REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM RO A.1-1

TITLE: Perform Calculation of Compensation Required for an Untrippable Control Rod

CANDIDATE:			
EXAMINER:			

JOB PERFORMANCE MEASURE DATA PAGE

Task: Perform Calculation	n of Com	pensation Rec	uired for a	an Untrippab	le Control Rod	
Alternate Path:	NON	Е				
Facility JPM #:	RTB-	02N.JPM				
K/A: 001A2.03	Impoi	rtance:	SRO:	4.2	RO:	3.5
proc	ations on edures to	the CRDS, ar	nd (b) base ol, or miti	ed on those pregate the cons	equences of the	
Task Standard:	EM-0	4-08 Attachm	ent 1 prop	erly complete	ed.	
Preferred Evaluation Locat	tion:	Simulator	_X_		In Plant	
Preferred Evaluation Meth	od:Perfo	rm	_X_		Simulate	
References: EM-04-08,		n Margin Requical Data Boo				
Validation Time:20) minı	utes	Time C	Critical: NO		
Candidate:				_		
Time Start:		Time Finish	:			
Performance Time:		minutes				
Performance Rating: SAT		UNS	AT			
Comments:						
Examiner:	Signa	ture		Date:		

Tools/Equipment/Procedures Needed:

Calculator Ruler

Also see **Simulator Operator Instructions** (last page of this document).

EXAMINER COPY ONLY

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:

Rod #6 is inoperable and fully withdrawn. It is believed that the rod is untrippable. Burnup is 6955 MWD/MTU. Reactor power is 40%, PCS Boron is 836 ppm. All rods are out, and equilibrium Xenon conditions exist. Reactor Engineering is NOT available.

INITIATING CUES:

You have been directed to determine the compensation for shutdown margin required for Control Rod #6 utilizing EM-04-08.

Proc.Step	TASK ELEMENT 1	STANDARD	Grade
	Obtain current procedure.	 Obtains EM-04-08 and refers to Section 7.2.3 and Attachment 1. Obtains Technical Data Book. 	S U
Comment:			

TASK ELEMENT 2	STANDARD	Grade
IF a withdrawn Control Rod is determined to be untrippable, THEN perform Attachment 1.	Refers to Attachment 1 for required actions.	S U
		-
	IF a withdrawn Control Rod is determined to be	IF a withdrawn Control Rod is determined to be Refers to Attachment 1 for required actions

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
Att. 1	Enter data in Section 1 for Untrippable Control Rod	Group "A", Number "6", Condition "Untrippable"	S U
Sect.1	Identification.	entered in Section 1.	3 0
Comment:			

Proc.Step	TASK ELEMENT 4	STANDARD	Grade
Sect. 2	Enter data in Section 2 for Worth of Untrippable Rod	Refers to TDB Fig. 1.1 Worth of Untrippable rod entered as 1.19. CRITICAL STEP	S U
Comment: TDB = Te	chnical Data Book		

Proc.Step	TASK ELEMENT 5	STANDARD	Grade
Sect. 3	Enter data in Section 3 for Source of Untrippable Control Rod Worth.	Source of data entered as "Technical Data Book", Fig. 1.1.	S U
Comment:			

Proc.Step	TASK ELEMENT 6	STANDARD	Grade
4.A	Enter data in Section 4.A for Current Cycle Burnup.	"6955" entered in Section 4.A.	S U

Note: Data given in Initial Conditions.

CRITICAL STEP

Proc.Step	TASK ELEMENT 7	STANDARD	Grade
4.B	Enter data in Section 4.B for Current Reactor Power Level.	"40" entered in Section 4.B.	S U

Comment:

Note: Data given in Initial Conditions.

CRITICAL STEP

Proc.Step	TASK ELEMENT 8	STANDARD	Grade
4.C	Enter data in Section 4.C for Control Rod Worth Inserted into Core.	"0" entered as Worth, Group as "4", and Inches as "131".	S U

Comment:

Note: Data given as "all rods out" in Initial Conditions.

Proc.Step	TASK ELEMENT 9	STANDARD	Grade		
4.D	Enter data in Section 4.D for PCS Boron Concentration.	"836" entered in Section 4.D.	S U		
Comment:	Comment:				
CRITICA	CRITICAL STEP				

Proc.Step	TASK ELEMENT 10	STANDARD	Grade
5.E	Enter data in Section 5.E for Worth of All Control Rods.	Refers to TDB, Fig. 1.1 "7.08" entered in Section 5.E. CRITICAL STEP	S U
Comment:			

5.F Enter data in Section 5.F for Maximum Worth of Stuck Rod. Worth entered as "1.19" in 5.F.	S U
Comments	
Comment:	

Proc.Step	TASK ELEMENT 12	STANDARD	Grade		
5.G	Enter data in Section 5.G for PCS Boron at 100% Power.	Refers to TDB Fig. 6.1. "780" entered in 5.G.	S U		
Comment:					
CRITICAL STEP					

Proc.Step	TASK ELEMENT 13	STANDARD	Grade			
5.Н	Enter data in Section 5.H for Power Defect at 100% Power.	Refers to TDB Fig. 3.2 "1.565" entered in 5.H.	S U			
Comment:						
CRITICA	CRITICAL STEP					

Proc.Step	TASK ELEMENT 14	STANDARD	Grade
5.I	Enter data in Section 5.I for Power Defect.	Calculated value of "0.626" entered in 5.I.	S U
Comment:	L STEP		

Proc.Step	TASK ELEMENT 15	STANDARD	Grade			
6.K	Enter data in Section 6.K for Net Amount of Shutdown Margin.	Calculated value of "2.728" entered in 6.K.	S U			
Comment:	Comment:					
CRITICA	CRITICAL STEP					

Proc.Step	TASK ELEMENT 16	STANDARD	Grade			
6.L	Enter data in Section 6.L for Worth of Untrippable Control Rod.	"1.19" entered in 6.L.	S U			
Comment:	Comment:					
Note: Previously determined data (Section 2).						
CRITICAL STEP						

Proc.Step	TASK ELEMENT 17	STANDARD				
6.M	Enter data in Section 6.M for Excess Shutdown Margin.	Calculated value of "1.538" entered in 6.M.	S U			
Comment:	Comment:					
CRITICAL STEP						

Proc.Step	TASK ELEMENT 18	STANDARD STANDARD			
8.R	Enter data in Section 8.R for PPC PDIL.	Refers to TDB, Fig. 1.9 Group as "4", and Inches as "25" entered in 8.R CRITICAL STEP	S U		
	Comment: NOTE: Section 7 is NOT required.				

Proc.Step	TASK ELEMENT 19	STANDARD		
8.8	Enter data in Section 8.S for Control Rod Position Corresponding to Excess Shutdown Margin.	Refers to TDB, Fig. 1.3 Group 3 at 8 inches entered in 8.S. CRITICAL STEP		
Comment:				

Proc.Step	TASK ELEMENT 20	STANDARD				
8.T	Enter data in Section 8.T for PDIL for Untrippable Control Rod Condition.	Group 4 at 25 inches entered in 8.T.	S U			
Comment:	Comment:					
CDITICAL STED						
CRITICA	CRITICAL STEP					

Proc.Step	TASK ELEMENT 21	STANDARD	Grade			
8. U	Determines if Caution Tag on Panel C-02 joystick is required.	Determines that a Caution Tag on Panel C-02 joystick is NOT required.	S U			
Comment:						
CRITICAL STEP						

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

Rod #6 is inoperable and fully withdrawn. It is believed that the rod is untrippable. Burnup is 6955 MWD/MTU. Reactor power is 40%, PCS Boron is 836 ppm. All rods are out, and equilibrium Xenon conditions exist. Reactor Engineering is NOT available.

INITIATING CUES:

You have been directed to determine the compensation for shutdown margin required for Control Rod #6 utilizing EM-04-08.

SIMULATOR OPERATOR INSTRUCTIONS

- Simulator not required for this JPM.
- Ensure a Technical Data Book is available. Insert Figure 1.10 that shows a burnup of 6955MWd/MTU.

REGION III INITIAL LICENSE EXAM JOB PERFORMANCE MEASURE

JPM RO A.1-2

TITLE: Perform PCS Heatup Determination

CANDIDATE:	 		
EXAMINER: _			

JOB PERFORMANCE MEASURE DATA PAGE

Task: Perform PCS Heatup	Determination			
Alternate Path:	NONE			
Facility JPM #:	JPMRO-A.1-120000	Cert		
K/A: 2.1.25	Importance:	SRO: 3.	1 RO:	2.8
K/A Statement:	Ability to obtain and s, monographs, and tal	-	tation reference mater contain performance of	
Task Standard: minut	Allowable Shutdownes (40 minutes to 48 m	_	utage time calculated	to be 44
Preferred Evaluation Location	on: Simulator	_X_	In Plant	
Preferred Evaluation Method	l:Perform	_X_	Simulate _	
References: SOP-3, "Safe	•		ng System" lown Cooling"	
Validation Time:15_	_ minutes	Time Cri	tical: NO	
Candidate:				_
Time Start:	Time Finish:		_	
Performance Time:	minutes			
Performance Rating: SAT_	UNS.	AT _		
Comments:				
Examiner:	Signature		Date:	

EXAMINER COPY ONLY

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:

Fifteen days after a plant shutdown, PCS temperature is 120°F. The Reactor cavity is flooded to a level of 633'. The Pressurizer manway is removed. Shutdown Cooling is in operation, but must be shutdown for the maximum time allowable.

INITIATING CUES:

You have been directed to determine how long (in minutes) Shutdown Cooling may be shutdown in accordance with SOP-3, Section 7.3.7.

Proc.Step	TASK ELEMENT 1	STANDARD	Grade		
	Obtain current copy of procedure.	Obtains SOP-3, and refers to Section 7.3.7.	S U		
Comment:	Comment:				

Proc.Step	TASK ELEMENT 2	STANDARD	Grade
7.3.7.a	Determine "Approximate Time to 200°F" time from appropriate curve in ONP-17 and convert to hours.	Refers to ONP-17, Attachment 1. Uses curve labeled Refueling Cavity Flooded to 632' to determine time to 200°F. Uses "15 Days" curve and 120°F point and determines time to 200°F is ~3 hours CRITICAL STEP	S U
Comment:			

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
7.3.7.b	Determine PCS heatup rate.	Heatup rate calculated to be ~27°F / hour.	S U

NOTE: Heatup rate is calculated by dividing 80°F (200°F - 120°F) by 3 hours.

CRITICAL STEP

Proc.Step	TASK ELEMENT 4	STANDARD	Grade
7.3.7.c	Determine allowable Shutdown Cooling outage time.	Calculates allowable Shutdown Cooling outage time to be 44 minutes (40 - 48 minutes).	S U

NOTE: Allowable outage time calculated by dividing 20°F (maximum allowed heatup) by 27°F / hour (previously calculated heatup rate) and converting to minutes.

CRITICAL STEP

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

Fifteen days after a plant shutdown, PCS temperature is 120°F. The Reactor cavity is flooded to a level of 633'. The Pressurizer manway is removed. Shutdown Cooling is in operation, but must be shutdown for the maximum time allowable.

INITIATING CUES:

You have been directed to determine how long (in minutes) Shutdown Cooling may be shutdown in accordance with SOP-3, Section 7.3.7.

SIMULATOR OPERATOR INSTRUCTIONS

Simulator not required for this JPM.

REGION III INITIAL LICENSE EXAM JOB PERFORMANCE MEASURE

JPM RO A.2

TITLE: Perform SHO-1 Surveillance

CANDIDATE:	 		
EXAMINER.			

JOB PERFORMANCE MEASURE DATA PAGE

Task: Complete	the SHO-1 Surveilla	nce.			
Alternate Path:	Spec surveillance ar	d directed to	o complete	completed Shiftly/Ho e it. During the perform ll discover several out-	nance of
Facility JPM #:	JPMRO	-A.2 2001			
K/A: 2.2.12	Importa	nce:	SRO:	RO:	3.0
K/A Statement:	Knowledge of s	urveillance	procedure	S.	
Task Standard:	Identific	eation of thre	ee out-of-s	spec readings.	
Preferred Evalua	tion Location:	Simulator	_X_	In Plant	
Preferred Evalua	tion Method:Perform		_X_	Simulate	
References: SI	HO-1, Shift Surveilla	nce Data Sh	eet		
Validation Time:	25 minut	es	Time C	ritical: NO	
Candidate:					
Time Start:		Γime Finish:	:	_	
Performance Tim	ne:	minutes			
Performance Rat	ing: SAT	UNS	AT		
Comments:					
Examiner:	Signatui	-e		Date:	

EVALUATOR SPECIAL INSTRUCTIONS:

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

Also see **Simulator Operator Instructions** (last page of this document).

EXAMINER COPY ONLY

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 5.1.1 through and including 5.1.13 on pages 1,2,3,4, and 5 for 'A' Shift. ALL remaining readings have already been taken by another NCO.

Proc.Step	TASK ELEMENT 1	STANDARD	Grade
5.1.1	Check the 4 safety channels of NI power within 1% of each other.	Records readings in "Shift A Readings" column, and initials "RECRD BY"	S U

Note: Surveillance steps may be performed in any order.

Proc.Step	TASK ELEMENT 2	STANDARD	Grade
5.1.2	Check 4 TMM ΔT Power indications within 1% of each other.	Records readings in "Shift A" column, and initials "RECRD BY.	S U
Comment:			

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
5.1.3	Check NI / ΔT Comparator meter varying as expected.	Records a $$ or "OK" and initials RECRD BY.	S U
Comment:			

Proc.Step	TASK ELEMENT 4	STANDARD	Grade
5.1.4	Check Axial Shape Index display OK.	Checks either the "System Status" or "Power Density" screen for OK indication; records a $$ or "OK", and initials RECRD BY.	S U
Comment:			

TASK ELEMENT 5	STANDARD	Grade
Check PCS Cold Leg Temperatures <543.5°F.	Checks TMM "System Status" screen Trip Status Box indicating OK; records a √or "OK", and initials RECRD BY.	S U
		Checks TMM "System Status" screen Trip Status Box indicating OK; records a √or "OK", and initials

Proc.Step	TASK ELEMENT 6	STANDARD	Grade			
5.1.6	Check Wide Range NIs readings and that they agree within 1 $\frac{1}{2}$ decades.	Records readings in "Shift A Readings" column.	S U			
Comment:	Comment:					

Proc.Step	TASK ELEMENT 7	STANDARD	Grade	
5.1.6	Determine out of tolerance data.	Notes that NI-1/3A is NOT within 1 ½ decades of the other Wide Range NI.	S U	
Comment:				
CRITICAL STEP				

Proc.Step	TASK ELEMENT 8	STANDARD	Grade
5.1.6	Identifies out of tolerance reading.	Circles in RED NI-1/3A reading, initials RECRD BY column and notifies Control Room Supervisor of out of tolerance reading.	S U

CUE: When notified as SS, direct candidate to continue the surveillance.

CRITICAL STEP

Proc.Step	TASK ELEMENT 9	STANDARD				
5.1.6	Provide explanation in Comments Section, SHO-1, Att. 1, p. 16.	NOTE: Since no detailed explanation is available, this step is NOT required.	S U			
Comment:						

Proc.Step	TASK ELEMENT 10	STANDARD	Grade
5.1.7	Check Quadrant Power Tilt.	Checks NI Channels 5,6,7,8 deviation lights NOT lit and no alarms (EK-06C3); records a $$ or "OK", and initials RECRD BY.	S U
Comment:			

		STANDARD	Grade			
	heck Steam Generator pressure indications within 0 psi of each other.	Records readings in "Shift A Readings" column.	S U			
Comment:	Comment:					

Proc.Step	TASK ELEMENT 12	STANDARD	Grade			
5.1.8	Determine out of tolerance data.	Notes PIC-0752C indication for "B" S/G is >40 psi out of agreement with the other 3 for "B" S/G.	S U			
Comment:	Comment:					
CRITICA	CRITICAL STEP					

Proc.Step	TASK ELEMENT 13	STANDARD	Grade
5.1.8	Identifies out of tolerance reading.	Circles in RED PIC-0752C reading, initials RECRD BY column and notifies Control Room Supervisor of out of tolerance reading.	S U

CUE: When notified as SS, direct candidate to continue the surveillance.

CRITICAL STEP

Proc.Step	TASK ELEMENT 14	STANDARD		Grade		
5.1.8	Provide explanation in Comments Section, SHO-1, Att. 1, p. 16.	Note:	Since no detailed explanation is available, this step is NOT required.	S U		
Comment:						
ı						

Proc.Step	TASK ELEMENT 15	STANDARD	Grade
5.1.9	Check Steam Generator levels sigmas within 4% of each other.	Records readings in "Shift A Readings" column and initials RECRD BY.	S U
Comment:			

Proc.Step	TASK ELEMENT 16	STANDARD	Grade
5.1.10	Check Primary Coolant Flow indications within 5% of scale agreement.	Records readings in "Shift A Readings" column and initials RECRD BY.	S U
Comment:			

Proc	c.Step	TASK ELEMENT 17	STANDARD	Grade
5.1	1.11	Check PZR Code Safety Temperatures.	Records three readings ranging from approx. 130° to 145°F and initials RECRD BY.	S U

Note: These reading are ambient and consistent with plant conditions.

Proc.St	TASK ELEMENT 18	STANDARD	Grade
5.1.12	Check PORV temperature.	Checks TIA-0106 for a reading.	S U

Comment:

Note: Candidate may choose to N/A this reading, since it is not required for current plant conditions.

Proc.Step	TASK ELEMENT 19	STANDARD	Grade
5.1.12	Determines out of tolerance data.	Notes TIA-0106 is failed low (reading 0).	S U
Comment:			

Proc.Step	TASK ELEMENT 20	STANDARD	
5.1.12	Identifies out of tolerance reading.	Circles in RED TIA-0106; initials RECRD BY column and notifies Control Room Supervisor of out of tolerance reading.	S U

Comment:

Note: When notified as CRS, direct candidate to continue the surveillance.

Proc.Step	TASK ELEMENT 21	STANDARD	
5.1.12	Provide explanation in Comments Section, SHO-1, Att. 1, p. 16.	Note: Since not detailed explanation is available, this step is NOT required.	
Comment:			

Proc.Step	TASK ELEMENT 22	STANDARD	
5.1.13	(FINAL ITEM FOR THIS JPM) Check PZR pressure.	Check 4 channel sigmas within agreement by 40 psi; AND check pressure between 2010 - 2100 psia. Records readings in "Shift A Readings" column and initials RECRD BY.	S U
Comment:			

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

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 5.1.1 through and including 5.1.13 on pages 1,2,3,4, and 5 for 'A' Shift. ALL remaining readings have already been taken by another NCO.

SIMULATOR OPERATOR INSTRUCTIONS

- Reset to any full power IC.
- OVERRIDE NI-1/3A Wide Range Log Meter indication to failed low (NI-3 PWR-1 @, 0.75)
- OVERRIDE PIC-0752C to indicate \sim 860# (Value = 0.71)
- TIA-0106 fail low (discharge temp for PORVs) (Value = 0.0)
- Ensure a RED PEN is available to candidate.
- Ensure "A" Channel TMM VHPT setpoint is at normal value.
- Ensure NI @ 100.1%, i.e., accurate.
- OVRD NI-4-PWR-1 @ 1.0.
- Ensure this JPM is administered only with a full power IC (when scheduling with other JPMs). This ensures that PORV tailpipe temperature is a required reading.
- Ensure copies of SHO-1, Attachment 1, page 1, 2, 3, 4, and 5 are available with Section 5.1.14 grayed out.
- Ensure Simulator clipboard copy of SHO-1, Attachment 1 is the current revision.

REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM RO A.3

TITLE: Determine Expected Dose for Equipment Inspection

CANDIDATE:			
EXAMINER:			

JOB PERFORMANCE MEASURE DATA PAGE

Task: Determine Expected	Dose for Equipment In	spection		
Alternate Path:	NONE			
Facility JPM #:	NEW			
K/A: 2.3.10	Importance:	SRO: 3.3	RO:	2.9
K/A Statement: radiati		ocedures to reduce exc	essive levels of	
Task Standard:	Expected dose is calc	culated to be 5 mR.		
Preferred Evaluation Location	n: Simulator	_X_	In Plant	
Preferred Evaluation Method	l:Perform	_X_	Simulate	
References: Health Physic	s Procedure 2.14, "Rad	diological Surveys"		
Validation Time:20_	_ minutes	Time Critical: NO		
Candidate:			_	
Time Start:	Time Finish:			
Performance Time:	minutes			
Performance Rating: SAT_	UNSA	AT		
Comments:				
Examiner:	Signature	Date:		

Tools/Equipment/Procedures Needed:

EXAMINER: Provide the attached "Radiological Area Status Sheet" to candidate upon request.

EXAMINER COPY ONLY

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 a refueling outage. Work is in progress on P-67A Low Pressure Safety Injection Pump. A report has been received in the Control Room that scaffold erecting activities may have damaged the seal cooler and seal injection lines for P-67A.

INITIATING CUES:

You have been assigned the task of inspecting P-67A seal cooler and seal injection lines for damage. This will require close inspection (within 2 feet of pump skid area next to the seal cooler), but you are NOT to cross any contamination boundary. The inspection is expected to require 15 minutes to complete.

Determine the maximum expected radiation dose you will receive for this task.

I	Proc.Step	TASK ELEMENT 1	STANDARD	Grade
		Obtains correct survey map for P-67A.	Obtains "Radiological Area Status Sheet" for East Engineering Safeguards.	S U

CUE: Provide candidate with attached Radiological Area Status Sheet.

Proc.Step	TASK ELEMENT 2	STANDARD	Grade
D	Determine dose rate near the component.	Dose rate determined to be 20 mRem/hr.	S U

Comment:

CUE: Provide candidate with attached photograph of P-67A skid.

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
	Calculates expected dose.	Expected dose calculated to be 5 mRem.	S U
Comment:			

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

The plant is a refueling outage. Work is in progress on P-67A Low Pressure Safety Injection Pump. A report has been received in the Control Room that scaffold erecting activities may have damaged the seal cooler and seal injection lines for P-67A.

INITIATING CUES:

You have been assigned the task of inspecting P-67A seal cooler and seal injection lines for damage. This will require close inspection (within 2 feet of pump skid area next to the seal cooler), but you are NOT to cross any contamination boundary. The inspection is expected to require 15 minutes to complete.

Determine the maximum expected radiation dose you will receive for this task.

SIMULATOR OPERATOR INSTRUCTIONS

Simulator NOT required for this JPM.

REGION III INITIAL LICENSE EXAM JOB PERFORMANCE MEASURE

JPM RO A.4

TITLE: Activate Emergency Response Data System (ERDS) Datalink to the NRC

CANDIDATE:		
EXAMINER:		

JOB PERFORMANCE MEASURE DATA PAGE

Task: Activate Emergency	Response Data System	Datalir	nk to NRC.		
Alternate Path:	NONE				
Facility JPM #:	2000CertJPMRO-A.4	1			
K/A: 2.4.39	Importance:	SRO:	3.1	RO:	3.1
K/A Statement: Knowledge	of RO responsibilities	s in eme	ergency plan im	plementation	
Task Standard: ERDS	Datalink to the NRC l	nas beer	activated.		
Preferred Evaluation Locatio	n: Simulator	_X_		In Plant	
———Preferred Evaluation Method	:Perform	_X_		Simulate	
References: SOP-34, "Pali	sades Plant Computer	(PPC) S	System		
Validation Time:5	minutes	Time (Critical: NO		
Candidate:					
Time Start:	Time Finish:				
Performance Time:	minutes				
Performance Rating: SAT_	UNSA	T			
Comments:					
Examiner:	Signature		Date:		

Tools/Equipment/Procedures Needed:

Also see **Simulator Operator Instructions** (last page of this document).

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READ TO CANDIDATE

DIRECTION TO CANDIDATE:

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INITIAL CONDITIONS:

An emergency event requires the Emergency Response Data System (ERDS) datalink to the NRC to be established.

INITIATING CUES:

You have been directed to activate the ERDS datalink to the NRC in accordance with SOP-34, Section 7.5.2.

Proc.Step	TASK ELEMENT 1	STANDARD	Grade
	Obtains current procedure.	Obtains copy of SOP-34 and refers to Section 7.5.2.	S U
Comment:			

Proc.Step	TASK ELEMENT 2	STANDARD	Grade
7.5.2.a	Select the EMERGENCY, OFFNORM, POST TRIP menu from the Main Menu.	Enters EMERGENCY menu from the Main Menu.	
Comment:			

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
7.5.2.b	Select ERDS ACTIVATION & STATUS	ERDS ACTIVATION & STATUS selected from EMERGENCY menu.	S U
Comment:			

Proc.Step	TASK ELEMENT 4	STANDARD	Grade
7.5.2.c	Select DATALINK (ON/OFF) square.	DATALINK (ON/OFF) square selected.	S U
Comment:			

Proc.Step	TASK ELEMENT 5	STANDARD	
7.5.2.d	Turn ERDS on.	Types "1" to turn ERDS datalink on.	S U
Comment:	L STEP		

Proc.Step	TASK ELEMENT 6	STANDARD	
7.5.2.e	Depress the UPDATE hardkey, and then depress the RETURN key.	UPDATE hardkey depressed, then RETURN key depressed.	
Comment:			
CRITICA	LSTEP		

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

An emergency event requires the Emergency Response Data System (ERDS) datalink to the NRC to be established.

INITIATING CUES:

You have been directed to activate the ERDS datalink to the NRC in accordance with SOP-34, Section 7.5.2.

SIMULATOR OPERATOR INSTRUCTIONS

- Reset to any IC.
- No special setup required.

REGION III INITIAL LICENSE EXAM JOB PERFORMANCE MEASURE

JPM SRO A.1-1

TITLE: Verify Calculation of Compensation Required for an Untrippable Control Rod

SRO	IPM	A 1	I - 1

EXAMINER:		
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JOB PERFORMANCE MEASURE DATA PAGE

Task: Verify Calcula	ition of Comp	ensation Requ	ired for a	n Untripp	pable Control Rod	l
Alternate Path:	NON	Е				
Facility JPM #:	RTB-	02N.JPM				
K/A: 001A2.03	Impoi	tance:	SRO:	4.2	RO:	3.5
K/A Statement:	operations on procedures to	the CRDS, and correct, contr	nd (b) bas ol, or mit	sed on the	e following malfu ose predictions, us consequences of r misaligned rod.	se
Task Standard:	EM-0 improperly.	4-08 Attachm	ent 1 revi	ewed and	determined to be	e performed
Preferred Evaluation I	Location:	Simulator	_X_		In Plant	
Preferred Evaluation 1	Method:Perfo	rm	_X_		Simulate	
References: EM-04		n Margin Requical Data Boo		3		
Validation Time:	20 minu	ıtes	Time (Critical: 1	NO	
Candidate:						
Time Start:		Time Finish	:			
Performance Time:		minutes				
Performance Rating:	SAT	UNS	SAT			
Comments:						
Examiner: PALISADES NUCLEAR PL	ANT	D 44	of 01]	Date:	
I ALIBADES NUCLEAR PL	ATT I	Page 44	01 0 1			July 2003

Tools/Equipment/Procedures Needed:

Calculator Ruler

Also see **Simulator Operator Instructions** (last page of this document).

EXAMINER COPY ONLY

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:

Rod #6 is inoperable and fully withdrawn. It is believed that the rod is untrippable. Burnup is 6955 MWD/MTU. Reactor power is 40%, PCS Boron is 836 ppm. All rods are out, and equilibrium Xenon conditions exist. Reactor Engineering is NOT available.

INITIATING CUES:

You have directed the Reactor Operator to determine the compensation for shutdown margin required for Control Rod #6 utilizing EM-04-08. Review the calculation using the given Attachment 1 of EM-04-08.

Proc.Step	TASK ELEMENT 1	STANDARD		
	Obtain current procedure.	Obtains EM-04-08 and refers to Section 7.2.3 and Attachment 1.Obtains Technical Data Book.	S U	
Comment:				

Proc.Step	TASK ELEMENT 2	STANDARD	Grade
Att. 1 Sect.1	Verifies data in Section 1 for Untrippable Control Rod Identification.	Verifies Group "A", Number "6", Condition "Untrippable" entered in Section 1.	S U
Comment:			•

Proc.Step	TASK ELEMENT 3	STANDARD	Grade		
Sect. 2	Verifies data in Section 2 for Worth of Untrippable Rod	Refers to TDB Fig. 1.1 Verifies Worth of Untrippable rod entered as 1.19.	S U		
	Comment: TDB = Technical Data Book				

Proc.Step	TASK ELEMENT 4	STANDARD	Grade		
Sect. 3	Verifies data in Section 3 for Source of Untrippable Control Rod Worth.	Verifies source of data entered as "Technical Data Book", Figure 1.1.	S U		
Comment:	Comment:				

SRO JPM A.1-1

Proc.Step	TASK ELEMENT 5	STANDARD	Grade
4.A	Verifies data in Section 4.A for Current Cycle Burnup.	Verifies "6955" entered in Section 4.A.	S U

Comment:

Note: Data given in Initial Conditions.

Proc.Step	TASK ELEMENT 6	STANDARD	Grade
4.B	Verifies data in Section 4.B for Current Reactor Power Level.	Verifies "40" entered in Section 4.B.	S U

Comment:

Note: Data given in Initial Conditions.

Proc.Step	TASK ELEMENT 7	STANDARD	Grade
4.C	Verifies data in Section 4.C for Control Rod Worth Inserted into Core.	Verifies "0" entered as Worth, Group as "4", and Inches as "131".	S U

Comment:

Note: Data given as "all rods out" in Initial Conditions.

Proc.Step	TASK ELEMENT 8	STANDARD	Grade			
4.D	Verifies data in Section 4.D for PCS Boron Concentration.	Verifies "836" entered in Section 4.D.	S U			
Comment:	Comment:					

Proc.Step	TASK ELEMENT 9	STANDARD	Grade
1 5 H: I	Verifies data in Section 5.E for Worth of All Control Rods.	Refers to TDB, Fig. 1.1. Verifies "7.08" entered in Section 5.E.	S U
Comment:			

Proc.Step	TASK ELEMENT 10	STANDARD	Grade			
5.F	Verifies data in Section 5.F for Maximum Worth of Stuck Rod.	Verifies Worth entered as "1.19" in 5.F.	S U			
Comment:	Comment:					

Proc.Step	TASK ELEMENT 11	STANDARD	Grade
5.G	Verifies data in Section 5.G for PCS Boron at 100% Power.	Refers to TDB Fig. 6.1. Verifies "780" entered in 5.G	S U
Comment:			

Proc.Step	TASK ELEMENT 12	STANDARD	Grade
5.Н	Verifies data in Section 5.H for Power Defect at 100% Power.	Refers to TDB Fig. 3.2. Verifies "1.565" entered in 5.H.	S U
Comment:			

Proc.Step	TASK ELEMENT 13	STANDARD	Grade
5.I	Verifies data in Section 5.I for Power Defect.	Verifies calculated value of "0.626" entered in 5.I.	S U
Comment:			

Proc.Step	TASK ELEMENT 14	STANDARD	
6.K	Verifies data in Section 6.K for Net Amount of Shutdown Margin.	Verifies calculated value of "2.728" entered in 6.K.	S U
Comment:			
ĺ			

Proc.Step	TASK ELEMENT 15	STANDARD	Grade
6.L	Verifies data in Section 6.L for Worth of Untrippable Control Rod.	Verifies "1.19" entered in 6.L.	S U
Comment:			

Note: Previously determined data (Section 2).

Proc.Step	TASK ELEMENT 16	STANDARD	
6.M	Verifies data in Section 6.M for Excess Shutdown Margin.	Calculates value of "1.538" and determines value has been entered INCORRECTLY as "0.538".	S U
Comment:			

Note:

If candidate returns the Attachment to you at this point, provide CUE: "Note the error and continue your review to determine if there are any additional errors."

CRITICAL STEP

Proc.Step	TASK ELEMENT 17	STANDARD	
8.R	Verifies data in Section 8.R for PPC PDIL.	Refers to TDB, Fig. 1.9.Verifies Group as "4", and Inches as "25" entered in 8.R.	S U
Comment: NOTE: Se	ction 7 is NOT required.		

Proc.Step	TASK ELEMENT 18	STANDARD	
8. S	Verifies data in Section 8.S for Control Rod Position Corresponding to Excess Shutdown Margin.	 Refers to TDB, Fig. 1.3. Determines that actual value should be Group 3 at 8 inches and NOT as entered on the completed Attachment. 	S U
Comment: Note: E CRITICA	rror carried forward from previous error.		

Proc.Step	TASK ELEMENT 19	SK ELEMENT 19 STANDARD	
8.T	Verifies data in Section 8.T for PDIL for Untrippable Control Rod Condition.	Determines value should be Group 4 at 25 inches and NOT as entered on the completed Attachment.	S U
Comment:			

Note: These values previously determined.

CRITICAL STEP

Proc.Step	TASK ELEMENT 19	STANDARD	Grade
	Return attachment to Reactor Operator.	Attachment returned to Reactor Operator for corrections.	S U
Comment:			

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

Rod #6 is inoperable and fully withdrawn. It is believed that the rod is untrippable. Burnup is 6955 MWD/MTU. Reactor power is 40%, PCS Boron is 836 ppm. All rods are out, and equilibrium Xenon conditions exist. Reactor Engineering is NOT available.

INITIATING CUES:

You have directed the Reactor Operator to determine the compensation for shutdown margin required for Control Rod #6 utilizing EM-04-08. Review the calculation using the given Attachment 1 of EM-04-08.

SIMULATOR OPERATOR INSTRUCTIONS

- Simulator not required for this JPM.
- Ensure Technical Data Book is available. Insert a new Figure 1.10 that shows burnup at 6955MWd/MTU.

REGION III INITIAL LICENSE EXAM JOB PERFORMANCE MEASURE

JPM SRO A.1-2

TITLE: Perform PCS Heatup Determination

CANDIDATE:			
EXAMINER: _	 		

JOB PERFORMANCE MEASURE DATA PAGE

Task: Perform PCS Heatup	Determination			
Alternate Path:	NONE			
Facility JPM #:	JPMRO-A.1-120000	Cert		
K/A: 2.1.25	Importance:	SRO: 3.	1 RO:	2.8
K/A Statement:	Ability to obtain and s, monographs, and tal	-	tation reference mater contain performance of	
Task Standard: minut	Allowable Shutdownes (40 minutes to 48 m	_	utage time calculated	to be 44
Preferred Evaluation Location	on: Simulator	_X_	In Plant	
Preferred Evaluation Method	l:Perform	_X_	Simulate _	
References: SOP-3, "Safe	•		ng System" lown Cooling"	
Validation Time:15_	_ minutes	Time Cri	tical: NO	
Candidate:				_
Time Start:	Time Finish:		_	
Performance Time:	minutes			
Performance Rating: SAT_	UNS.	AT _		
Comments:				
Examiner:	Signature		Date:	

EXAMINER COPY ONLY

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:

Fifteen days after a plant shutdown, PCS temperature is 120°F. The Reactor cavity is flooded to a level of 633'. The Pressurizer manway is removed. Shutdown Cooling is in operation, but must be shutdown for the maximum time allowable.

INITIATING CUES:

You have been directed to determine how long (in minutes) Shutdown Cooling may be shutdown in accordance with SOP-3, Section 7.3.7.

Proc.Step	TASK ELEMENT 1	STANDARD	
	Obtain current copy of procedure.	Obtains SOP-3, and refers to Section 7.3.7.	S U
Comment:			

Proc.Step	TASK ELEMENT 2	STANDARD	
7.3.7.a	Determine "Approximate Time to 200°F" time from appropriate curve in ONP-17 and convert to hours.	Refers to ONP-17, Attachment 1. Uses curve labeled Refueling Cavity Flooded to 632' to determine time to 200°F. Uses "15 Days" curve and 120°F point and determines time to 200°F is ~3 hours CRITICAL STEP	S U
Comment:			

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
7.3.7.b	Determine PCS heatup rate.	Heatup rate calculated to be ~27°F / hour.	S U

Comment:

NOTE: Heatup rate is calculated by dividing 80°F (200°F - 120°F) by 3 hours.

CRITICAL STEP

Proc.Step	TASK ELEMENT 4	STANDARD	Grade
7.3.7.c	Determine allowable Shutdown Cooling outage time.	Calculates allowable Shutdown Cooling outage time to be 44 minutes (40 - 48 minutes).	S U

Comment:

NOTE: Allowable outage time calculated by dividing 20°F (maximum allowed heatup) by 27°F / hour (previously calculated heatup rate) and converting to minutes.

CRITICAL STEP

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

Fifteen days after a plant shutdown, PCS temperature is 120°F. The Reactor cavity is flooded to a level of 633'. The Pressurizer manway is removed. Shutdown Cooling is in operation, but must be shutdown for the maximum time allowable.

INITIATING CUES:

You have been directed to determine how long (in minutes) Shutdown Cooling may be shutdown in accordance with SOP-3, Section 7.3.7.

SIMULATOR OPERATOR INSTRUCTIONS

Simulator not required for this JPM.

REGION III INITIAL LICENSE EXAM JOB PERFORMANCE MEASURE

JPM SRO A.2

TITLE: Hot Work Permit Authorization

CANDIDATE:				
EXAMINER:				

JOB PERFORMANCE MEASURE DATA PAGE

Task: Hot Work Permit A	uthorization.				
Alternate Path:	N/A				
Facility JPM #:	NEW				
K/A: 2.4.25	Importance:	SRO:	3.4	RO:	2.9
K/A Statement: Know	wledge of fire protection	on proced	ures.		
Task Standard: form	Hot Work Permit is	NOT app	oroved	due to errors o	n the permit
Preferred Evaluation Locat	ion: Simulator	_X_		In Plant	
Preferred Evaluation Metho	od:Perform	_X_		Simulate	
References: FPIP-7, "Fir	e Prevention Activities	3"			
Validation Time:10	minutes	Time (Critical	: NO	
Candidate:					
Time Start:	Time Finish	:			
Performance Time:	minutes				
Performance Rating: SAT	UNS	AT		_	
Comments:					
Examiner:	Signature			Date:	

Tools/Equipment/Procedures Needed:

NOTE: Provide candidate with a completed Hot Work Permit request for review.

EXAMINER COPY ONLY

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 in MODE 5 for a refueling outage. One of the cable tray supports above LCC-12 has been identified as needing repair. There is no other work in progress in the Cable Spreading Room.

INITIATING CUES:

As the SRO in the Work Control Center, you have been given a Hot Work Permit request for your review and authorization.

Proc.Step	TASK ELEMENT 1	STANDARD	Grade		
	Obtains current procedure.	Obtains FPIP-7 and refers to Section 9.2 and 9.3.	S U		
	Comment: NOTE: Acceptable to refer to any or all procedure sections.				

Proc.Step	TASK ELEMENT 2	STANDARD	Grade			
		Review the Hot Work Permit and notes at least one the following:				
	Conducts Hot Work Permit review.	Fire Watch listed as "None required" is NOT acceptable. At least one dedicated Fire Watch is required.	S U			
		 Portable Fire Extinguishers Required box is checked Yes, but information on Type, Fire Ext. No., and Last Inspection Date is missing. 				
Comment:						
Note:	It is acceptable for the candidate to identify only one or more than one error. The key factor is to NOT approve the permit for any valid reason. Candidate may terminate the review as soon as the first error is detected - this is also acceptable.					
CRITICA	LSTEP					

Proc.Step	TASK ELEMENT 3	STANDARD	Grade			
	Evaluates Hot Work Permit request for authorization.	Hot Work Permit request is NOT approved without corrections being made.	S U			
Comment:						
CRITICA	L STEP					

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

The plant is in MODE 5 for a refueling outage. One of the cable tray supports above LCC-12 has been identified as needing repair. There is no other work in progress in the Cable Spreading Room.

INITIATING CUES:

As the SRO in the Work Control Center, you have been given a Hot Work Permit request for your review and authorization.

SIMULATOR OPERATOR INSTRUCTIONS

Use of Simulator NOT required.

MAKE SURE that the KEY is NOT provided to candidate. Prepare a FPIP-7, Attachment 3, per the key, but MINUS the identification of errors. These two errors are identified on the KEY by being enclosed in parentheses.

REGION III

INITIAL LICENSE EXAM

JOB PERFORMANCE MEASURE

JPM SRO A.3

TITLE: Determine Expected Dose for Equipment Inspection

CANDIDATE:	

SRO	JPM	۸ 3
SKU	JPW	A

EXAMINER:	
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JOB PERFORMANCE MEASURE DATA PAGE

Task: Determine Expected	Dose for Equipment In	spection		
Alternate Path:	NONE			
Facility JPM #:	NEW			
K/A: 2.3.10	Importance:	SRO: 3.3	RO:	2.9
K/A Statement: radiati		ocedures to reduce exc	essive levels of	
Task Standard:	Expected dose is calc	culated to be 5 mR.		
Preferred Evaluation Location	on: Simulator	_X_	In Plant	
Preferred Evaluation Method	l:Perform	_X_	Simulate	
References: Health Physic	s Procedure 2.14, "Rad	diological Surveys"		
Validation Time:20_	_ minutes	Time Critical: NO		
Candidate:				
Time Start:	Time Finish:			
Performance Time:	minutes			
Performance Rating: SAT_	UNSA	ΛT		
Comments:				
Examiner:	Signature	Date:		

Tools/Equipment/Procedures Needed:

EXAMINER: Provide the attached "Radiological Area Status Sheet" to candidate upon request.

EXAMINER COPY ONLY

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 a refueling outage. Work is in progress on P-67A Low Pressure Safety Injection Pump. A report has been received in the Control Room that scaffold erecting activities may have damaged the seal cooler and seal injection lines for P-67A.

INITIATING CUES:

You have been assigned the task of inspecting P-67A seal cooler and seal injection lines for damage. This will require close inspection (within 2 feet of pump skid area next to the seal cooler), but you are NOT to cross any contamination boundary. The inspection is expected to require 15 minutes to complete.

Determine the maximum expected radiation dose you will receive for this task.

I	Proc.Step	TASK ELEMENT 1	STANDARD	Grade
		Obtains correct survey map for P-67A.	Obtains "Radiological Area Status Sheet" for East Engineering Safeguards.	S U

Comment:

CUE: Provide candidate with attached Radiological Area Status Sheet.

Proc.Step	TASK ELEMENT 2	STANDARD	Grade
D	Determine dose rate near the component.	Dose rate determined to be 20 mRem/hr.	S U

Comment:

CUE: Provide candidate with attached photograph of P-67A skid.

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
	Calculates expected dose.	Expected dose calculated to be 5 mRem.	S U
Comment:			

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

The plant is a refueling outage. Work is in progress on P-67A Low Pressure Safety Injection Pump. A report has been received in the Control Room that scaffold erecting activities may have damaged the seal cooler and seal injection lines for P-67A.

INITIATING CUES:

You have been assigned the task of inspecting P-67A seal cooler and seal injection lines for damage. This will require close inspection (within 2 feet of pump skid area next to the seal cooler), but you are NOT to cross any contamination boundary. The inspection is expected to require 15 minutes to complete.

Determine the maximum expected radiation dose you will receive for this task.

SIMULATOR OPERATOR INSTRUCTIONS

Simulator NOT required for this JPM.

REGION III INITIAL LICENSE EXAM JOB PERFORMANCE MEASURE

JPM SRO A.4

TITLE: Classify Event and Determine PARs

CANDIDATE:			
EXAMINER:			

SRO JPM A.4

JOB PERFORMANCE MEASURE DATA PAGE

Task: Classify a	an Event and	Determine PARs -	Protective Act	ion Recommen	dations
Alternate Path:		N/A			
Facility JPM #:		Bank 2001NRC			
K/A: 2.4.41, 2.	4.44	Importance:	SRO: 4.1,	4.0	RO:
K/A Statement:	(2.4.41) Kno classificatio	(2.4.44) K			s and protective action
Task Standard:		fied as a General E miles in Areas 1 a		PARs are evacı	nation of 2 mile
Preferred Evalua	tion Location	: Simulator	_X_	In Plant	
Preferred Evalua	tion Method:	Perform	_X_	Simulate	
	I-1, Emergen	· · · · · · · · · · · · · · · · · · ·	nunications and		ions for Offsite
Validation Time:	30	minutes	Time Critic	cal: YES	
Candidate:					
Time Start:		Time Finis	h:		
Performance Tin	ne:	minutes	3		
Performance Rat	ing: SAT	UN	SAT		
Comments:					
Examiner:		Signature		Date:	

EXAMINER COPY ONLY

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. The Reactor has tripped.
- 2. A LOCA is in progress.
- 3. Pressurizer level is offscale LOW.
- 4. PCS pressure is 100 psia.
- 5. CETs indicate 600°F.
- 6. Total LPSI/HPSI flow is inadequate per EOP Supplement 4.
- 7. SIRW tank level is 38% and lowering slowly.
- 8. Containment isolation has occurred as designed and EOP Supplement 6 for Containment Isolation is in progress.
- 9. An actual release is NOT occurring through the plant stack or steam dumps.
- 10. Containment Gamma Monitors (RIA-2321 and 2322) are indicating 5E4R/hr.
- 11. Reactor Vessel Level Monitoring System (RVLMS) indicates ALL red lights
- 12. Failed fuel analysis is in progress with no results to report yet.
- 13. Obtained Meteorological Data is as follows:
 - \bullet ON = 0.0
 - $\bullet \qquad QI = 0.0$
 - Wind Speed = 1.1
 - Stability Class = G
 - Wind Direction = 235 (from)
 - Weather is clear with no precipitation.

INITIATING CUES:

During activation of the Site Emergency Plan, you are the Shift Supervisor (acting as the Site Emergency Director). You are to classify the event given the above information and determine any required Protective Action Recommendations, and complete an Event Notification Form. No previous event declaration has been made. This JPM is Time Critical.

Proc.Step	TASK ELEMENT 1	STANDARD	Grade		
	Locates procedure to determine Emergency Classification.	Locates EI-1 and refers to Attachment 1.	S U		
Comment:	Comment:				

Proc.Step	TASK ELEMENT 2	STANDARD	Grade
	Refers to "Fission Product Barriers/Fuel Damage"	Refers to page 7 of EI-1, Attachment 1.	S U
Comment:			

Proc.Step	TASK ELEMENT 3	STANDARD	Grade
	Determines status of fission product barriers.	 Refers to Table 1 Determines a LOSS of Fuel Cladding (based on Containment Gamma monitors readings. Determines a LOSS of PCS Barrier (based on leak rate and PCS subcooling). Determines a POTENTIAL LOSS of Containment Barrier (based on Containment Gamma monitors readings). 	S U

Comment:

CUE: If candidate refers to EI-11: "That procedure will be performed by the TSC."

Proc.Step	TASK ELEMENT 4	STANDARD	Grade		
	Declares correct Emergency Classification.	Declares a GENERAL EMERGENCY based on status of fission product barriers (loss of TWO and potential loss of THIRD).	S U		
Comment:					
CRITICA	CRITICAL STEP				

Proc.Step	TASK ELEMENT 5	STANDARD	Grade
	Prepares Emergency Actions/Notifications form.	Obtains EI-1, Attachment 2 and fills out per attached KEY.	S U

Comment:

Note: (Filling out this form is NOT required for this JPM; however a key is attached in case candidate fills out the form.)

It is NOT the intent of this JPM to have candidate actually make the notifications.

Pr	oc.Step	TASK ELEMENT 6	STANDARD	Grade
		Prepares Event Notification Form.	Obtains EI-3, Attachment 1 and fills out per attached KEY.	S U

Comment:

Note: KEY is attached to this JPM.

EI-3, Attachment 1.1, "Palisades Event Technical Data Sheet" is NOT required during this JPM.

Proc.Step	TASK ELEMENT 7	STANDARD	Grade
	Determines Protective Action Recommendations (PARs).	Obtains EI-6.13, Attachment 1 and determines: Severe core damage exists. Evacuate 2 Mile Radius and 5 mile in Affected Areas (1 and 2).	S U
Comment:			

Proc.Step	TASK ELEMENT 8	STANDARD	Grade			
	Completes filling out Palisades Event Notification Form.	Palisades Event Notification Form completely filled per attached KEY.	S U			
	Comment: CRITICAL STEP					

END OF TASK

CANDIDATE CUE SHEET

(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

CANDIDATE CUE SHEET

INITIAL CONDITIONS:

- 1. The Reactor has tripped.
- 2. A LOCA is in progress.
- 3. Pressurizer level is offscale LOW.
- 4. PCS pressure is 100 psia.
- 5. CETs indicate 600°F.
- 6. Total LPSI/HPSI flow is inadequate per EOP Supplement 4.
- 7. SIRW tank level is 38% and lowering slowly.
- 8. Containment isolation has occurred as designed and EOP Supplement 6 for Containment Isolation is in progress.
- 9. An actual release is NOT occurring through the plant stack or steam dumps.
- 10. Containment Gamma Monitors (RIA-2321 and 2322) are indicating 5E4R/hr.
- 11. Reactor Vessel Level Monitoring System (RVLMS) indicates ALL red lights
- 12. Failed fuel analysis is in progress with no results to report yet.
- 13. Obtained Meteorological Data is as follows:
 - $\bullet \qquad \text{QN} = 0.0$
 - OI = 0.0
 - Wind Speed = 1.1
 - Stability Class = G
 - Wind Direction = 235 (from)
 - Weather is clear with no precipitation.

INITIATING CUES:

During activation of the Site Emergency Plan, you are the Shift Supervisor (acting as the Site Emergency Director). You are to classify the event given the above information and determine any required Protective Action Recommendations, and complete an Event Notification Form. No previous event declaration has been made. This JPM is Time Critical.

SIMULATOR OPERATOR INSTRUCTIONS

- No Simulator setup required.
- It is preferred that this JPM be done separately from the simulator. If, by chance, candidate IS in the simulator while doing this JPM, THEN ensure the IC does NOT have a release in progress.