
 - Wind Direction = 235 (from)

INITIATING CUES:

During activation of the Site Emergency Plan, you are the Shift Supervisor (acting as the SED).

You are to classify the event given the above information AND determine the Protective Action Recommendations required for this event. No previous event declaration has been made.

SIMULATOR OPERATOR INSTRUCTIONS

No Simulator setup required. Ensure the offsite dose program on the computer in the simulator is functioning.