INITIAL SUBMISSION OF THE 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	Develop Caution Tags for Pump
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.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 __X___ In Plant _____

Preferred Evaluation Method: Perform __X___ 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: _____ 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.

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 the necessary Meteorological Data required to be entered on EI-3, Attachment 1, Emergency Notification Form, Section 6, Items A, B, and C.

START TIME: _____

STEP / STANDARD		Grading
Step 1:	Obtains current copy of attachment.	
Standard:	Obtains copy of EI-3, Attachment 1, Emergency Notification Form	S____
Notes:	***NOTE: May consult EI-6.7, Section 5.1, for instructions on how to operate Met Data Display on PPC, but this is NOT required.***	U____
Comments:		
Step 2:	Locates PPC display containing Meteorological Data.	
Standard:	Goes to PPC Page 351 to obtain data.	S____
Notes:		U____
Comments:		
Step 3:	Records proper Wind Direction.	
Standard:	Records proper Wind Direction as from 330° to 150°.	S____
Notes:	***Critical step to enter proper wind direction.***	U____
Comments:		
Step 4:	Records proper Wind Speed.	
Standard:	Records Wind Speed as 10 mph.	S____
Notes:	***Critical step to enter proper wind speed.***	U____
Comments:		

STEP / STANDARD		Grading
Step 5:	Records proper Stability Class.	
Standard:	Records Stability Class as Class D.	**S**____
Notes:		**U**____
Comments:		
Step 6:	Record downwind sectors.	
Standard:	Records 3 downwind sectors.	**S**____
Notes:	***Critical to enter correct downwind sectors.***	**U**____
Comments:		
Step 7:	Completes entering data in Attachment 1.	
Standard:	Completes entering data in Attachment 1, Section 6, Items A, B, C, D, and E and returns to Shift Supervisor	**S**____
Notes:		**U**____
Comments:		
	END OF TASK	

STOP TIME: _____

CANDIDATE CUE SHEET

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

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 the necessary Meteorological Data required to be entered on EI-3, Attachment 1, Emergency Notification Form, Section 6, Items A, B, and C.

SIMULATOR OPERATOR INSTRUCTIONS

1. Reset to IC-11.

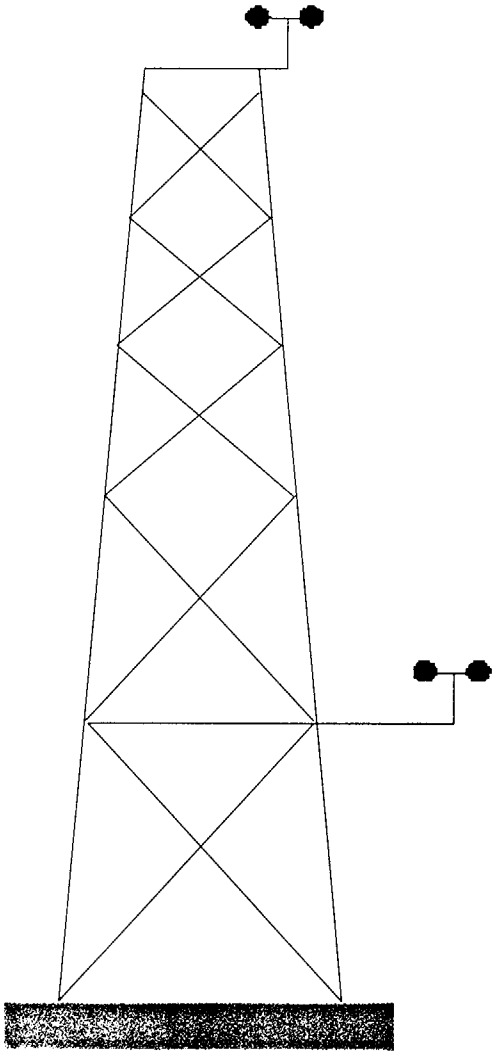
2. Ensure Met Data on PPC 351 lists the following data:

   * Wind Direction = from 330° to 150°

   * Wind Speed = 10 mph

   * Stability Class = D

Note: If the above parameters are not shown on PPC 351, select another IC that uses these parameters, OR, if possible, modify the parameters on the PPC 351 to reflect those given.



HEIGHT 60 METERS

WIND DIRECTION (from)	330	CIRCULAR DEGREES
STD DEVIATION	4	CIRCULAR DEGREES
WIND SPEEED	10	MPH
DELTA TEMPERATURE	0	DEG C
STABILITY	D	PASQ

HEIGHT 10 METERS

WIND DIRECTION (from)	330	CIRCULAR DEGREES
(to)	150	CIRCULAR DEGREES
STD DEVIATION	4	CIRCULAR DEGREES
WIND SPEEED	10	MPH
TEMPERATURE	17	DEG C
	62	DEG F

DOWNWIND SECTORS A B C D E F G H
J K L M N P Q R

JPM RO-A.4 ANSWER KEY

EMERGENCY NOTIFICATION FORM

REQUIRED INFORMATION

Approval: _____ Date: _____ Time: _____

☐ This is a drill. ☐ This is not a drill.

From: ☐ CR ☐ TSC ☐ EOF

1. To: ☐ County Name: _____ Time: _____
   ☐ State Name: _____ Time: _____
   ☐ NRC Name: _____ Time: _____
2. PALISADES 2A. PLANT MESSAGE NUMBER _____
3. CLASS OF EMERGENCY
   A. ☐ Unusual Event B. ☐ Alert C. ☐ Site Area Emergency D. ☐ General Emergency
   E. This classification declared by Plant at: Time: _____ Date: _____
   F. Initiating Conditions/Description of Event:

_____
_____
_____

4. PLANT STATUS
   A. ☐ Stable B. ☐ Degrading C. ☐ Improving
   D. Additional Information:

_____
_____
_____

5. RADIOLOGICAL RELEASE IN PROGRESS: ☐ YES ☐ NO

6. METEOROLOGICAL DATA
   A. Wind Direction, Degrees From: _____ To: _____ B. Wind Speed, MPH: _____ C. Stability Class: _____
   D. Three Downwind Sectors: _____ E. Precipitation: ☐ YES ☐ NO

7. PROTECTIVE ACTION RECOMMENDATIONS
   A. ☐ YES ☐ NO
   Note: If YES fill in following information.
   B. PAR based on: ☐ Dose Calculations ☐ Plant Status ☐ Other _____
   C. In-place Shelter (Areas) _____
   D. Evacuation (Areas) _____

AS AVAILABLE

8. RADIOLOGICAL RELEASE DATA
   A. Time release started _____ Projected duration of release _____
   B. ☐ Airborne ☐ Waterborne ☐ Waterborne Analysis Attached
   C. Effluent Points _____
   D. Noble gas release rate, Ci/sec _____ Sample _____ Monitor _____ Estimate _____
   E. Average energy per disintegration, MeV _____ Sample _____ Monitor _____ Estimate _____
   F. Equivalent I-131 release rate, Ci/sec _____ Sample _____ Monitor _____ Estimate _____
   G. Particulate release rate Ci/sec _____ Sample _____ Estimate _____

9. CALCULATED OFFSITE DOSES
   A. ☐ Actual ☐ Potential
   B. Based on: ☐ Monitor (in Plant) ☐ Sample (in Plant) ☐ Back Calculation from field data ☐ Other Plant Conditions
   C. Calculated Dose Rate (mrem/hr)
   Time of Calculation _____

Distance	TEDE (mrem/hr)	Adult Thyroid CDE (mrem/hr)
Site Boundary		
2 Miles		
5 Miles		
10 Miles		

   D. Calculated Accumulated Dose (mrem)
   Calculated Duration, Hours _____

Distance	TEDE (mrem)	Adult Thyroid CDE (mrem)
Site Boundary		
2 Miles		
5 Miles		
10 Miles		

   E. Sectors Affected _____

10. MEASURED OFFSITE DOSE RATES

A. Distance	Time	Reading (mR/hr)	Affected Sector
Site Boundary			
_____miles			
_____miles			
_____miles			

   B. Additional Information

_____
_____
_____

REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM 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: Upon exiting a Contaminated Area (CA) you are preparing to perform a Whole Body Frisk. After verifying the frisker is on the X1 scale, you note that the background level indicates approximately 250 cpm.

During the frisk, you note an area on your left wrist that indicates 380 cpm.

What action(s) should you take?

Answer: Per Admin Proc 7.15, Attachment 3, item 3 the worker should remain in the area and notify Radiation Safety for assistance.

CANDIDATE'S RESPONSE

Time: 5 minutes

K/A: 2.3.4 (Importance - 2.5)

JPM QUESTION #2

REFERENCE ALLOWED: ___X___ / _____
YES NO

Question: An emergency condition requires you to enter the Radwaste Panel C-40 area.

What is the MINIMUM dosimetery required for you to wear?

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

CANDIDATE'S RESPONSE

_____

_____

_____

_____

_____

_____

Time: 5 minutes

K/A: 2.3.1 (Importance - 2.6)

JPM QUESTION #1

CANDIDATE COPY

REFERENCE ALLOWED: ___X___ / _____
YES NO

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: Upon exiting a Contaminated Area (CA) you are preparing to perform a Whole Body Frisk. After verifying the frisker is on the X1 scale, you note that the background level indicates approximately 250 cpm.

During the frisk, you note an area on your left wrist that indicates 380 cpm.

What action(s) should you take?

JPM QUESTION #2

CANDIDATE COPY

REFERENCE ALLOWED: ___X___ / _____
YES NO

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: An emergency condition requires you to enter the Radwaste Panel C-40 area.

What is the MINIMUM dosimetery required for you to wear?

REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM RO - A.2

TITLE: Develop Caution Tags for Pump

CANDIDATE: _____

EXAMINER: _____

JOB PERFORMANCE MEASURE
DATA PAGE

Task: Develop Caution Tags for an Inoperable Pump

Alternate Path: N/A

Facility JPM #: JPM RO-A.1-2/2000NRC

K/A: 2.2.13 Importance: SRO: RO: 3.6

K/A Statement: Knowledge of tagging and clearance procedures.

Task Standard: Caution Tag Log and Caution Tag Form 350 and Form 3188 have been completed with required information.

Preferred Evaluation Location: Simulator __X___ In Plant _____

Preferred Evaluation Method: Perform __X___ Simulate _____

References: Admin Proc 4.02, Control of Equipment

Validation Time: _____ minutes Time Critical:

Candidate: _____

Time Start: _____ Time Finish: _____

Performance Time: _____ minutes

Performance Rating: SAT _____ UNSAT _____

Comments:

Examiner: _____ Date: _____
Signature

EVALUATOR SPECIAL INSTRUCTIONS:

- Provide candidate with a partially filled out Caution Tag Log per Admin Proc 4.02 listing one other CR related series of Caution Tags previously hung and still installed.
- Ensure required blank Caution Tags are available to be completed by the candidate.
- Properly completed tags and index are included with JPM.

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.

INITIAL CONDITIONS:

Charging Pump P-55C breaker 52-1105 has been racked to the DISCONNECT position due to an Auxiliary Operator's report of excessive pump vibration.

INITIATING CUES:

The Shift Supervisor has directed you to develop the necessary Caution Tags to place on handswitch 52-1105CS on C-02 for P-55C and on breaker 52-1105 on LCC 11.

P-55C is only to be used with Shift Supervisor permission for emergency conditions if P-55A and P-55B are both unavailable.

Work Request Number 279868 has been initiated to troubleshoot and repair the pump. Initiation of a Condition Report is not required at this time.

START TIME: _____

STEP / STANDARD		Grading
Step 1:	Locates procedure to caution tag P-55C.	
Standard:	Locates Admin 4.02 and refers to Sections 10.2.1, 10.2.2, and Attachment 4.	S____
Notes:	***It is NOT required that the candidate actually refer to and open the procedure, but may do so.***	U____
Comments:		
Step 2:	Obtain proper type of Caution Tag for use on control panels.	
Standard:	Obtains Caution Tag Form 3188.	S____
Notes:	***If none available, and candidate explains how to normally obtain proper type of Caution Tag, provide Caution Tag Form 3188***	U____
Comments:		
Step 3:	Obtain proper type of Caution Tag for breaker 52-1105.	
Standard:	Obtains Caution Tag Form 350.	S____
Notes:	***If none available, and candidate explains how to normally obtain proper type of Caution Tag, provide Caution Tag Form 350.***	U____
Comments:		

Step 4:	Obtain next available Serial Number from Caution Tag Log.	
Standard:	Obtains Serial Number 01-CR-153-2 from Caution Tag Log, records in Caution Tag Log and on both Caution Tags to be installed, except that one of the tags is listed as 01-CR-153-1, and the other is listed as 01-CR-153-2.	**S**____ **U**____
Notes:	***Steps 4 through 8 may be performed in any order.***	
Comments:	***All entries may be performed on either the Control Room Caution Tag Logsheet OR the Feedwater Purity Bldg. logsheet.***	
Step 5:	Make entry for individual hanging the tags.	
Standard:	Candidate enters his name in "Tag Placed; By" space on Caution Tag Logsheet, and on both Caution Tags to be installed.	**S**____ **U**____
Notes:		
Comments:		
Step 6:	Enters equipment designator.	
Standard:	Enters "P-55C C/S," "P-55C H/S," or "52-1105 C/S" AND "52-1105" in Block 3 of Caution Tag Log, enters "52-1105" on the front of Form 350, and enters "P-55C C/S," "P-55C H/S," or "52-1105 C/S"on the front of Form 3188.	**S**____ **U**____
Notes:		
Comments:		

Step 7:	Enters AMMS designator for system in Caution Tag Log.	
Standard:	Enters "CVC" in lower left corner of Block 3 of Caution Tag Log.	S____ U____
Notes:	***May obtain from computer or any other available source.***	
Comments:		
Step 8:	Enters special instructions and/or reason for tagging equipment.	
Standard:	Enters "Only operate in emergency" (or similar) in Caution Tag Log Block 4, on front of Form 350 and Form 3188 and "excessive vibration" (or similar) in Caution Tag Log Block 4, on front of Form 350 and on Form 3188	S____ U____
Notes:	***Candidate may place "S.S." in "Authorized By" block of Form 350. This block is not required to be filled out for successful task completion.***	
Comments:		
Step 9:	Enters Work Request number in Caution Tag Log	
Standard:	Enters Work Request number "279868" in Block 5 of Caution Tag Log	S____ U____
Notes:	***Critical step to identify associated work to repair pump.*** ***NOTE: Work Request number given in initial conditions.*** ***CUE: If candidate indicates that Caution Tag number is to be included on Work Request, inform candidate that it will be performed by another crew member.***	
Comments:		

Step 10:	Informs Shift Supervisor that Caution Tags are ready to be installed.	
Standard:	Informs Shift Supervisor that Caution Tags are ready to be installed.	**S**____ **U**____
Notes:		
Comments:		
	END OF TASK	

STOP TIME: _____

CANDIDATE CUE SHEET

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

INITIAL CONDITIONS:

Charging Pump P-55C breaker 52-1105 has been racked to the DISCONNECT position due to an Auxiliary Operator's report of excessive pump vibration.

INITIATING CUES:

The Shift Supervisor has directed you to develop the necessary Caution Tags to place on handswitch 52-1105CS on C-02 for P-55C and on breaker 52-1105 on LCC 11.

P-55C is only to be used with Shift Supervisor permission for emergency conditions if P-55A and P-55B are both unavailable.

Work Request Number 279868 has been initiated to troubleshoot and repair the pump. Initiation of a Condition Report is not required at this time.

SIMULATOR OPERATOR INSTRUCTIONS

Any IC.

Rackout to DISCONNECT breaker 52-1105 for Charging Pump P-55C.
Ensure RED and GREEN lights OFF.

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 __X___ In Plant _____

Preferred Evaluation Method: Perform __X___ 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: _____ 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.

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 IA and 1B did not fast transfer.
· 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
Step 1:	Enter "T-2 Inventory" curve with Condensate Storage Tank T-2 level and determine available T-2 inventory.	
Standard:	T-2 inventory is listed as 90,000 gallons. (89-91 allowed).	S____ U____
Notes:	***Critical step to accurately determine inventory.***	
Comments:		
Step 2:	Determine other sources that can be taken credit for as a source of available inventory.	
Standard:	T-939 is available.	S____
Notes:	***Critical step to ensure that only available sources are considered.***	U____
Comments:		
Step 3:	Determine "T-939 Inventory"	
Standard:	T-939 inventory determined to be 190,000 gal. (188-192 allowed.)	S____ U____
Notes:	***Critical step to accurately determine inventory.***	
Comments:		
Step 4:	Add the results of Steps 1 and 2.	
Standard:	Total determined as 280,000 gal. (278-282 allowed.)	S____
Notes:		U____
Comments:		

STEP / STANDARD		Grading
Step 5:	Determine present highest PCS Loop Tc (Tc initial).	
Standard:	Tc initial is ~530°F.	S____
Notes:		U____
Comments:		
Step 6:	Enter "Sensible Heat Removal" curve with data from above step and determine inventory required to remove sensible heat.	S____
Standard:	Inventory required is 41,000 gal. (40-42 allowed).	U____
Notes:	***Critical step to accurately determine required inventory.***	
Comments:		
Step 7:	Determine inventory available to remove decay heat.	
Standard:	Inventory available is 239,000 gal. (237-241 allowed).	S____
Notes:	***Critical step to accurately determine inventory required.***	U____
Comments:		
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.	S____
Standard:	Time interval is >32 hrs. (Interpolation not required.)	U____
Notes:	***Critical step to accurately determine time interval.***	
Comments:		

STEP / STANDARD		Grading
Step 9:	Notify Shift Supervisor of completion.	
Standard:	Notifies Shift Supervisor that the time interval is > 32 hrs.	
Notes:		**S**____
Comments:		**U**____
	END OF TASK	

STOP TIME: _____

CANDIDATE CUE SHEET

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

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 IA and 1B did not fast transfer.
- 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.

TITLE: PCS Cooldown Strategy

1.0 CONDENSATE STORAGE TANK T-2

1. **DETERMINE** AND **RECORD** Condensate Storage Tank T-2 level using the "T-2 Inventory" curve:

   T-2 inventory = _____ gallons

2.0 DEMINERALIZED WATER TANK T-939

1. IF any of the following conditions exist:

   - P-936 is transferring water to T-2
   - P-936 is capable of transferring water to T-2
   - ONP-2.1, Attachment 2, "Restoring P-936 to Service During Loss of Offsite Power" has been completed

   THEN Demineralized Water Tank T-939 is available.

2. IF Demineralized Water Tank T-939 is available, THEN **DETERMINE** AND **RECORD** Demineralized Water Tank T-939 inventory using the "T-939 Inventory" curve.

   T-939 inventory = _____ gallons

3. IF Demineralized Water Tank T-939 is available, THEN **DISREGARD** Primary System Makeup Tank T-81 inventory AND **GO TO** Step 4.0.

3.0 PRIMARY SYSTEM MAKEUP TANK T-81

1. IF any of the following conditions exist:

   - P-79A or P-79B is in service transferring water to T-2 per SOP-12, Section 7.6.4
   - T-81 gravity feed to T-2 is aligned per the in-use EOP or SOP-12, Section 7.6.5

   THEN Primary System Makeup Tank T-81 is available.

2. IF Primary System Makeup Tank T-81 is available, THEN **DETERMINE** Primary System Makeup Tank T-81 inventory using "T-81 Inventory" curve.

T-81 inventory = _____ gallons

4.0 DETERMINE THE TOTAL INVENTORY

1. **ADD** the available tank inventories:

_____ (Step 1.1 T-2 Inventory) + _____ (Step 2.2 T-939 Inventory) + _____ (Step 3.2 T-81 Inventory) = _____ (Total Inventory)

5.0 DETERMINE COOLDOWN RATE

1. **DETERMINE AND RECORD** present highest PCS Loop T_C (T_C Initial):

T_C Initial = _____ °F

2. **DETERMINE AND RECORD** inventory required to remove sensible heat using "T_C Initial" temperature and the "Sensible Heat Removal" curve:

Required Sensible Heat Removal Inventory = _____ gallons

3. **SUBTRACT** Step 5.2 results from Step 4.1 results:

_____ (Step 4.1 Total Feedwater Inventory) - _____ (Step 5.2 Inventory required to remove sensible heat) = _____ (Inventory Available to remove decay heat)

4. **DETERMINE AND RECORD** the time interval available for heat removal using the following:

- Applicable "Decay Heat Removal" curve for the number of PCPs operating
- Graph line for the elapsed time after shutdown
- Amount of inventory available to remove decay heat (graph)

Time interval available for heat removal = _____ hours

5. IF the time interval available for heat removal is less than eight hours, THEN **PERFORM** the following:

   a. **INFORM** the Shift Supervisor of the available interval and that additional sources of inventory are required.

   b. **CONSIDER** AND **EVALUATE** each of the following potential inventory sources on the contribution to available Feedwater inventory:

      1) P-936 transfer of T-939 to T-2. **REFER TO** ONP-2.1, Attachment 2.

      2) T-81 pump/gravity feed to T-2. **REFER TO** SOP-12.

      3) T-90 gravity feed to T-2. **REFER TO** SOP-12.

      4) Either of the following Hotwell sources:

         a) Condensate Pump P-2A or P-2B operating and MV-CD129 is OPEN rejecting the hotwell to T-2.

         b) P-214 hotwell transfer to T-2.

         REFER TO SOP-11.

      5) Makeup to T-2 from Makeup Demineralizers.

      6) TSC/PRC approved methods.

   c. **IMPLEMENT** additional available Feedwater inventory sources as necessary.

6. **DETERMINE** the minimum cooldown rate that available Feedwater inventory can support as follows:

$$\frac{(T_C \text{ Initial (Step 5.1)}) - (300)}{(\text{Time Interval (Step 5.4)})} = \text{minimum cooldown rate}$$

$$\frac{(\qquad\qquad) - 300}{(\qquad)} = \_\_\_\_\_ \text{°F/hr.}$$

7. **INFORM** the Shift Supervisor that the available feedwater inventory will support the cooldown rate determined in Step 5.6.

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 __X___ In Plant _____

Preferred Evaluation Method: Perform __X___ Simulate _____

References: Admin Proc. 4.02, Att. 9

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.

INITIAL CONDITIONS:

Today is December 19, 2001. 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".

START TIME: _____

STEP / STANDARD	Grading
Step 1: Initiate EOOS Program from computer main screen. Standard: EOOS Program showing on computer screen. Notes: Comments:	S____ U____
Step 2: Ensure "Local At-Power Model" and "Local EOOS" selected. Standard: Both items are selected (highlighted). Notes: Comments:	S____ U____
Step 3: Select "OK". Standard: Candidate selects "OK". Notes: Comments:	S____ U____
Step 4: Ensure User Name is "WCC". Standard: User Name is "WCC". Notes: Comments:	S____ U____

STEP / STANDARD	Grading
Step 5: Type in password, "WORK". Standard: Password "WORK" is typed in cue window. Notes: Comments:	S____ U____
Step 6: Select "OK". Standard: "OK" is selected. Notes: Comments:	S____ U____
Step 7: Check "Environmental Vacancies" = "Normal" Standard: "Environmental Vacancies" noted to be "Normal". Notes: Comments:	S____ U____
Step 8: Check "Trains In-Service" = "< 75°F Outside Air" Standard: "Trains In-Service" = "<75°F Outside Air" noted. Notes: Comments:	S____ U____

STEP / STANDARD		Grading
Step 9:	Select RED graphic box for P-66A. ----- OR ----- Locate and select "P-66A" from the component list.	S____
Standard:	P-66A graphic box is selected.	U____
Notes:	***(Either method is acceptable.)***	
Comments:	***Critical step to enter correct component.***	
Step 10:	Select "OK".	
Standard:	"OK" is selected.	S____
Notes:		U____
Comments:		
Step 11:	Select calculator graphic icon to calculate the RAW.	
Standard:	RAW calculation is initiated.	S____
Notes:		U____
Comments:		
Step 12:	Obtain RAW score of 3.50.	
Standard:	RAW score of 3.50 is determined.	S____
Notes:	(3.45 - 3.55 is acceptable.)	U____
Comments:	***Critical step to obtain correct Risk Achievement Worth***	
	End of Task	

STOP TIME: _____

CANDIDATE CUE SHEET

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

INITIAL CONDITIONS:

Today is December 19, 2001. 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".

SIMULATOR OPERATOR INSTRUCTIONS

Determining a Risk Achievement Worth can be performed independent of any Simulator IC.

NO special setup required.

REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM SRO - 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:

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 __X___ In Plant _____

Preferred Evaluation Method: Perform __X___ 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.

INITIAL CONDITIONS:

The plant is at full power and has been at steady state for 11 days. S/G Blowdowns actual values are 21K each.

INITIATING CUES:

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

START TIME: _____

STEP / STANDARD		Grading
Step 1:	Obtains current procedure.	
Standard:	Candidate obtains GOP-12 and refers to Section 6.1.1.	S____
Notes:		U____
Comments:		
Step 2:	Obtain PPC Page 521.	
Standard:	PPC Page 521 is showing on the PPC screen.	S____
Notes:		U____
Comments:		
Step 3:	Ensure UFM Correction factors are correct.	
Standard:	Refers to Tech Data Book, Figure 14.1 and determines that UFM Correction factors are correct.	S____
Notes:	***Steps 3 and 4 may be performed in any order.***	U____
Comments:		
Step 4:	Update S/G Blowdowns.	
Standard:	Candidate determines that a change to S/G Blowdown flow IS required.	S____
Notes:		U____
Comments:		

STEP / STANDARD		Grading
Step 5:	Select data.	
Standard:	Data key is selected.	S____
Notes:		U____
Comments:		
Step 6:	Enter new value.	
Standard:	Enters 21000 lbm/hr for each S/G Blowdown flow.	S____
Notes:		U____
Comments:	***Critical step to ensure accurate Heat Balance Power is calculated.***	
Step 7:	Press UPDATE hardkey.	
Standard:	UPDATE is pressed. S/G Blowdown flow values change to 21000 lbm/hr each.	S____
Notes:		U____
Comments:		
Step 8:	Print Heat Balance form.	
Standard:	Depresses PRINTER hardkey and obtains printout from printer.	S____
Notes:		U____
Comments:		

STEP / STANDARD		Grading
Step 9:	Sign the printout.	
Standard:	Candidate signs anywhere on the printout form.	S____
Notes:		U____
Comments:		
Step 10:	Request SRO review.	
Standard:	Requests SRO review and signature.	S____
Notes:	***Cue: When requested as the SS, inform candidate that all readings are within 1% of each other, and that NO adjustments are required.***	U____
Comments:		
	END OF TASK	

STOP TIME: _____

CANDIDATE CUE SHEET

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

INITIAL CONDITIONS:

The plant is at full power and has been at steady state for 11 days. S/G Blowdowns actual values are 21K 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 3 requirements can be accomplished by resetting the simulator to IC-19 each time.

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 __X___ In Plant _____

Preferred Evaluation Method: Perform __X___ 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: _____ 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.

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
Step 1:	Obtain current procedure.	
Standard:	Candidate refers to Admin Proc 9.31, 7.2.1.	S____
Notes:		U____
Comments:		
Step 2:	Documentation of Administrative Review.	
Standard:	Candidate refers to Admin Proc, Attachment 4.	S____
Notes:	***Provide Working Copy of Attachment 4 to candidate.***	U____
Comments:		
Step 3:	Perform Administrative Review of the Temporary Mod.	
Standard:	Candidate reviews all items on the provided and filled out Form 3621 and notes the Technical Review has NOT been performed (signature missing).	S____ U____
Notes:		
Comments:	***Critical step to determine that TM has not been adequately reviewed.***	
Step 4:	Complete Admin Proc 9.31, Attachment 4.	
Standard:	Candidate determines that this Temporary Modification should NOT be approved for installation.	S____ U____
Notes:	***To examiner: Use "Answer Key for JPM SRO-A.2" to assist in grading.***	
Comments:		
	END OF TASK	

STOP TIME: _____

CANDIDATE CUE SHEET

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

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

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

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 ☐ 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 J. Engineer Date ***Dec. 17, 2001***

REVIEW

Technical Review	Date
PRC Review (if Q-Listed) Alan Smith	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 ☐ Yes ☐ 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***	***Open***				
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

Answer Key for JPM SRO-A.2

TEMPORARY MODIFICATION ADMINISTRATIVE REVIEW SHEET

Perform an Administrative Review of the TM. This review is to ensure completeness of information including:

	YES	NO	N/A
TM index number has been assigned.	☑	☐	
All information in the "Description" section is complete	☑	☐	
Technical review performed and documented.	☐	☑	
Safety Review completed.	☐	☑	
PRC Review complete and documented if the TM is Q-Listed.	☑	☐	☐
Item, location, and operation descriptions for installation are appropriate.	☑	☐	
TM is compatible with existing Plant and system conditions.	☑	☐	
If compatibility of the TM is questionable, is functional testing identified or required for this TM?	☐	☐	
The installation of the new TM is logged in the Shift Supervisors Logbook in accordance with Palisades Administrative Procedure 4.00, "Operations Organization, Responsibilities and Conduct."	☐	☐	
All affected drawings noted in TM description section.	☑	☐	
All affected Control Room drawings revised prior to operability.	☐	☐	☑
All affected procedures revised prior to operability.	☐	☐	☑
Caution Tags installed. -If yes, indicate Caution Tag log number on TM Form.	☐	☑	

Candidate may stop here.

Comments:

_____

_____

_____

Shift Supervisor _____

Date _____

REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM 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: Upon exiting a Contaminated Area (CA) you are preparing to perform a Whole Body Frisk. After verifying the frisker is on the X1 scale, you note that the background level indicates approximately 250 cpm.

During the frisk, you note an area on your left wrist that indicates 380 cpm.

What action(s) should you take?

Answer: Per Admin Proc 7.15, Attachment 3, item 3 the worker should remain in the area and notify Radiation Safety for assistance.

CANDIDATE'S RESPONSE

Time: 5 minutes

K/A: 2.3.4 (Importance - 2.5)

JPM QUESTION #2

REFERENCE ALLOWED: ___X___ / _____
YES NO

Question: An emergency condition requires you to enter the Radwaste Panel C-40 area.

What is the MINIMUM dosimetery required for you to wear?

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

CANDIDATE'S RESPONSE

_____

_____

_____

_____

_____

_____

Time: 5 minutes

K/A: 2.3.1 (Importance - 2.6)

JPM QUESTION #1

CANDIDATE COPY

REFERENCE ALLOWED: ___X___ / _____
YES NO

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: Upon exiting a Contaminated Area (CA) you are preparing to perform a Whole Body Frisk. After verifying the frisker is on the X1 scale, you note that the background level indicates approximately 250 cpm.

During the frisk, you note an area on your left wrist that indicates 380 cpm.

What action(s) should you take?

JPM QUESTION #2

CANDIDATE COPY

REFERENCE ALLOWED: ___X___ / _____
YES NO

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF ANSWER)

Question: An emergency condition requires you to enter the Radwaste Panel C-40 area.

What is the MINIMUM dosimetery required for you to wear?

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 threshholds 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: _____ 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.

INITIAL CONDITIONS:

1. A LOCA is in progress.
2. PZR level is offscale low.
3. PCS pressure is 100 psia.
4. PCS indicates superheated conditions.
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.

You have 15 minutes to evaluate and declare the appropriate emergency action level and 15 minutes to ensure this information is provided to VanBuren County.

START TIME: _____

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

Step 4:	Prepares Notification Form by entering meteorological data in offsite dose program.	
Standard:	Enters following meterological data in offsite dose program • QN = 0.0 • QI = 0.0 • Wind Speed = 1.1 • Stability Class = G • Wind Direction = 235 (from) and verifies 0.7 Mev/dis, 0.0 m release height, and 2 hour release duration default information in program.	S____ U____
Notes:	***Critical to ensure correct information is relayed to offsite agencies.*** ***NOTE: With no release in progress, may elect to manually enter data in EI-6.13. This is acceptable.***	
Comments:		
Step 5:	Enters required information in Notification Form.	
Standard:	Checks box labeled "From CR".	S____
Notes:		U____
Comments:		
Step 6:	Enters required information in Notification Form, Section 1	
Standard:	Checks boxes labeled "To County", "To State", and "To NRC"	S____
Notes:	***Critical step to ensure correct offsite agencies are notified.***	U____
Comments:		

Step 7:	Enters required information in Notification Form, Section 2A	
Standard:	Enters "1" in "Plant Message Number"	**S**____
Notes:		**U**____
Comments:		
Step 8:	Enters required information in Notification Form, Section 3	
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.).	**S**____
Notes:	***Critical to ensure correct information is relayed to offsite agencies.***	**U**____
Comments:		
Step 9:	Enters required information in Notification Form, Section 4	
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.	**S**____ **U**____
Notes:	***Critical to ensure correct offsite agencies are notified.*** ***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.***	
Comments:		

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

Step 13:	Enters required information in Notification Form, Section 7	
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	**S**____ **U**____
Notes:	***Critical to ensure correct information is relayed to offsite agencies.***	
Comments:		
Step 14:	Hands Notification Form to communicator for transmission.	
Standard:	Give Notiifcation Form to communicator.	**S**____
Notes:		**U**____
Comments:		
	END OF TASK	

STOP TIME: _____

CANDIDATE CUE SHEET

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

INITIAL CONDITIONS:

1. A LOCA is in progress.
2. PZR level is offscale low.
3. PCS pressure is 100 psia.
4. PCS indicates superheated conditions.
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.

You have 15 minutes to evaluate and declare the appropriate emergency action level and 15 minutes to ensure this information is provided to VanBuren County.

SIMULATOR OPERATOR INSTRUCTIONS

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