# ADMINISTRATIVE TOPICS OUTLINE FORM ES-301-1

	Facility: WNP-2 Date of examination: 10/23/00			
	Examination level: SRO			
Administrative		Describe the method of evaluation:		
	Topic/Subject	1. ONE admin JPM, OR		
	Description	2. TWO Administrative questions		
A.1	Mode Changes	2.1.12 – Ability to apply Tech Specs for a system.		
		JPM – Determination of Mode Change – Given a set of plant		
		conditions with equipment out of service, determine if Mode		
	JPM	change is allowed. <b>Browns Ferry OE 11029</b>		
	Shift Staffing	2.1.4 – Knowledge of Shift Staffing requirements.		
	requirements	1 <sup>st</sup> question – Given plant conditions and a list of personnel, can the		
		oncoming shift relieve the outgoing shift and justifications for the		
		decision.		
		2 <sup>nd</sup> question – Who is allowed to operate controls in the control		
	2 questions	room during power operations.		
A.2	Use of P+IDs	2.1.24 – Ability to obtain and interpret station electrical and		
		mechanical drawings.		
		JPM - Given a scenario with SM-7 powered from the Startup		
		Transformer, using EWDs explain why LPCS-P-1 will not start by		
	177.4	arm and depress		
	JPM	WNP-2 PER 298-1094		
A.3	Control of Radiation	2.3.11 – Ability to control Radiation Release.		
	Release	JPM – Determination of Shelter or Evacuation including the CNF		
		form for a changing PAR – Conditions will be given for an		
	IDM	emergency condition with a release underway. The decision to		
A.4	JPM Emergency Action Levels	evacuate or shelter will have to be made.		
A.4	Emergency Action Levels and Classifications.	2.4.40 – Knowledge of SRO responsibilities in emergency plan		
	and Classifications.	implementation.  JPM – Turn over the Emergency Director duties to oncoming		
		Emergency Director – This JPM will be performed in conjunction		
	JPM	with one of the Dynamic Scenarios.		
	J1 1V1	with one of the Dynamic Sections.		

Appendix C	Job Performance Measure	Form ES-C-1
	<b>ADMINJPM SA.1JPM rev 2</b>	

Facility: WNP-2	Task No: SRO-0225-P-PLA
Task Title: Determination of Mode Change	Job Performance Measure No: SA.1JPM
	Rev 1
K/A Reference: 2.4.40 2.3/4.0	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Perform – Simulator/Control Room

# JPM SETUP INFORMATION

**Initial Conditions:** 

The plant is in Mode 4. A startup is underway following a short maintenance outage. The following conditions exist:

- SRMs have normal indications
- All IRM indications are normal on Range 1, except IRM-A which has an upscale trip and is bypassed
- The ECP has been calculated and entered on the control rod sequence pull sheet in the control room.
- RPS is reset.
- The Barrier Impairment Log has no Mode change limiting conditions
- The Surveillance in Progress Log shows no mode change limiting conditions
- RCC-V-5 has just gone out of service in the open position due to a failed motor-operator
- A search of the LCO/INOP/RFO log shows no limiting conditions for a mode change
- All surveillances are complete and up to date
- A panel walkdown has been completed
- RHR is secured in the LPCI standby lineup with all valves positioned as required
- RRC is in operation at 15 hz
- Containment was not opened or ventilated

Task Standard: Evaluate plant conditions and evaluate all variances for

applicability prior to placing the MODE Switch to RUN. The Change to MODE 2 is not allowed due to the failed RCC-V-5.

Required Materials: N/A

General References: PPM 3.1.2 rev 51, pages 17-20, LCS 1.6.1.3 rev 20, TS 3.6.1.3

Initiating Cue: The plant is ready to enter MODE 2 from MODE 4. Complete the

given PPM 3.1.2 from step 5.1.21 through 5.1.44 to evaluate plant conditions and determine if the change to MODE 2 is allowed.

Notify the Shift Manager with your determination and

justifications.

Time Critical Task: NO

Appendix C	pendix C Job Performance Measure	
	<b>ADMINJPM SA.1JPM rev 2</b>	

Validation Time: 20 minutes

Simulator ICs: N/A

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup Instructions:

N/A

# PERFORMANCE INFORMATION

# START TIME:

Crisical Chara. VEC *				
Critical Step: YES *	Critical Step: YES *			
Performance Step: 1	Complete PPM 3.1.2 steps 5.1.21 through 5.1.44. The following determinations should be made:			
	<ol> <li>IRM-A upscale does not prevent placing the MODE Switch in the RUN position. Only 3 per channel are required in MODE 2.</li> </ol>			
	2. *RCC-V-5 is a containment isolation valve and cannot remain open with the motor operator inoperable. RCC-V-5 or the other isolation valve inline has to be closed. This Tech Spec does not allow the dependence on an action statement when changing MODES.			
Standard:	Information is evaluated correctly and the fact that the MODE change is not allowed due to RCC-V-5 inoperable in the open position.			
Comment: SAT / UNSAT				

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

# Appendix C Job Performance Measure ADMINJPM SA.1JPM rev 2 Form ES-C-1

VERIFICATION OF COMPLETION			
JPM Number:	SA.1JPM rev 1		
E			
Examinee's Name:			
Examiner's Name:			
Date Performed:			
Facility Evaluator:			
Number of Attempts:			
Time to Complete:			

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: Evaluate plant conditions and evaluate all variances for

> applicability prior to placing the MODE Switch to RUN. The Change to MODE 2 is not allowed due to the failed RCC-V-5.

Required Materials: N/A Safety Equipment: N/A

General References: PPM 3.1.2 rev 51, pages 17-20, LCS 1.6.1.3 rev 20, TS 3.6.1.3

Time Critical Task:

NO

**Initial Conditions:** The plant is in Mode 4. A startup is underway following a short

maintenance outage. The following conditions exist:

- SRMs have normal indications
- All IRM indications are normal except IRM-A which has an upscale trip and is bypassed
- The ECP has been calculated and entered on the control rod sequence pull sheet in the control room.
- RPS is reset.
- The Barrier Impairment Log has no Mode change limiting conditions
- The Surveillance in Progress Log shows no mode change limiting conditions
- RCC-V-5 has just gone out of service in the open position due to a failed motor-operator
- A search of the LCO/INOP/RFO log shows no limiting conditions for a mode change
- All surveillances are complete and up to date
- RHR is secured in the LPCI standby lineup with all valves positioned as required
- RRC is in operation at 15 hz
- Containment was not opened or ventilated

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# Job Performance Measure ADMINJPM SA.1JPM rev 2

Form ES-C-1

## **INITIATING CUE**

The plant is ready to enter MODE 2 from MODE 4. Complete the given PPM 3.1.2 from step 5.1.21 through 5.1.44 to evaluate plant conditions and determine if the change to MODE 2 is allowed. Notify the Shift Manager with your determination and justifications.

# INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: SRO-0225-P-PLA Validation Time: 20 minutes

NUREG 1123 Reference: 2.4.40 2.3/4.0 Time Critical: No

Location: Simulator/Control Room Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 7/31/00

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Question No.	The plant is operating at rated power. Control Room staffing is as follows:			
SA.1-1				
	Shift Manager	Out of the control	room, on a plant tour.	
	CRS	Control room		
	CRO1	Control room		
	CRO2	Control room		
	STA – Non licensed	Control room		
	At 0300, the CRS sudo	denly passes out and c	cannot be revived.	
	What action is required concerning control room staffing and when does the action have to be taken?			
	CLOSED REFERENCE			
	ANSWER:	The Shift Manager room immediately	r must be called to return to the control.	
Response:				
SAT / UNSAT				
2.1.4 2.3/3.4	6933		TS 5.1.2, 5.2.2.B	

page 1 00sa1r2

Question No. SA.1-2	-	The plant is operating at 80% power for economic dispatch. The following conditions exist:		
		The Shift Manager is out of the An inactive licensed SRO is a The CRS is in the restroom.	ne control room. under instruction as the CRS.	
	BPA has called and asked that power be increased to 1100 MWe. The CRS under instruction has directed the CRO to increase power to 1100 MWe.			
	Is the CRS under instruction allowed to direct this power increase? Justify your answer.			
	CLOSED REFERENCE			
	ANSWER:	_ , , , , , , , , , , , , , , , ,	on has an inactive SRO license and f reactor controls without the direct icensed SRO.	
Response:		1		
SAT / UNSAT				
2.1.1 3.7/3.8		6076	PPM 1.3.1 rev 46, page 25.	

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Question No.	The plant is operating at rated power. Control Room staffing is as follows:		
SA.1-1			
	Shift Manager	Out of the control room, on a plant tour.	
	CRS	Control room	
	CRO1	Control room	
	CRO2	Control room	
	STA – Non licensed	Control room	
	At 0300, the CRS suddenly passes out and cannot be revived.		
	What action is required concerning control room staffing and when does the action have to be taken?		
	CLOSED REFERENCE		

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Question No. SA.1-2	The plant is operating at 80% power for economic dispatch. The following conditions exist:		
	The Shift Manager is out of the control room. An inactive licensed SRO is under instruction as the CRS. The CRS is in the restroom.		
	BPA has called and asked that power be increased to 1100 MWe. The CRS under instruction has directed the CRO to increase power to 1100 MWe.  Is the CRS under instruction allowed to direct this power increase? Justify your answer.		
	CLOSED REFERENCE		

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#### STUDENT INFORMATION

**Initial Conditions:** 

The plant is in Mode 4. A startup is underway following a short maintenance outage. The following conditions exist:

- SRMs have normal indications
- All IRM indications are normal on Range 1, except IRM-A which has an upscale trip and is bypassed
- The ECP has been calculated and entered on the control rod sequence pull sheet in the control room.
- RPS is reset.
- The Barrier Impairment Log has no Mode change limiting conditions
- The Surveillance in Progress Log shows no mode change limiting conditions
- RCC-V-5 has just gone out of service in the open position due to a failed motor-operator
- A search of the LCO/INOP/RFO log shows no limiting conditions for a mode change
- All surveillances are complete and up to date
- A panel walkdown has been completed
- RHR is secured in the LPCI standby lineup with all valves positioned as required
- RRC is in operation at 15 hz
- Containment was not opened or ventilated

#### **INITIATING CUE**

The plant is ready to enter MODE 2 from MODE 4. Complete the given PPM 3.1.2 from step 5.1.21 through 5.1.44 to evaluate plant conditions and determine if the change to MODE 2 is allowed. Notify the Shift Manager with your determination and justifications.

Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – SA3JPM rev 2	

Facility: WNP-2	Task No:
Task Title: Calculate Projected dose and	Job Performance Measure No: SA.3JPRM
make Protective action recommendations	rev 1
K/A Reference: 2.3.11 2.7/3.2	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Perform - Simulator

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# JPM SETUP INFORMATION

**Initial Conditions:** The plant was operating at 100% power when a transient

occurred. The reactor scrammed 30 minutes ago. The following

conditions exist:

• Wind Speed – 2 mph

• Wind Direction – from 300°

• A release is underway from the turbine building with TB HVAC flow rate of 360000 cfm

• The Turbine Building Intermediate Range Monitor indicates 7

• The release is expected to last 3 hours.

Task Standard: Projected dose is calculated to correctly identify the minimum

PARs for a General Emergency and the correct section is

evacuated.

Required Materials: A computer terminal with QEDPS

General References: PPM 1.3.8 rev, 19 page 6 and 7

**Initiating Cue:** The plant was operating at 100% power when a transient

occurred. The reactor scrammed 30 minutes ago. The following

conditions exist:

• Wind Speed – 2 mph

• Wind Direction – from 300°

• A release is underway from the turbine building with TB

HVAC flow rate of 360000 cfm

• The Turbine Building Intermediate Range Monitor indicates 7

• The release is expected to last 3 hours.

• Stability class = E

You are directed to calculate a projected dose using QEDPS and complete the CNF Form section 5 with the correct PARs. Notify

me when you have completed the CNF Form section 5.

Time Critical Task: NO

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Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – SA3JPM rev 2	

Validation Time: 15 minutes

Simulator ICs: N/A

Malfunctions/Remote N/A

Triggers:

Overrides: N/A

Special Setup Instructions:

N/A

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# PERFORMANCE INFORMATION

# START TIME:

Critical Step: Yes	
Performance Step: 1	Turn on computer equipment as needed.
Standard:	Equipment is on and ready for software start.
Comment:	
SAT / UNSAT	

Critical Step: Yes	
Performance Step: 2	Start QEDPS by double clicking on QEDPS Icon.
Standard:	Double click on the icon.
Comment:	
SAT / UNSAT	

Critical Step: Yes	
Performance Step: 3	Select Turbine Building Intermediate Monitor.
Standard:	Turbine Building Intermediate Monitor selected.
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – SA3JPM rev 2	

Critical Step: Yes	
Performance Step: 4	Enter 7 for the monitor reading.
Standard:	Enter 7 for the monitor reading.
Comment:	
SAT / UNSAT	

Critical Step: Yes	
Performance Step: 5	Enter 3 hours for the release duration.
Standard:	Enter 3 hours for the release duration.
Comment:	
SAT / UNSAT	

Critical Step: Yes	
Performance Step: 6	Enter 30 min for time since reactor shutdown.
Standard:	Enter 30 min for time since reactor shutdown.
Comment:	
SAT / UNSAT	

Critical Step: Yes	
Performance Step: 7	Enter meteorological data:
	Wind Speed – 2 mph
	Wind Direction − 300°
	Stability Class - E
Standard:	Enters correctly as above.
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – SA3JPM rev 2	

Critical Step: No	
Performance Step: 8	Print data.
Standard:	Data printed.
Comment:	
SAT / UNSAT	

Critical Step: No	
Performance Step: 9	Click on MAP to display map of plume.
Standard:	Click on MAP
Comment:	
SAT / UNSAT	

Critical Step: No	
Performance Step: 10	Print Map.
Standard:	Map printed.
Comment:	
SAT / UNSAT	

Critical Step: Yes-	
Performance Step: 11	Compare data with 13.1.1 to classify the event.
Standard:	
	•
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – SA3JPM rev 2	

Critical Step: Yes	
Performance Step: 12	Complete the CNF form section 5.
Standard:	CNF section 5 completed correctly per the attached CNF Form.
Comment:	
SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – SA3JPM rev 2	

VERIFICATION OF COMPLETION		
JPM Number:	SA.3JPM rev 1	
Examinee's Name:		
Examiner's Name:		
Date Performed:		
Facility Evaluator:		
Number of Attempts:		
Time to Complete:		

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# JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: Projected dose is calculated to correctly identify the minimum

PARs for a General Emergency and the correct section is

evacuated.

Required Materials: A computer terminal with QEDPS

Safety Equipment: N/A

General References: PPM 13.8.1 rev, 20 pages 5-7, PPM 13.1.1 rev 27 page 19

Time Critical Task: No

Initial Conditions: The plant was operating at 100% power when a transient

occurred. The reactor scrammed 30 minutes ago. The following

conditions exist:

• Wind Speed – 2 mph

• Wind Direction – from 300°

 A release is underway from the turbine building with TB HVAC flow rate of 360000 cfm

• The Turbine Building Intermediate Range Monitor indicates 7 pmu.

• The release is expected to last 3 hours.

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Form ES-C-1

### **INITIATING CUE**

The plant was operating at 100% power when a transient occurred. The reactor scrammed 30 minutes ago. The following conditions exist:

- Wind Speed 2 mph
- Wind Direction from 300°
- A release is underway from the turbine building with TB HVAC flow rate of 360000 cfm
- The Turbine Building Intermediate Range Monitor indicates 7 pmu.
- The release is expected to last 3 hours.
- Stability class = E

You are directed to calculate a projected dose using QEDPS and complete the CNF Form section 5 with the correct PARs. Notify me when you have completed the CNF Form section 5.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: Validation Time: 15 minutes

NUREG 1123 Reference: 2.3.11 2.7/3.2 Time Critical: No

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 7/25/00

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### STUDENT INFORMATION

**Initial Conditions:** 

The plant was operating at 100% power when a transient occurred. The reactor scrammed 30 minutes ago. The following conditions exist:

- Wind Speed 2 mph
- Wind Direction from 300°
- A release is underway from the turbine building with TB HVAC flow rate of 360000 cfm
- The Turbine Building Intermediate Range Monitor indicates 7 pmu.
- The release is expected to last 3 hours.

#### **INITIATING CUE**

The plant was operating at 100% power when a transient occurred. The reactor scrammed 30 minutes ago. The following conditions exist:

- Wind Speed 2 mph
- Wind Direction from 300°
- A release is underway from the turbine building with TB HVAC flow rate of 360000 cfm
- The Turbine Building Intermediate Range Monitor indicates 7 pmu.
- The release is expected to last 3 hours.
- Stability class = E

You are directed to calculate a projected dose using QEDPS and complete the CNF Form section 5 with the correct PARs. Notify me when you have completed the CNF Form section 5.

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Appendix C	Job Performance Measure	Form ES-C-1
	<b>ADMIN JPM SA.4JPM rev 2</b>	

Facility: WNP-2	Task No:
Task Title: Complete the Emergency	Job Performance Measure No: Sa.4JPM
Director Turnover Sheet	Rev 2
K/A Reference: 2.4.40 2.3/4.0	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Perform - Simulator

## JPM SETUP INFORMATION

Initial Conditions: The plant simulator has been frozen following the scenario you

have just completed.

Task Standard: The Emergency Director Turnover Sheet is completed and the

values recorded are within 10% of the attached marked up copy.

A score of 80% is required for passing the JPM.

For Op Test 1 Scenario 2, there are 17 correct responses. 3 can

be missed and pass the JPM.

For Op Test 2 Scenario 1, there are 20 correct responses. 4 can

be missed and pass the JPM.

Required Materials: Emergency Director Turnover Sheet

General References: Emergency Director Turnover Sheet, PPM 13.1.1 rev 27, pages

14 and 21.

Initiating Cue: The plant simulator has been frozen following the scenario you

have just completed. Complete the given Emergency Director

Turnover Sheet.

• Include all out of service equipment and actions being taken for

recovery.

• There have been no CNF forms released yet. The oncoming ED

will release the first one.

• All forms and procedures are available for use in completing the

Emergency Director Turnover sheet.

Notify me when you have completed the Emergency Director

Turnover Sheet.

Time Critical Task: NO

Validation Time: 15 minutes

Simulator ICs: N/A
Malfunctions/Remote N/A

Triggers:

Overrides: N/A

Special Setup The simulator will be frozen following the completion of either

Instructions: OP Test 1 Scen #2 or OP Test 2 Scen #1. Ensure these scenarios

have notes in the setup not to reset the simulator until this JPM is

completed.

Page 2 00sa4jpmr2

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: Yes*	
Performance Step: 1	The Emergency Director Turnover Sheet will be completed with data from the frozen simulator following either OP Test 1 Scen. #2 or OP Test 2 Scen. #1.
CUE: Inform the	
examinee the time for	
the emergency	
declaration (space 1b	
on the ED Turnover	
Sheet) is the actual	
time he determines the	
classification.	
Standard:	The Emergency Director Turnover Sheet is completed and the values recorded are within 10% of the attached marked up copy. A score of 80% is required for passing the JPM. For Op Test 1 Scenario 2, there are 17 correct responses. 3 can be missed and pass the JPM.
	For Op Test 2 Scenario 1, there are 20 correct responses. 4 can be missed and pass the JPM.
Comment:	
SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	ADMIN JPM SA.4JPM rev 2	

VERIFICATION OF COMPLETION		
JPM Number:	SA.4JPMrev 2	
Examinee's Name:		
Examiner's Name:		
Date Performed:		
Facility Evaluator:		
Number of Attempts:		
Time to Complete:		

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### JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: The Emergency Director Turnover Sheet is completed and the

values recorded are within 10% of the attached marked up copy.

A score of 80% is required for passing the JPM.

For Op Test 1 Scenario 2, there are 17 correct responses. 3 can

be missed and pass the JPM.

For Op Test 2 Scenario 1, there are 20 correct responses. 4 can

be missed and pass the JPM.

Required Materials: Emergency Director Turnover Sheet

Safety Equipment: N/A

General References: Emergency Director Turnover Sheet, PPM 13.1.1 rev 27, pages

14 and 21.

Time Critical Task: No

Initial Conditions: The plant simulator has been frozen following the scenario you

have just completed.

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### Form ES-C-1

## **INITIATING CUE**

The plant simulator has been frozen following the scenario you have just completed. Complete the given Emergency Director Turnover Sheet.

- Include all out of service equipment and actions being taken for recovery.
- There have been no CNF forms released yet. The oncoming ED will release the first one.
- All forms and procedures are available for use in completing the Emergency Director Turnover sheet.

Notify me when you have completed the Emergency Director Turnover Sheet.

# INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: Validation Time: 15 minutes

NUREG 1123 Reference: 2.4.40 2.3/4.0 Time Critical: No

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 7/23/00

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Appendix C	Job Performance Measure	Form ES-C-1
	<b>ADMIN JPM SA.4JPM rev 2</b>	

## STUDENT INFORMATION

Initial Conditions: The plant simulator has been frozen following the scenario you

have just completed.

## **INITIATING CUE**

The plant simulator has been frozen following the scenario you have just completed. Complete the given Emergency Director Turnover Sheet.

- Include all out of service equipment and actions being taken for recovery.
- There have been no CNF forms released yet. The oncoming ED will release the first one.
- All forms and procedures are available for use in completing the Emergency Director Turnover sheet.

Notify me when you have completed the Emergency Director Turnover Sheet.

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# ADMINISTRATIVE TOPICS OUTLINE FORM ES-301-1

	Facility: WNP-2 Date of examination: 10/23/00		
	Examination level: RO		
Administrative		Describe the method of evaluation:	
Topic/Subject		1. ONE admin JPM, OR	
	Description	2. TWO Administrative questions	
A.1	Use of Procedures	2.1.1 – Knowledge of Conduct of Operations	
		The question concerns what actions are required by PPM 1.3.1 for	
		an unexpected power increase on IRM R5-6. Closed Reference	
		WNP-2 LER 86-004	
		2.1.21 – Ability to obtain and verify controlled procedures	
		The question will deal with how to verify the correct procedure is	
	2 Questions	used for a surveillance procedure. Closed Reference	
	Plant Parameter 2.1.18 – Ability to make accurate, clear and concise logs, records		
	Verification	status boards, and reports.	
		JPM – Complete reactor scram Post Event Report – Following one	
		of the evaluated dynamic scenarios, the ROs will complete a scram	
	JPM	Post Event Report Form.	
A.2	Use of P+IDs	2.1.24 – Ability to obtain and interpret station electrical and	
		mechanical drawings.	
		JPM - Given a scenario with SM-7 powered from the Startup	
		Transformer, using EWDs explain why LPCS-P-1 will not start by	
		arm and depress	
	JPM	WNP-2 PER 298-1094	
A.3	Radiation Work Permits	2.3.1 – Knowledge of 10CFR20 and related facility radiation	
		control requirements.	
	JPM	JPM – Process into the RCA using the TES system.	
A.4	Emergency Action Levels	2.4.39 – Knowledge of responsibilities in Emergency Plan	
	and Classifications	Implementation.	
		The question concerns classification of a SJAE Outlet High High	
		radiation Alarm.	
		2.4.43 – Knowledge of Emergency Communications System and	
		Techniques.	
		The question concerns notification of Offsite Agencies during an	
	2 Questions	Emergency.	

#### ADMINISTRATIVE TOPICS OUTLINE FORM ES-301-1

NOTE: The question RA.1-1 was changed to add 1 more open reference question to the RO Admin Exam. This change was driven by form ES301-3. This requires the Admin portion of the exam be predominately open reference questions. The modification of this question to an open reference question gives a 50% open reference versus closed reference on both the SRO and the RO admin exam. This is acceptable per telephone conversation with Tom McKernon. The KA for RA.1-1 was not changed, so the outline has not change. The following is the text of the new question:

A maintenance test has been performed on RHR-V-24A, Test Return, (MOV type SMB-3) that required the valve to be stroked from closed to full open and back to closed 5 times, with no time between change of direction. The valve takes an average of 3 minutes to stroke full open and back closed. The work order has allowed no deviation in duty cycle requirements.

What is the required cooldown time prior to the next allowable operation of RHR-V-24A?

**OPEN REFERENCE** 

Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – Ba.2JPM rev 1	

Facility: WNP-2	Task No: RO-0573-N-ADMIN
Task Title: Evaluate LPCS-P-1 failure to	Job Performance Measure No: Ba.2JPM
start with EWDs	Rev 1
K/A Reference: 2.1.24 2.8/3.1	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Perform – Use of EWDs – Simulator/Control Room

Page 1 00ba2jpmr1

### JPM SETUP INFORMATION

Initial Conditions: The plant is in MODE 4 with reactor level at –40 inches and the

drywell is open for personnel access. All electrical busses are

aligned normally for MODE 4.

Task Standard: Using the EWDs, correctly determine the cause of the failure to

start.

Required Materials: N/A

General References: EWD 8E010 and 8E001

Initiating Cue: The plant is in MODE 4 with reactor level at -40 inches and the

drywell is open for personnel access. All electrical busses are

aligned normally for MODE 4.

You have been directed to start LPCS-P-1 by the use of the ARM and DEPRESS pushbutton. All LPCS valves realign as required

but LPCS-P-1 does not start.

Using the EWDs, explain why the pump did not start.

Time Critical Task: NO

Validation Time: 10 minutes

Simulator ICs: N/A

Malfunctions/Remote

N/A

Triggers:

Overrides: N/A

Special Setup

N/A

Instructions:

Page 2 00ba2jpmr1

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: Yes	
Performance Step: 1	
Standard:	The applicant should note the following:
	<ol> <li>LPCS-RLY-K12 closes when the ARM and DEPRESS pushbutton is pushed.</li> </ol>
	2. LPCS/62/1 closes after UV or an FA signal and a 10 second time delay, so it remains open.
	3. LPCS/RHRA/1 energizes and opens when power is from TR-S which prevents a manual initiation of LPCS-P-1 with
	the ARM and DEPRESS pushbutton while powered from the Startup Transformer.
	FOR FULL CREDIT: LPCS-P-1 cannot be manually initiated
	with the ARM and DEPRESS pushbutton while powered from
	the Startup (TR-S) Transformer.
Comment:	
SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

Page 3 00ba2jpmr1

Appendix C	Job Performance Measure	Form ES-C-1
	Admin JPM – Ba.2JPM rev 1	

VERIFICATION OF COMPLETION				
<u> </u>				

Page 4 00ba2jpmr1

## JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: Using the EWDs, correctly determine the cause of the failure to

start.

Required Materials: N/A

Safety Equipment: N/A

General References: EWD 8E010 and 8E001

Time Critical Task: NO

Initial Conditions: The plant is in MODE 4 with reactor level at –40 inches and the

drywell is open for personnel access. All electrical busses are

aligned normally for MODE 4.

#### **INITIATING CUE**

The plant is in MODE 4 with reactor level at -40 inches and the drywell is open for personnel access. All electrical busses are aligned normally for MODE 4. You have been directed to start LPCS-P-1 by the use of the ARM and DEPRESS pushbutton. All LPCS valves realign as required but LPCS-P-1 does not start.

Using the EWDs, explain why the pump did not start.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0573-N-ADMIN Validation Time: 10 minutes

NUREG 1123 Reference: 2.1.24 2.8/3.1 Time Critical: NO

Location: Simulator/Control room Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 7/23/99

Page 5 00ba2jpmr1

## STUDENT INFORMATION

Initial Conditions: The plant is in MODE 4 with reactor level at –40 inches and the

drywell is open for personnel access. All electrical busses are

aligned normally for MODE 4.

# **INITIATING CUE**

The plant is in MODE 4 with reactor level at -40 inches and the drywell is open for personnel access. All electrical busses are aligned normally for MODE 4. You have been directed to start LPCS-P-1 by the use of the ARM and DEPRESS pushbutton. All LPCS valves realign as required but LPCS-P-1 does not start.

Using the EWDs, explain why the pump did not start.

Page 6 00ba2jpmr1

Appendix C	Job Performance Measure	Form ES-C-1
	<b>ADMIN JPM RA.1JPM rev2</b>	

Facility: WNP-2	Task No:
Task Title: Complete Post Scram Report	Job Performance Measure No: Ra.1JPM
	Rev 2
K/A Reference: 2.1.18 2.9/3.0	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Perform - Simulator

Page 1 00ra1jpmr2

## JPM SETUP INFORMATION

Initial Conditions: The plant simulator has been frozen following the scenario you

have just completed.

Task Standard: The Post Scram Reports are completed in accordance with PPM

1.3.5 and the values recorded are within 10% of panel

indications. A score of 80% is required for passing the JPM.

NOTE: The attached turnover forms are based on panel indications following scenario validation. Actual values may vary depending on variables due to operation during the scenario and the stopping point of the scenario. The values given as reference will have to be verified prior to grading of this JPM.

Required Materials: PPM 1.3.5 rev 15, att 5.3

General References: PPM 1.3.5 rev 15

Initiating Cue: The plant simulator has been frozen following the scenario you

have just completed. Complete the given Post Scram Report. All

ROs are to complete the CRO1 Post Scram Report.

Notify me when you have completed the Post Scram Report

Time Critical Task: NO

Validation Time: 10 minutes

Simulator ICs: N/A

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup

Instructions: OP Test 1 Scen #2 or OP Test 2 Scen #1. Ensure these scenarios

have notes in the setup not to reset the simulator until this JPM is

The simulator will be frozen following the completion of either

completed.

Page 2 00ra1jpmr2

Appendix C	Job Performance Measure ADMIN JPM RA.1JPM rev2	Form ES-C-1
	PERFORMANCE INFORMATION	

# START TIME:

Critical Step: Yes*	
Performance Step: 1	The CRO1 Post Scram reports will be completed with data from the frozen simulator following either OP Test 1 Scen. #2 or OP Test 2 Scen. #1.
Standard:	The Post Scram Reports are completed in accordance with PPM 1.3.5 and the values recorded are within 10% of panel indications. A score of 80% is required for passing the JPM.  NOTE: The attached turnover forms are based on panel indications following scenario validation. Actual values may vary depending on variables due to operation during the scenario and the stopping point of the scenario. The values given as reference will have to be verified prior to grading of this JPM.
Comment: SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

Page 3 00ra1jpmr2

Appendix C	Job Performance Measure	Form ES-C-1
	<b>ADMIN JPM RA.1JPM rev2</b>	

VERIFICATION OF COMPLETION				

Page 4 00ra1jpmr2

# JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: The Post Scram Reports are completed in accordance with PPM

1.3.5 and the values recorded are within 10% of panel

indications. A score of 80% is required for passing the JPM.

NOTE: The attached turnover forms are based on panel indications following scenario validation. Actual values may vary depending on variables due to operation during the scenario and the stopping point of the scenario. The values given as reference will have to be verified prior to grading of this JPM.

Required Materials: PPM 1.3.5 rev 15, att 5.3

Safety Equipment: N/A

General References: PPM 1.3.5 rev 15

Time Critical Task: No

Initial Conditions: The plant simulator has been frozen following the scenario you

have just completed.

Page 5 00ra1jpmr2

# Job Performance Measure ADMIN JPM RA.1JPM rev2

Form ES-C-1

### **INITIATING CUE**

The plant simulator has been frozen following the scenario you have just completed. Complete the given Post Scram Report. All ROs are to complete the CRO1 Post Scram Report.

Notify me when you have completed the Post Scram Report

# INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: Validation Time: 10 minutes

NUREG 1123 Reference: 2.1.18 2.9/3.0 Time Critical: No

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 7/23/00

Page 6 00ra1jpmr2

Appendix C	Job Performance Measure	Form ES-C-1
	<b>ADMIN JPM RA.1JPM rev2</b>	

## STUDENT INFORMATION

Initial Conditions: The plant simulator has been frozen following the scenario you

have just completed.

## **INITIATING CUE**

The plant simulator has been frozen following the scenario you have just completed. Complete the given Post Scram Report. All ROs are to complete the CRO1 Post Scram Report.

Notify me when you have completed the Post Scram Report

Page 7 00ra1jpmr2

WNP-2 RA.3-1 and RA.3-2 OCTOBER 23, 00

Question No.	A co-worker has been injured and is unconscious in a High High Radiation area.		
RA.3-1:	You have decided to enter the area and carry the worker to safety.		
	What is the WNP-2 administrative maximum allowable dose in a lifesaving situation?		
	CLOSED REFERENCE		
	ANSWER: 25 rem TEDE		
Response:			
GAT (ADAGAT			
SAT / UNSAT			
2.3.1 (2.6/3.1)	6016	GEN-RPP-07 rev 3, page 8	

page 1 00ra1r3

WNP-2 RA.3-1 and RA.3-2 OCTOBER 23, 00

Question No. RA.3-2	You have been directed to enter a radiation area with a general area dose rate of 245 mrem/hr.			
	What are the	What are the dosimetry requirements for entering this area?		
	CLOSED R	CLOSED REFERENCE		
	ANSWER:	9	correct; ice that continuously indicates the rea (e.g., survey instrument)	
		radiation dose rate in the a	ice that continuously integrates the rea and alarms when a preset (e.g., an alarming electronic riate alarm setpoint.	
		rate and cumulative dose to Health Physics personnel r	ice that continuously transmits dose o a remote receiver monitored by esponsible for controlling personnel he area (e.g., an electronic dosimeter remote monitoring system)	
		in the area of and indi qualified in radiation equipped with a radiat indicating device and personnel radiation ex - Be under the surveilla means of close circuit in radiation protection	nd, ance (as specified in the RWP), while vidual at the work site who is protection procedures and who is tion dose rate monitoring and is responsible for controlling aposure within the area ance (as specified in the RWP), by a television, of an individual qualified in procedures who is responsible for radiation exposure in the area.	
Response:				
SAT / UNSAT	Т	1001		
2.3.1 (2.6/3.1)		6036	PPM 11.2.7.3 rev 18, pages 4 and 5	

page 2 00ra1r3

WNP-2 RA.3-1 and RA.3-2 OCTOBER 23, 00

Question No. A co-worker has been injured and is unconscious in a High High Rac You have decided to enter the area and carry the worker to safety.	
	What is the WNP-2 administrative maximum allowable dose in a lifesaving situation?
	CLOSED REFERENCE

page 3 00ra1r3

WNP-2 RA.3-1 and RA.3-2 OCTOBER 23, 00

Question No. RA.3-2	You have been directed to enter a radiation area with a general area dose rate of 245 mrem/hr.
	What are the dosimetry requirements for entering this area?
	CLOSED REFERENCE

page 4 00ra1r3

WNP-2 REACTOR OPERATOR MARCH 99

Question No. RA.4-1	The plant is operating at reduced power following a trip of RRC-P-1A. Off Gas activity has increased and a valid annunciator for SJAE CONDENSER OUTLET RAD HI-HI, P602 A5 drop 3-3 illuminates.  What is the classification of this event and who is the CRO required to notify?		
	what is the classification of this event and who is the CKO required to houry:		
	OPEN REFERENCE		
	ANSWER: 1. Unusual Event 2. The Shift Manager		
Response:			
SAT / UNSAT			
2.4.39 3.3/3.1	PPM 4.602.A5.3-3 rev 12, page 25, PPM 13.1.1, rev 26, pages 4 and 11		
Question No. RA.4-2	The plant has experienced a LOCA and the Shift Manager has declared an emergency. The FAX machine is not working.		
	Which one of the phone systems is the preferred system for notification of local authorities?		
	CLOSED REFERENCE		
	ANSWER: The CRASH Phone		
Response:			
SAT / UNSAT			
2.4.43 2.8/3.5	8907 PPM 13.4.1 rev 25, page 5		

page 1 ra4r1

WNP-2 REACTOR OPERATOR MARCH 99

Question No. RA.4-1	The plant is operating at reduced power following a trip of RRC-P-1A. Off Gas activity has increased and a valid annunciator for SJAE CONDENSER OUTLET RAD HI-HI, P602 A5 drop 3-3 illuminates.
	What is the classification of this event and who is the CRO required to notify?
	OPEN REFERENCE

page 2 ra4r1

WNP-2 REACTOR OPERATOR MARCH 99

Question No. RA.4-2	The plant has experienced a LOCA and the Shift Manager has declared an emergency. The FAX machine is not working.
	Which one of the phone systems is the preferred system for notification of local authorities?
	CLOSED REFERENCE

page 3 ra4rl

#### 

Facility: WIP-2 Date of exami nati on: Oct ober 23, 2000 Exam level: RO SRO-I B.1 Control Room Systems System / JPM Title Type Code\* Safety Function Reactor Feedwater / Reactor Feed M Pump Quick Start LR000131 <u>Si mul at or</u> Main Generator / Generator Capability Curve LADD1133 M A 4 Si mul at or Reactor Closed Cooling / Change RCC N, A, 8 **Pump** Abnor mal Si mul at or 1803 / Bypass Control Rods in 1803 12000196 D Si mul at or ACDist./Transfer 480V Bus from N. A 6 Normal to Alternate supply. Si mul at or RMS / Operate CRO to make the Reactor Critical IR000228 M A L 1 Si mul at or D,  $N^4$  / Override NVW Isolation Emergency, Interlocks LR000160 Control Room B2. Facility Walkthrough Remote Shutdown / Establish Suppression Pool Cooling from Emergency, the Alternate Remote Shutdown Panel IR000144 RCA. FSF Containment Nitrogen / Open CNV-65 with No Bottle, Local Actions D, 3 Emergency, RCA, ESF

D,

Emergency,

Pl ant

Pl ant

Control Rod Drive / Insert Control

Rod by venting the Scram Air Header 18000249

1

## 

Fa	ncility: WMP-2 Date of ex 23, 2000	ami nati on:	0ctober
	Exam level: RO / SROI		
	Spare JPMs		
	System / JMTitle	Type Code*	Safety Function
1	Main Steam Leakage Control / Start Main Steam Leakage Control LR000197 Simulator	D, Emergency	9
2.	Diesel Generator/Slow Start DG1 from the Local Panel LR000198 Plant	D	6
*Type Codes: (D) irect from bank, (M) odified from bank, (N) ew, (A) Iternate path, (L) ow power			
	Indicates spare JPMs		

# 

Facility: WNP-2	Date o 23, 2000	of ex	ami nati on:	0ct ober
Exam level:	23, 2000 SRO-U			
B1 Control Room Systems				
System / JPMTitle / Type Codes*	Type Code		Safety Func	t i on
a. Reactor Closed Cooling/ Change NCC Pump	N, A, Abnormal		8	
Si mul at or				
b. Main Generator / Generator Capability Curve LRO0153  Simulator	M. A		4	
c. KSCS / Bypass Control Rods in KSCS IR000196	D		7	
d. NS4/Override RMU Isolation Interlocks IR000160	D, Emergenc y, RCA, ESF		5	
Control Room				
R2. Facility Walkthrough				
a. Control Rod Drive/ Insert Control Rod by venting the Scram Air Header IR000249	Emergenc y, RCA		1	
Pl ant				
Spare JMs	I	1		
System / JPMTitle /	Type (odes	*	Type Code	Safety Function
1. Main Steam Leakage Contro Steam Leakage Control LADO	l /Start Mai 0197	n	D, Emergency	9
Simulator  2. Diesel Generator / Slow Start DG1 from the Local Panel LD00198  6			6	
Pl ant				
*Type Codes: (D) irect from bank, (M) odified from bank, (N) ew, (A) Iternate path, (L) ow power				
Indicates spare JMs				

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

Facility: WNP-2	Task No: RO-0371-N-RFW
Task Title: REACTOR FEED PUMP	Job Performance Measure No: B.1.a
QUICK RESTART	00JPM1R2
K/A Reference: 259001A4.02 (3.9/3.7)	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Actual Performance - Simulator

Page 1 jpm01r3

## JPM SETUP INFORMATION

Initial Conditions: A manual reactor scram has been inserted as part of a normal

shutdown early in core life. RPV level increased to greater than

+54.5 inches and both feed pumps have tripped.

Task Standard: One feed pump started and maintaining reactor level in the normal

operating band.

Required Materials: PPM 2.2.4A and 2.2.4B on the hard card at BD A

General References: PPM 2.2.4A, rev 1 and PPM 2.2.4B, rev0

Initiating Cue: You have been directed by the CRS to perform a Quick restart of

RFW-P-1A. Inform the CRS when reactor level is being

controlled +13 inches to +54 inches per the hard card at BD A.

Time Critical Task: NO

Validation Time: 16 minutes

Simulator ICs: 78

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup

N/A

Instructions:

Page 2 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

## PERFORMANCE INFORMATION

## START TIME:

NOTE: Step 2.1 directs transfer of RFW-FCV-10A/B per PPM 2.2.4B concurrently with this procedure. A copy of 2.2.4B is included for reference. Step 9 of this JPM can be performed at this time (first).

Critical Step: NO	
Performance Step: 1	2.2 - Ensure RFW-V-112A and RFW-V-112B are started
	closed.
Standard:	Closes RFW-V-112A and RFW-V-112B.
Comment:	
SAT / UNSAT	

Critical Step: Yes	
Performance Step: 2	2.3 – Ensure MSIVs are OPEN* and no other Reactor Feed
	Pump is in service
Standard:	Verify MSIVs are open* and no feed pump in service
Comment:	
SAT / UNSAT	

Critical Step: Yes	
Performance Step: 3	2.4 – Ensure at least two HIGH LEVEL SEAL INs are RESET
Standard:	Push at least 2 High Level Seal In Reset Pushbuttons and verify
	the high level seal in indicating lights are extinguished.
Comment:	
SAT / UNSAT	

Page 3 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

Critical Step: YES*		
Performance Step: 4	ormance Step: 4 2.5 – Ensure speed controller RFW-SC-601A is in MDVP at	
_	0%.	
Standard:	Notes RFW-SC-601A is in MDVP at 40% and notifies the CRS.	
	Manually* reduces setpoint to 0%.	
Cue: If notified by the		
CRO, as CRS direct		
the CRO to reduce the		
setpoint to 0%		
Comment:		
SAT / UNSAT		

Critical Step: YES	
Performance Step: 5	2.6 – Reset the Reactor Feed Pump. Hold the TRIP/RESET switch to RESET until the HP and LP Stop Valves indicate full open.
Standard:	Place the TRIP/RESET switch to RESET and hold until the HP and LP Stop Valves indicate full open.
Comment: SAT / UNSAT	

Critical Step: YES	
Performance Step: 6	2.7 – Increase Turbine speed using RFW-SC-601A in MDVP in MDVP (turbine will roll on main steam at approximately 60% valve position)
Standard:	Roll turbine with RFW-SC-601A in MDVP.
Comment: SAT / UNSAT	

Page 4 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

Critical Step: YES		
Performance Step: 7	2.8 – Transfer RFW-SC-601A to MDEM as soon as practical (GT 800 rpm).	
	( o z o o spray.	
Standard:	Transfer RFW-SC-601A to MDEM GT 800 rpm.	
Comment:		
SAT / UNSAT		

Critical Step: NO		
Performance Step: 8	2.9 – Ensure RFW-V-112A and RFW-V-112B are fully closed.	
Standard:	Verifies RFW-V-112A and RFW-V-112B are fully closed.	
Comment:		
SAT / UNSAT		

Page 5 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

Critical Step: YES*	
Performance Step: 9	<ul> <li>2.10 – Ensure feedwater system lineup appropriate for plant conditions:</li> <li>Open RFW-V-118*</li> <li>Ensure RFW-V-117A and RFW-V-117B are open*.</li> <li>Place RFW-LIC-620, Startup level control, in AUTOMATIC @36 inches.</li> </ul>
Standard:	Verify feedwater system lineup appropriate for plant conditions as above.
NOTE: This step is covered in PPM 2.2.4B. The critical portion of this step is to ensure the valve lineup allows for feedwater injection through RFW-LIC-620. Control is either manual or automatic with automatic with automatic preferred  Comment: SAT / UNSAT	

Page 6 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

2.11 – Increase turbine speed to raise RFP discharge pressure, as necessary, to control reactor level +13 inches to +54 inches.
as necessary, to control reactor for the mones to the timenes.
Maintain RFP discharge pressure greater than reactor pressure to ensure injection with reactor level controlled in the band from +13 inches to +54 inches.

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

Page 7 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

	VERIFICATION OF COMPLETION
JPM Number: B.1.a	00JPM1R2
Examinee's Name:	
Examiner's Name:	
Date Performed:	
Facility Evaluator:	
Number of Attempts:	
Time to Complete:	

Page 8 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

### JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: One feed pump started and maintaining reactor level in the normal

operating band.

Required Materials: PPM 2.2.4A and 2.2.4B on the hard card at BD A

Safety Equipment: N/A

General References: PPM 2.2.4A, rev 1 and PPM 2.2.4B, rev0

Time Critical Task: NO

Initial Conditions: A manual reactor scram has been inserted as part of a normal

shutdown early in core life. RPV level increased to greater than

+54.5 inches and both feed pumps have tripped.

#### **INITIATING CUE**

You have been directed by the CRS to perform a Quick restart of RFW-P-1A. Inform the CRS when reactor level is being controlled +13 inches to +54 inches per the hard card at BD A.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0371-N-RFW Validation Time: 16 minutes

NUREG 1123 Reference: 259001A4.02 Time Critical: NO

(3.9/3.7)

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 5/1/00

Page 9 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.a rev3	

## STUDENT INFORMATION

Initial Conditions: A manual reactor scram has been inserted as part of a normal

shutdown early in core life. RPV level increased to greater than

+54.5 inches and both feed pumps have tripped.

## **INITIATING CUE**

You have been directed by the CRS to perform a Quick restart of RFW-P-1A. Inform the CRS when reactor level is being controlled +13 inches to +54 inches per the hard card at BD A.

Page 10 jpm01r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.b rev4	

Facility: WNP-2	Task No: RO-0327-N-TG
Task Title: Generator Capability Curve	Job Performance Measure No: B.1.b
Interpretation – Faulted JPM – Respond to	00JPM2R3
loss of H <sub>2</sub> in Main Generator	
K/A Reference: 245000K1.01 (3.1/3.3)	
245000A4.05 (2.7/2.7)	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Actual Performance - Simulator

Page 1 00jpm2r4

## JPM SETUP INFORMATION

**Initial Conditions:** Reactor power is 97%. The Plant is operating normally.

Task Standard: Respond to the loss of H<sub>2</sub> by reducing Main Generator output to

less than the capability curve.

Required Materials: PPM 4.820.B3 drop 2-3, PPM 2.5.7 att. 6.6

General References: PPM 4.820.B3 drop 2-3, PPM 2.5.7 att. 6.6

**Initiating Cue:** The CRS has directed you to increase reactor power to 100%

with Recirculation Flow at the rate of 5 MWe/min. Notify the

CRS when Reactor Power is 100%.

Time Critical Task: NO

Validation Time: 10 minutes

Simulator ICs: 77

Malfunctions/Remote

Triggers:

100 cfm H<sub>2</sub> leak in the generator.

Overrides: N/A

Special Setup

Initialize the simulator in IC-77. Insert the H2 leak when power Instructions: increase is started. Stop the leak at 70# H2 pressure indicated on

the computer panel drawing. This gives an indication of 68# on the simulator panel. Ensure annuciator B# drop 5-4 has been faile

off.

Page 2 00jpm2r4

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.b rev4	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: NO	
Performance Step: 1	Increase reactor power as directed to 100% power.
Standard:	Increase reactor power with recirc flow as directed
NOTE: When the CRO	
approches the board,	
insert the H <sub>2</sub> leak	
causing H <sub>2</sub> pressure to	
decrease. Stop the leak	
when H <sub>2</sub> pressure is 70	
psig on the computer	
panel. It takes about 2 ½	
minutes for the leak to	
cause the <b>GEN H2</b>	
PRESS LOW	
annunciator.	
CUE: The candidate	
will have to be cued	
that this alarm is his.	
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 2	At H13-P620 (BD B) check hydrogen pressure on H <sub>2</sub> -PI-1.
Standard:	CRO checks pressure as directed and verifies pressure less than 72 psig.
Comment:	
SAT / UNSAT	

Page 3 00jpm2r4

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.b rev4	

Critical Step: NO	
Performance Step: 3	CRO dispatches an operator to check hydrogen pressure at the Generator H <sub>2</sub> Control Station on H2-PI-3.
Standard:	CRO either dispatches or asks CRS to dispatch operator as directed by the procedure.
CUE: If asked by the	
CRO to dispatch an	
operator, acknowledge	
the operator has been	
dispatched to chech the	
H <sub>2</sub> and seal oil systems.	
Comment:	
SAT / UNSAT	

**NOTE:** It is possible to reduce reactive load by the use of the voltage regulator to maintain the generator within the capability curve. If needed use the following cue to direct reduction of generator load by the reduction of Recirculation Flow.

CUE: Reduce generator output with Recirc Flow to maintain operation of the generator within the capability curve.

NOTE: STOP THE H2 LEAK AT 70# INDICATED ON THE COMPUTER PANEL.

Page 4 00jpm2r4

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.b rev4	

Critical Step: YES		
Performance Step: 4	Maintain the Main Generator within the limits of the Generator Capability Curve in PPM 2.5.4 H <sub>2</sub> /CO <sub>2</sub> System.	
G. 1 1		
Standard:	Reduce Main Generator load by recirculation flow to less than the value in the table in att. 6.6 of 2.5.7.	
	1162 MW for 68 psig hydrogen pressure.	
CUE: If directed by		
the CRO to add H <sub>2</sub> to		
the generator, cue that		
there is no hydrogen		
available. A truck is		
on the way but will not		
be on site for at least 4		
hours.		
Comment:		
SAT / UNSAT		

**TERMINATION CUE:** When generator load has been reduced to a value at least as low as the value in the table, announce to the CRO, "THE TERMINATION POINT OF THIS JPM HAS BEEN REACHED."

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

Page 5 00jpm2r4

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.b rev4	

VERIFICATION OF COMPLETION		
JPM Number: B.1.b	00JPM2r3	
Examinee's Name:		
Examiner's Name:		
Date Performed:		
Facility Evaluator:		
Number of Attempts:		
Time to Complete:		

Page 6 00jpm2r4

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.b rev4	

### JPM INFORMATION CARD

### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

### READ TO THE EXAMINEE:

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

Task Standard: Respond to the loss of H<sub>2</sub> by reducing Main Generator output to

less than the capability curve.

Required Materials: PPM 4.820.B3 drop 2-3, PPM 2.5.7 att. 6.6

Safety Equipment: NA

General References: PPM 4.820.B3 drop 2-3, PPM 2.5.7 att. 6.6

Time Critical Task: NO

Initial Conditions: Reactor power is 97%. The Plant is operating normally.

### **INITIATING CUE**

The CRS has directed you to increase reactor power to 100% with Recirculation Flow at the rate of 5 MWe/min. Notify the CRS when Reactor Power is 100%.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0327-N-TG Validation Time: 10 minutes

NUREG 1123 Reference: 245000K1.01 Time Critical: NO

(3.1/3.3)

245000A4.05 (2.7/2.7)

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 8/3/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.b rev4	

# STUDENT INFORMATION

Initial Conditions: Reactor power is 97%. The Plant is operating normally.

## **INITIATING CUE**

The CRS has directed you to increase reactor power to 100% with Recirculation Flow at the rate of 5 MWe/min. Notify the CRS when Reactor Power is 100%.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.c rev 6	

Facility: WNP-2	Task No: RO-0048-A-RCC
Task Title: Change RCC Pumps – Alternate	Job Performance Measure No: B.1.c
Path JPM – Respond to loss of RCC Pump	00JPM3R4
at Power	
K/A Reference: 400000K1.02 (3.2/3.4)	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Actual Performance - Simulator

Page 1 00jpm3r6

### JPM SETUP INFORMATION

Initial Conditions: The reactor is operating at 97% power. All equipment is normal.

Maintenance needs to tag out RCC-P-1A for breaker maintenance.

Task Standard: Respond the loss of an RCC pump at power and the subsequent

closure of RCC-V-6 in accordance with PPM 4.8.3.2.

Required Materials: NA

General References: PPM 2.8.3, PPM 4.8.3.2, and PPM 4.820.B1 drop 4-1

Initiating Cue: The CRS has directed you change RCC Pumps per PPM 2.8.3,

section 5.4 Reactor and Radwaste Building Close Cooling Water System. After RCC-P-1A has been stopped, Place the control switch in Pull to Lock in preparation for hanging the tag for

maintenance.

Notify the CRS when RCC-P-1A is in PTL and RCC-P-1C is in

operation with all system parameters normal.

Time Critical Task: NO

Validation Time: 10 minutes

Simulator ICs: 77

Malfunctions/Remote RCC-P1C Breaker trip

Triggers: Override RCC-P-1C in the PTL position

Malfunction to fail the Overcurrent Trip annunciator for RCC-P-

1C

Overrides: N/A

Special Setup Initialize to IC-77. All malfunctions/overrides are set to trigger

Instructions: on RCC-P-1A PTL control switch position.

Page 2 00jpm3r6

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.c rev 6	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: NO	
Performance Step: 1	Ensure suction valve is open for RCC-P-1C.
Standard:	Verifies suction valve is open for RCC-P-1C.
<b>CUE: Suction valve</b>	
for RCC-P-1C is open.	
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 2	Ensure discharge valve is open for RCC-P-1C.
Standard:	Verifies discharge valve is open for RCC-P-1C.
<b>CUE:</b> Discharge valve	
for RCC-P-1C is open.	
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 3	Start RCC-P-1C.
Standard:	Place the control switch for RCC-P-1C in start and releases
	when the pump starts.
NOTE: May announce	
the start of RCC-P-	
1C.	
Comment:	
SAT / UNSAT	

Page 3 00jpm3r6

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.c rev 6	

Critical Step: YES	
Performance Step: 4	Stop RCC-P-1A and place the control switch in PTL.
Standard:	Stops RCC-P-1A and places the control switch in PTL.
<b>NOTE:</b> When the	
control switch for RCC-	
P-1A is placed in the	
PTL position, RCC-P-	
1C trips.	
CUE: IF CALLED AS	
OPS2, VERIFY THE	
DISCHARGE CHECK	
VALVE IS CLOSED	
Comment:	
SAT / UNSAT	

Critical Step: NO	
Performance Step: 5	Refers to PPM 4.820.B1 drop 4-1, RCC PUMP C MOTOR OL
	TRIP.
	May attempt to restart RCC-P-1A.
	Refers to ABN-RCC Loss of RCC
Standard:	As stated above.
CUE: If needed cue	
operator to respond to	
the Board N	
annunciator indication	
on Board S.	
Comment:	
SAT / UNSAT	

Critical Step: NO	
Performance Step: 6	Verifies RCC-V-6 has closed.
Standard:	At BD N, verifies RCC-V-6 has closed.
Comment:	
SAT / UNSAT	

Page 4 00jpm3r6

Appendix C	Job Performance Measure Worksheet JPM B.1.c rev 6	Form ES-C-1

Critical Step: YES*	
Performance Step: 7	Trip RWCU-P-1A (1B)
_	Close RWCU-V-4*
Standard:	Trips RWCU-P-1A (1B)
	Closes RWCU-V-4
Comment:	
SAT / UNSAT	

**TERMINATION CUE:** THE TERMINATION POINT OF THIS JPM HAS BEEN REACHED.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	•

Page 5 00jpm3r6

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.c rev 6	

	VERIFICATION OF COMPLETION
JPM Number: B.1.c	00JPM3R4
- ' ' N	
Examinee's Name:	
Examiner's Name:	
Date Performed:	
Facility Evaluator:	
racinty Evaluator.	
Number of Attempts:	
Time to Complete:	

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## JPM INFORMATION CARD

### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

### READ TO THE EXAMINEE:

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

Task Standard: Respond the loss of an RCC pump at power and the subsequent

closure of RCC-V-6 in accordance with ABN-RCC.

Required Materials: NA

Safety Equipment: NA

General References: PPM 2.8.3, ABN-RCC, and PPM 4.820.B1 drop 4-1

Time Critical Task: NO

Initial Conditions: The reactor is operating at 97% power. All equipment is normal.

Maintenance needs to tag out RCC-P-1A for breaker maintenance.

## **INITIATING CUE**

The CRS has directed you change RCC Pumps per PPM 2.8.3, section 5.4 Reactor and Radwaste Building Close Cooling Water System. After RCC-P-1A has been stopped, Place the control switch in Pull to Lock in preparation for hanging the tag for maintenance. Notify the CRS when RCC-P-1A is in PTL and RCC-P-1C is in operation with all system parameters normal.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0048-A-RCC Validation Time: 10 minutes

NUREG 1123 Reference: : 400000K1.02 Time Critical: NO

(3.2/3.4)

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 5/1/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.c rev 6	

## STUDENT INFORMATION

Initial Conditions: The reactor is operating at 97% power. All equipment is normal.

Maintenance needs to tag out RCC-P-1A for breaker maintenance.

## **INITIATING CUE**

The CRS has directed you change RCC Pumps per PPM 2.8.3, section 5.4 Reactor and Radwaste Building Close Cooling Water System. After RCC-P-1A has been stopped, Place the control switch in Pull to Lock in preparation for hanging the tag for maintenance.

Notify the CRS when RCC-P-1A is in PTL and RCC-P-1C is in operation with all system parameters normal.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

Facility: WNP-2	Task No: RO-0134-N-RSCS
Task Title: Bypass Control Rods on the	Job Performance Measure No: B.1.d
RSCS	00JPM4R3
K/A Reference: 201004A4.01 3.4/3.5	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Actual Performance - Simulator

Page 1 00jpm4r3

## JPM SETUP INFORMATION

Initial Conditions: Control Rod 26-27 must be bypassed in the RSCS. The CRS has

verified bypassing rod 26-27 is in compliance with all Tech Specs. The Shift Manager has given permission to bypass this

control rod.

Task Standard: Control rod 26-27 is bypass in the RSCS correctly in accordance

with plant procedures.

Required Materials: Key #81 or #82

General References: PPM 2.1.5 rev 10, section 5.2 Bypassing Control Rods and ATT

6.1/6.2/6.3

Initiating Cue: You have been directed by the CRS to bypass control rod 26-27

in the RSCS cabinet per PPM 2.1.5, section 5.2, step 2. Notify the CRS when you have verified the Control rod is bypassed in the

RSCS on P603

Time Critical Task: NO

Validation Time: 9 minutes

Simulator ICs: 76 – can be run in any IC for 2000 ILC JPM exam.

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup Instructions:

No control rods are bypassed in the RSCS in IC-76.

Page 2 00jpm4r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: NO	
Performance Step: 1	Step 2) Depress the "RED DISPLAY CONTROL" Pushbutton on the
	RSCS Panel on P603 to illuminate the "BYPASS LIGHT"
	Verify that no other control rods currently bypassed.
Standard:	Verifies no other control rods bypassed.
Comment: SAT / UNSAT	

Critical Step: YES*		
Performance Step: 2	Step 3)	
	*Unlock the bypassed rod identifier cabinet	
	Verifies no other control rods bypassed.	
Standard:	Unlocks cabinet and verifies no other rods bypassed.	
NOTE: THIS STEP		
CAN BE		
PERFORMED OUT		
OF SEQUENCE TO		
ALLOW		
<b>VERIFICATION OF</b>		
CORRECT SWITCH		
SETTINGS		
Comment:		
SAT / UNSAT		

Page 3 00jpm4r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

Critical Step: NO		
Performance Step: 3	Step 4)	
	a. Circle control rod 26-27 on ATT 6.2/6.3	
	b. N/A	
	c. Record and initial above verifications in Control	
	Room Log.	
<b>CUE: Verifications</b>		
and initials have been		
recorded in the CR		
Log,		
Standard:		
NOTE: There is only		
going to be one control		
rod bypassed, so step 4		
b. is N/A		
Comment:		
SAT / UNSAT		

Critical Step: YES	
Performance Step: 4	Step 5)
	Determine the RSCS binary equivalent X and Y coordinates
	from ATT 6.1, Control Rod Location Equivalents
Standard:	X,Y coordinates correctly determined $-26$ (X) = 01000 27 (Y) = 01000
Comment:	
SAT / UNSAT	

Critical Step: NO	
Performance Step: 5	Step 6) Ensure the Bypassed/Not Bypassed toggle switch at the top of the card to be used is in the NOT BYPASSED position Ensure the red light below the switch is NOT illuminated
Standard:	Bypass switch in the NOT BYPASSED position Red light below the switch is not illuminated.

Page 4 00jpm4r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

Critical Step: YES		
Performance Step: 6	Step 7)	
	On the same card place the $X_4$ through $X_0$ (01000) and the $Y_4$	
	through $Y_1$ (01000) in the position consistent with the binary	
	equivalent from ATT 6.1	
Standard:	Code set: $X_4 - X_1 = 01000$ $Y_4 - Y_1 = 01000$	
Comment:		
SAT / UNSAT		

Critical Step: NO	
Performance Step: 7	Step 8)
	Obtain independent verification of toggle switch positions from
	second licensed operator or technically qualified individual.
<b>CUE:</b> Switch position	
verified either correct	
or incorrect.	
NOTE: IF SWITCH	
POSITION NOT	
CORRECT, RETURN	
TO PROCEDURE	
STEP 5.	
Standard:	Switches placed in the correct position to bypass control rod
	26-27
Comment:	
SAT / UNSAT	

Page 5 00jpm4r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

Critical Step: YES*	
Performance Step: 8	Step 9)
	*Place the BYPASSED/NOT BYPASSED Toggle Switch at the
	top of the care in the BYPASSED position.
	Ensure the red light just under the switch is illuminated.
Standard:	Switch in BYPASSED
	Red light illuminated
Comment:	
SAT / UNSAT	

Critical Step: NO	
Performance Step: 9	Step 10)
	Ensure the rod bypassed indicates on the RSCS Panel on P603
	Ensure the correct rod is bypassed.
Standard:	Ensure the rod bypassed indicates on the RSCS Panel on P603
	Ensure the correct rod is bypassed.
Comment:	
SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

VERIFICATION OF COMPLETION		
JPM Number: B.1.d	00JPM4R3	
Examinee's Name:		
Examiner's Name:		
Date Performed:		
Facility Evaluator:		
Tuellity Evaluator.		
Number of Attempts:		
Time to Complete:		

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

### JPM INFORMATION CARD

### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

### READ TO THE EXAMINEE:

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

Task Standard: Control rod 26-27 is bypass in the RSCS correctly in accordance

with plant procedures.

Required Materials: Key #81 or #82

Safety Equipment: NONE

General References: PPM 2.1.5 rev 10, section 5.2 Bypassing Control Rods and ATT

6.1/6.2/6.3

Time Critical Task: NO

Initial Conditions: Control Rod 26-27 must be bypassed in the RSCS. The CRS has

verified bypassing rod 26-27 is in compliance with all Tech Specs. The Shift Manager has given permission to bypass this

control rod.

### **INITIATING CUE**

You have been directed by the CRS to bypass control rod 26-27 in the RSCS cabinet per PPM 2.1.5, section 5.2, step 2. Notify the CRS when you have verified the Control rod is bypassed in the RSCS on P603

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0134-N-RSCS Validation Time: 9 minutes

NUREG 1123 Reference: 201004A4.01 Time Critical: NO

3.4/3.5

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 8/3/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.d rev3	

## STUDENT INFORMATION

Initial Conditions: Control Rod 26-27 must be bypassed in the RSCS. The CRS has

verified bypassing rod 26-27 is in compliance with all Tech Specs. The Shift Manager has given permission to bypass this

control rod.

## **INITIATING CUE**

You have been directed by the CRS to bypass control rod 26-27 in the RSCS cabinet per PPM 2.1.5, section 5.2, step 2. Notify the CRS when you have verified the Control rod is bypassed in the RSCS on P603

Page 9 00jpm4r3

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

Facility: WNP-2	Task No: RO-0672-E-RWCU
Task Title: Override RWCU Isolation	Job Performance Measure No: B.1.g
Interlocks	00JPM5R2
K/A Reference: 223002K4.08 3.3/3.7	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Control Room - Simulate

Page 1 00jpm05r2

### JPM SETUP INFORMATION

Initial Conditions: An event has occurred that caused PPM 5.1.1 to be entered.

Task Standard: The simulated bypass of the RWCU Isolation Interlocks is

performed in accordance with PPM 5.5.4.

Required Materials: Jumpers and contact boots for PPM 5.5.4

General References: PPM 5.5.4 rev 3

Initiating Cue: The CRS has directed you to bypass the RWCU Isolation

Interlocks per PPM 5.5.4. Notify the CRS when you have finished

**SIMULATING** the bypass of these interlocks.

CONTROL MANIPULATIONS WILL NOT BE

PERFORMED. ALL ACTIONS AND STEPS WILL BE

SIMULATED.

Time Critical Task: NO

Validation Time: 8 minutes

Simulator ICs: N/A

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup

N/A

**Instructions:** 

Page 2 00jpm05r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: YES	
Performance Step: 1	Step 1)
	Install one jumper across contact terminal studs 7 and 8 for each
	of the below listed relays:
	H13-P622 MS-RLY-K26 RWCU-V-1
	H13-P623 MS-RLY-K27 RWCU-V-4
<b>CUE: JUMPERS</b>	
INSTALLED	
CORRECTLY.	
Standard:	Terminal studs 7 and 8 correctly identified on each relay.
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 2	Step 1)
	Install one contact boot on contact 3-4 for each of the below
	listed relays:
	H13-P622 MS-RLY- K26 RWCU-V-1
	H13-P623 MS-RLY-K27 RWCU-V-4
CUE: CONTACT	
BOOTS	
CORRECTLY	
INSTALLED.	
Standard:	Contacts 3-4 correctly identified on both relays.
Comment:	
SAT / UNSAT	

Page 3 00jpm05r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

Page 4 00jpm05r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

	VERIFICATION OF COMPLETION
JPM Number: B.1.g	00JPM5R2
Examinee's Name:	
Examiner's Name:	
Date Performed:	
Facility Evaluator:	
Number of Attempts:	
Time to Complete:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

### JPM INFORMATION CARD

### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

### READ TO THE EXAMINEE:

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

Task Standard: The simulated bypass of the RWCU Isolation Interlocks is

performed in accordance with PPM 5.5.4.

Required Materials: Jumpers and contact boots for PPM 5.5.4

Safety Equipment: N/A

General References: PPM 5.5.4 rev 3

Time Critical Task: N/A

Initial Conditions: An event has occurred that caused PPM 5.1.1 to be entered.

## **INITIATING CUE**

The CRS has directed you to bypass the RWCU Isolation Interlocks per PPM 5.5.4. Notify the CRS when you have finished **SIMULATING** the bypass of these interlocks.

CONTROL MANIPULATIONS WILL <u>NOT</u> BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0672-E-RWCU Validation Time: 6 minutes

NUREG 1123 Reference: 223002K4.08 Time Critical: NO

3.3/3.7

Location: Control Room Performance Method: SIMULATE

Prepared/Revised by: S Hutchison Revision Date: 6/12/00

Page 6 00jpm05r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

## STUDENT INFORMATION

Initial Conditions: An event has occurred that caused PPM 5.1.1 to be entered.

# **INITIATING CUE**

The CRS has directed you to bypass the RWCU Isolation Interlocks per PPM 5.5.4. Notify the CRS when you have finished **SIMULATING** the bypass of these interlocks.

CONTROL MANIPULATIONS WILL  $\underline{NOT}$  BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

Facility: WNP-2	Task No: RO-0672-E-RWCU
Task Title: Override RWCU Isolation	Job Performance Measure No: B.1.g
Interlocks	00JPM5R2
K/A Reference: 223002K4.08 3.3/3.7	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Control Room - Simulate

Page 1 00jpm05r2

### JPM SETUP INFORMATION

Initial Conditions: An event has occurred that caused PPM 5.1.1 to be entered.

Task Standard: The simulated bypass of the RWCU Isolation Interlocks is

performed in accordance with PPM 5.5.4.

Required Materials: Jumpers and contact boots for PPM 5.5.4

General References: PPM 5.5.4 rev 3

Initiating Cue: The CRS has directed you to bypass the RWCU Isolation

Interlocks per PPM 5.5.4. Notify the CRS when you have finished

**SIMULATING** the bypass of these interlocks.

CONTROL MANIPULATIONS WILL NOT BE

PERFORMED. ALL ACTIONS AND STEPS WILL BE

SIMULATED.

Time Critical Task: NO

Validation Time: 8 minutes

Simulator ICs: N/A

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup

N/A

**Instructions:** 

Page 2 00jpm05r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: YES	
Performance Step: 1	Step 1)
	Install one jumper across contact terminal studs 7 and 8 for each
	of the below listed relays:
	H13-P622 MS-RLY-K26 RWCU-V-1
	H13-P623 MS-RLY-K27 RWCU-V-4
<b>CUE: JUMPERS</b>	
INSTALLED	
CORRECTLY.	
Standard:	Terminal studs 7 and 8 correctly identified on each relay.
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 2	Step 1)
	Install one contact boot on contact 3-4 for each of the below
	listed relays:
	H13-P622 MS-RLY- K26 RWCU-V-1
	H13-P623 MS-RLY-K27 RWCU-V-4
CUE: CONTACT	
BOOTS	
CORRECTLY	
INSTALLED.	
Standard:	Contacts 3-4 correctly identified on both relays.
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

	VERIFICATION OF COMPLETION
JPM Number: B.1.g	00JPM5R2
Examinee's Name:	
Examiner's Name:	
Date Performed:	
Facility Evaluator:	
Number of Attempts:	
Time to Complete:	

Page 5 00jpm05r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

### JPM INFORMATION CARD

### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

### READ TO THE EXAMINEE:

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

Task Standard: The simulated bypass of the RWCU Isolation Interlocks is

performed in accordance with PPM 5.5.4.

Required Materials: Jumpers and contact boots for PPM 5.5.4

Safety Equipment: N/A

General References: PPM 5.5.4 rev 3

Time Critical Task: N/A

Initial Conditions: An event has occurred that caused PPM 5.1.1 to be entered.

## **INITIATING CUE**

The CRS has directed you to bypass the RWCU Isolation Interlocks per PPM 5.5.4. Notify the CRS when you have finished **SIMULATING** the bypass of these interlocks.

CONTROL MANIPULATIONS WILL <u>NOT</u> BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0672-E-RWCU Validation Time: 6 minutes

NUREG 1123 Reference: 223002K4.08 Time Critical: NO

3.3/3.7

Location: Control Room Performance Method: SIMULATE

Prepared/Revised by: S Hutchison Revision Date: 6/12/00

Page 6 00jpm05r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.g rev 2	

## STUDENT INFORMATION

Initial Conditions: An event has occurred that caused PPM 5.1.1 to be entered.

# **INITIATING CUE**

The CRS has directed you to bypass the RWCU Isolation Interlocks per PPM 5.5.4. Notify the CRS when you have finished **SIMULATING** the bypass of these interlocks.

CONTROL MANIPULATIONS WILL  $\underline{NOT}$  BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.e rev 2	

Facility: WNP-2	Task No: RO-0390-N-AC
Task Title: Transfer 480V Bus Power	Job Performance Measure No: B.1.e
Supply From Normal to Alternate –	00JPM6R2
Alternate Path.	
K/A Reference: 262001A4.04 3.6/3.7	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Simulator – Actual Performance

Page 1 00jpm6r2

### JPM SETUP INFORMATION

**Initial Conditions:** Bus SL-11 is currently powered from the normal power supply

through circuit SM-1.

Task Standard: Bus SL-11 is transferred from the normal power supply to the

alternate power supply, in accordance with plant procedures.

Required Materials: N/A

General References: PPM 2.7.1B rev 12, section 5.0

The CRS has directed you to transfer the SL-11 power source Initiating Cue:

from the normal source, CB 11-1, to the alternate source, CB 21-

11, per PPM 2.7.1B.

Inform the CRS when the transfer of SL-11 to SL-21 is completed.

Ensure malfunction to prevent auto transfer of CB 11-1 is

Time Critical Task: NO

Validation Time: 5 minutes

Simulator ICs: 75

Malfunctions/Remote

Triggers:

Special Setup

N/A

Overrides: N/A

Instructions:

activated.

00jpm6r2 Page 2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.e rev 2	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: YES	
Performance Step: 1	5.1.1) Ensure the CB-21/11 green tripped light is illuminated and the green position flag is being displayed in the CB-21/11 control switch window.
Standard:	Verifies green tripped light is illuminated and the green position flag is displayed in the window.
Comment: SAT / UNSAT	

Critical Step: YES	
Performance Step: 2	5.1.2)
	Place the BUS 11, 21, and 31 Trip Permissive selector switch
	in the TRIP CB-11/1 position.
Standard:	Trip switch place in the TRIP CB-11/1 position.
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 3	5.1.3)
	Place the CB-21/11control switch to the CLOSE position.
Standard:	CB-21/11 control switch in CLOSE.
Comment:	
SAT / UNSAT	

Page 3 00jpm6r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.e rev 2	
Critical Step: NO		
Performance Step: 4	5.1.4)	
	Ensure the CB-21/11 green tripped light exclosed light illuminates.	xtinguishes and red
Standard:	Place the CS for CB-21/11 in the close po	sition.
Comment:		
SAT / UNSAT		

Critical Step: YES*	
Performance Step: 5	<ul> <li>5.1.5/5.1.6)</li> <li>a) Ensure CB11/1 auto trips and the green tripped light illuminates at the time of breaker CB-21/11 closure.</li> <li>b) *Manually trip CB-11/1</li> <li>c) Verify CB-11/1 is tripped by the green tripped light and the green flag is displayed in the control switch window.</li> </ul>
Standard:	Verifies indications and *trips CB-11/1.
NOTE: Candidate may announce the action to the CRS Comment: SAT / UNSAT	

Page 4 00jpm6r2

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.e rev 2	

Critical Step: NO	
Performance Step: 5	5.1.7)
_	Place the BUS11, 21, and 31 Trip Permissive Selector switch in
	an off position.
Standard:	Place the switch in an off position.
Comment:	
SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.e rev 2	

VERIFICATION OF COMPLETION		
JPM Number: b.1.E	00JPM6R2	
Examinee's Name:		
Examinee's Name:		
Examiner's Name:		
Date Performed:		
Facility Evaluator:		
Number of Attempts:		
Time to Complete:		

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.e rev 2	

### JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: Bus SL-11 is transferred from the normal power supply to the

alternate power supply, in accordance with plant procedures.

Required Materials: N/A

Safety Equipment: N/A

General References: PPM 2.7.1B rev 12, section 5.1

Time Critical Task: NO

Initial Conditions: Bus SL-11 is currently powered from the normal power supply

through circuit SM-1.

#### **INITIATING CUE**

The CRS has directed you to transfer the SL-11 power source from the normal source, CB 11-1, to the alternate source, CB 21-11, per PPM 2.7.1B.

Inform the CRS when the transfer of SL-11 to SL-21 is completed.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0390-N-AC Validation Time: 5 minutes

NUREG 1123 Reference: 262001A4.04 Time Critical: NO

3.6/3.7

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 5/12/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.e rev 2	

# STUDENT INFORMATION

Initial Conditions: Bus SL-11 is currently powered from the normal power supply

through circuit SM-1.

# **INITIATING CUE**

The CRS has directed you to transfer the SL-11 power source from the normal source, CB 11-1, to the alternate source, CB 21-11, per PPM 2.7.1B.

Inform the CRS when the transfer of SL-11 to SL-21 is completed.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

Facility: WNP-2	Task No: RO-0156-N-RMCS
Task Title: Operate the CRD System to	Job Performance Measure No: B.1.f
Bring the Reactor Critical – Alternate Path	00JPM7R2
<ul> <li>Drifting Control Rods – Manual Scram</li> </ul>	
K/A Reference: 201002A1.04 3.6/3.5	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Actual Performance - Simulator

Page 1 00jpm7r5

### JPM SETUP INFORMATION

Initial Conditions: A startup from cold conditions is in progress. Control rods have

been withdrawn by the previous crew in preparation to bring the reactor critical. The reactor is subcritical. The SRM and IRM recorders are in fast speed and criticality is expected to occur between RWM Group 12 Step 9, rod 58-31 position 04 and RWM

Group 13 Step 3, rod 34-33 positon 10.

Task Standard: The reactor is made critical per plant procedures resulting in a

stable positive period longer than 60 seconds. Respond 2 drifting in control rods and scram the reactor. Take immediate scram

actions in accordance with PPM 3.3.1.

Required Materials: Control Rod Pull Sheet and marking pen.

General References: PPM 3.1.2 rev 51, section 5.2.5, PPM 4.1.1 rev 12, step 4.2

Initiating Cue: The CRS has directed you to continue the control rod withdrawal

per the control rod pull sheet (sequence sheet), step 12-9 to make

the reactor critical per PPM 3.1.2 step 5.2.5.

The examiner will be the second checker

Notify the CRS when all critical data has been taken and a stable positive period of longer than 60 seconds has been established.

Time Critical Task: NO

Validation Time: 9 minutes

Simulator ICs: 75

Malfunctions/Remote

Triggers:

Malfunction for a drifting control rod 58-31 and 10-39

Overrides: N/A

Special Setup Ensure a marker up copy of the pull sheet is available at the CRO

Instructions: 1 desk.

Page 2 00jpm7r5

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: NO	
Performance Step: 1  CUE: NOTIFY THE EXAMINEE THAT YOU ARE THE	<ul> <li>5.2.5)</li> <li>Withdraw control rods as directed by the rod withdrawal sequence sheets to achieve criticality as follows:</li> <li>a) For initial rod movement prior to criticality, mark sequence sheet table 1 with a Y when movement causes a discernible flux change, or with a N when movement does not cause a discernible flux change.</li> <li>b) For each rod fully withdrawn, check coupling integrity by attempting to pull the rod to the overtravel position and verifying the ROD OVERTRAVEL annunciator 4.603.A7.1-8 does not alarm and initial the sequence sheet.</li> <li>c) For each rod fully withdrawn, ensure position 48 corresponds to the full out indicating light and initial the sequence sheet.</li> </ul>
SECOND QUALIFIED INDIVIDUAL	
Standard:	Control rods are withdrawn as above in accordance with the procedure.
CUE: Drift the first control rod 58-31 when the operator selects and moves the second rod.  Comment: SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

Critical Step: YES	
Performance Step: 2	Respond to rod drift alarm:
	a) Terminate control rod movement.
	b) Refer to PPM 4.1.1.1
	c) Select the drifting in control rod and drive it the full in
	position by depressing the CONTINOUS INSERT
	Pushbutton
	d) Reset the Rod Drift annunciator using the ROD DRIFT
	RESET pushbutton on H13-P603
<b>NOTE:</b> As soon as the f	irst control rod drift is reset, initiate the second rod drift
malfunction.	
MALFUNCTION:	
WHEN THE	
EXAMINEE HAS	
RESET THE FIRST	
ROD DRIFT	
ANNUNCIATOR	
DRIFT THE SECOND	
ROD 10-39	
Standard:	Respond the drifting rod in accordance with plant procedures as
	above.
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

Critical Step: YES			
Performance Step: 3	Upon receipt of the second drifting rod, manually scram the		
	reactor and take the immediate scram actions from memory:		
	a) Place the Mode Switch in SHUTDOWN		
	b) Monitor reactor power, level, and pressure		
	c) Verify all control rods have fully inserted.		
Standard:	Take scram actions from memory as above.		
CUE: WHEN THE			
IMMEDIATE SCRAM			
<b>ACTIONS HAVE</b>			
BEEN COMPLETED,			
ANNONCE THE			
TERMINATION			
POINT OF THE JPM			
Comment:			
SAT / UNSAT			

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

	VERIFICATION OF COMPLETION
JPM Number: B.1.f	00JPM7R3
Examinee's Name:	
Examiner's Name:	
Date Performed:	
Facility Evaluator:	
Number of Attempts:	
Time to Complete:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

### JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: The reactor is made critical per plant procedures resulting in a

stable positive period longer than 60 seconds. Respond 2 drifting in control rods and scram the reactor. Take immediate scram

actions in accordance with PPM 3.3.1.

Required Materials: Control Rod Pull Sheet and marking pen.

Safety Equipment: NONE

General References: PPM 3.1.2 rev 50, section 5.2.5, PPM 4.1.1 rev 12, step 4.2

Time Critical Task: NO

Initial Conditions: The CRS has directed you to continue the control rod withdrawal

per the control rod pull sheet (sequence sheet), step 12-9 to make

the reactor critical per PPM 3.1.2 step 5.2.5.

The examiner will be the second checker

Notify the CRS when all critical data has been taken and a stable positive period of longer than 60 seconds has been established.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

### **INITIATING CUE**

The CRS has directed you to continue the control rod withdrawal per the control rod pull sheet (sequence sheet), step 12-9 to make the reactor critical per PPM 3.1.2 step 5.2.5. Notify the CRS when all critical data has been taken and a stable positive period of longer than 60 seconds has been established.

# INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0156-N-RMCS Validation Time: 9 minutes

NUREG 1123 Reference: 201002A1.04 Time Critical: NO

3.6/3.5

Location: Simulator Performance Method: Perform

Prepared/Revised by: S Hutchison Revision Date: 5/12/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.1.f rev 5	

### STUDENT INFORMATION

Initial Conditions: A startup from cold conditions is in progress. Control

rods have been withdrawn by the previous crew in preparation to bring the reactor critical. The reactor is subcritical. The SRM and IRM recorders are in fast speed and criticality is expected to occur between RWM Group 12 Step 9, rod 58-31 position 04 and RWM Group

13 Step 3, rod 34-33 positon 10.

## **INITIATING CUE**

The CRS has directed you to continue the control rod withdrawal per the control rod pull sheet (sequence sheet), step 12-9 to make the reactor critical per PPM 3.1.2 step 5.2.5.

The examiner will be the second checker

Notify the CRS when all critical data has been taken and a stable positive period of longer than 60 seconds has been established.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.a rev 1	

Facility: WNP-2	Task No: SRO-0251-A-RSP RO-0117-A-RSP
Task Title: Establish Suppression Pool Cooling from Alt Rem Shutdown Panel	Job Performance Measure No: B.2.a 0JPM08R1
K/A Reference: 295016AA2.04 3.9/4.1	
Examinee:	NRC Examiner:
Facilitas Facelanda III	Deter
Facility Evaluator:	Date:

Method of testing:

Simulate - Plant

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### JPM SETUP INFORMATION

Initial Conditions: The control room has been evacuated due to a fire. The Remote

Shutdown Panel is manned with all equipment operable. RPV level is 35 inches, SW-P-1A, SW-P-1B, and RCIC were started from the control room prior to evacuation. Suppression Pool

temperature is 114°F. RHR-P-2A is not in operation.

Task Standard: All actions to place RHR-P-2A in Suppression Pool Cooling will

be **SIMULATED** in accordance with the procedure.

Required Materials: N/A

General References: PPM 4.12.1.1 rev 38, sections 5.8 and 5.9

Initiating Cue: The CRS has directed you to place RHR-A in suppression pool

cooling at the Alternate Remote Shutdown Panel using PPM 4.12.1.1 Section 5.9. Inform the CRS when you have established

a suppression pool cooling flow rate of 7000 to 7500 gpm.

CONTROL MANIPULATIONS WILL NOT BE

PERFORMED. ALL ACTIONS AND STEPS WILL BE

SIMULATED.

Time Critical Task: NO

Validation Time: 12 minutes

Simulator ICs: N/A

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup

N/A

**Instructions:** 

Page 2 00jpm8r1

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: YES	
Performance Step: 1	5.9.1.a ) To ensure RHR-P-2A is running, perform the
1	following:
	5.8.1 – At E-CP-ARS, ensure correct switch alignment for
	RHR-A as follows:
CUE: As the	• RHR-P-2A - Stop
examinee points to	• RHR-V-24A - NORM (closed)
each valve and states	• RHR-V-27A - Closed
the position of the	• RHR-V-6A - Closed
switch/indicating light,	• RHR-V-8 - Closed
cue that the valve is	• RHR-V-16A – Closed
positioned as per the	• RHR-V-42A – Closed
procedure.	• RHR-V-64A – Closed
procedures	• RHR-V-4A – Open
	• RHR-V-53A – NORM (CLOSED)
	• RHR-V-48A – NORM (OPEN)
	• RHR-V-3A - NORM (OPEN)
	5.8.2 – Place the following power transfer switches to the
	EMERG position:
	• RHR-V-24A - POWER TRANSFER
	• RHR-V-27A - POWER TRANSFER
	• RHR-V-6A - POWER TRANSFER
	• RHR-V-8 - POWER TRANSFER
	• RHR-V-16A - POWER TRANSFER
	• RHR-V-42A - POWER TRANSFER
	• RHR-V-64A - POWER TRANSFER • RHR-V-4A - POWER TRANSFER
	<ul><li>RHR-V-53A - POWER TRANSFER</li><li>RHR-V-48A - POWER TRANSFER</li></ul>
	• RHR-V-48A - POWER TRANSFER • RHR-V-3A - POWER TRANSFER
	• RHR-V-3A - POWER TRANSFER • RHR-P-2A – POWER TRANSFER
	· MIN-F-ZA – FOWER TRAINSFER
	5.8.3 – Start RHR-P-2A by placing RHR-P-2A Control Switch
	to START and opens RHR-FCV-64A.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.a rev 1	

Standard:	All steps <b>SIMULATED</b> IAW the procedure.
Comment: SAT / UNSAT	

Critical Step: NO	
Performance Step: 2	5.9.1.b)
<b>CUE:</b> The valve is	Ensure RHR-V-42A is closed
closed.	
Standard:	RHR-V-42A is simulated closed.
Comment:	
SAT / UNSAT	

Critical Step: NO	
Performance Step: 3	5.9.1.c)
CUE: The valve is	Ensure RHR-FCV-64A is open
open.	
Standard:	RHR-FCV-64A is simulated open.
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 4	5.9.1.d)
<b>CUE:</b> The valve is	Throttle open RHR-V-24A to establish approximately 2000 gpm
open with 2000 gpm	flow rate.
flowrate.	
Standard:	RHR-V-24A is open with 2000 gpm flow.
Comment:	
SAT / UNSAT	

Page 4 00jpm8r1

Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.a rev 1	

Critical Step: NO	
Performance Step: 5	5.9.1.e)
<b>CUE:</b> The valve is	Close RHR-FCV-64A
closed.	
Standard:	RHR-FCV-64A is simulated closed.
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 6	5.9.1.f)
<b>CUE:</b> The valve is	Throttle open RHR-V-24A to establish between 7000 to 7500
open with required	gpm flow rate.
flow.	
Standard:	RHR-V-24A is simulated open with 7000 to 7500 gpm flow.
Comment:	
SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.a rev 1	

	VERIFICATION OF COMPLETION
JPM Number: B.2.a	00JPM8R1
Examinee's Name:	
Examiner's Name:	
Date Performed:	
Facility Evaluator:	
Number of Attempts:	
Time to Complete:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.a rev 1	

### JPM INFORMATION CARD

## HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: All actions to place RHR-P-2A in Suppression Pool Cooling will

be **SIMULATED** in accordance with the procedure.

Required Materials:

Safety Equipment:

General References: PPM 4.12.1.1 rev 38, sections 5.8 and 5.9

Time Critical Task: NO

Initial Conditions: The control room has been evacuated due to a fire. The Remote

Shutdown Panel is manned with all equipment operable. RPV level is 35 inches, SW-P-1A, SW-P-1B, and RCIC were started from the control room prior to evacuation. Suppression Pool

temperature is 114°F. RHR-P-2A is not in operation.

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Form ES-C-1

### **INITIATING CUE**

The CRS has directed you to place RHR-A in suppression pool cooling at the Alternate Remote Shutdown Panel using PPM 4.12.1.1 Section 5.9. Inform the CRS when you have established a suppression pool cooling flow rate of 7000 to 7500 gpm.

CONTROL MANIPULATIONS WILL  $\underline{NOT}$  BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

# INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: SRO-0251-A-RSP RO- Validation Time: 12

0117-A-RSP

NUREG 1123 Reference: 295016AA2.04 Time Critical: NO

3.9/4.1

Location: Plant Performance Method: Simulate

Prepared/Revised by: S Hutchison Revision Date: 5/18/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.a rev 1	

## STUDENT INFORMATION

Initial Conditions: The control room has been evacuated due to a fire. The Remote

Shutdown Panel is manned with all equipment operable. RPV level is 35 inches, SW-P-1A, SW-P-1B, and RCIC were started from the control room prior to evacuation. Suppression Pool

temperature is 114°F. RHR-P-2A is not in operation.

## **INITIATING CUE**

The CRS has directed you to place RHR-A in suppression pool cooling at the Alternate Remote Shutdown Panel using PPM 4.12.1.1 Section 5.9. Inform the CRS when you have established a suppression pool cooling flow rate of 7000 to 7500 gpm.

CONTROL MANIPULATIONS WILL  $\underline{NOT}$  BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.b rev 1	

Facility: WNP-2	Task No: RO-0050-A-CAS EO-1863-A-CAS
Task Title: Open CN-V-65 with a Gas Bottle	Job Performance Measure No: B.2.b 00JPM9R1
K/A Reference: 300000K3.02 3.3/3.4	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Simulate-Plant

Page 1 00jpm9r1

## JPM SETUP INFORMATION

Initial Conditions: The Control Air System has been depressurized.

Task Standard: Actions to place a Nitrogen bottle and open CN-V-65 are taken in

accordance with the procedure.

Required Materials: NONE

General References: PPM 2.8.2 rev 17, section 5.8

Initiating Cue: You have been directed by the CRS to place a nitrogen bottle on

CN-V-65 and open CN-V-65 per PPM 2.8.2 section 5.8. Inform

the CRS when CN-V-65 is open.

MANIPULATIONS WILL <u>NOT</u> BE PERFORMED. ALL

ACTIONS AND STEPS WILL BE SIMULATED.

Time Critical Task: NO

Validation Time: 7 minutes

Simulator ICs: N/A

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup

N/A

Instructions:

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.b rev 1	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: YES	
Performance Step: 1	5.8.1)
	Obtain a nitrogen bottle and regulator and bottle stand from the
	EOP toolbox on the RB 522 west wall.
<b>CUE: Bottle and</b>	
regulator are obtained.	
Standard:	Obtains bottle and regulator from EOP toolbox.
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 2	5.8.2)
	Close CN-V-765A (CN-SPV-65 bypass)
CUE: CN-V-765A is	
closed	
Standard:	Close CN-V-765A (CN-SPV-65 bypass)
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.b rev 1	

Critical Step: YES	
Performance Step: 3	5.8.3)
_	Close CN-V-765B (CN-SPV-65 outlet)
<b>CUE: CN-V-765B is</b>	
closed	
Standard:	Close CN-V-765B (CN-SPV-65 outlet)
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 4	5.8.4)
	Connect gas bottle and regulator to CN-V-765C (Gas Bottle
	Connection)
<b>CUE:</b> Gas bottle and	
regulator are	
connected to CN-V-	
765C	
Standard:	Connect gas bottle and regulator to CN-V-765C (Gas Bottle
	Connection)
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure Worksheet JPM B.2.b rev 1	Form ES-C-1
	WORKSHEET JPW B.2.D FeV 1	
Cuitinal Chama VIEC		
Critical Step: YES	5 0 5)	
Performance Step: 5	5.8.5)	
CUE. Dogulator set at	Adjust gas bottle regulator to 50-70 psig.	
CUE: Regulator set at 50-70 psig.		
Standard:	Adjust gas bottle regulator to 50-70 psig.	
Standard.	Adjust gas bottle regulator to 50-70 psig.	
Comment:		
SAT / UNSAT		
Critical Step: Yes		
Performance Step: 6	5.8.6)	
•	Open CN-V-765C (Gas Bottle Connection)	
CUE: CN-V-765C is		
open		
Standard:	Open CN-V-765C (Gas Bottle Connection)	
Comment:		
SAT / UNSAT		
~		
Critical Step: NO	T 0 = 1	
Performance Step: 7	5.8.7)	
CHE CNIN CE	Ensure CN-V-65 opens.	
CUE: CN-V-65 opens.	D COLUMN	
Standard:	Ensure CN-V-65 opens.	
<u> </u>		
Comment: SAT / UNSAT		
SAI / UNSAI		
THE EXAMINEE SHOP	ULD ANNOUNCE THE TERMINATION PO	INT OF THE IPM
AT THIS POINT.		
III IIIID I OII II.		
JPM TERMINATION		
TIME:		
JPM START TIME:	-	
JPM COMPLETION TIL	ME:	

VERIFICATION OF COMPLETION

	Appendix C	Job Perfo	rmance Measure	Form ES-C-1
		Worksheet	JPM B.2.b rev 1	
_				
	JPM Number: B.2.b	00JPM9R1		
_	T ' 1 1 1			
	Examinee's Name:			
_				
	Examiner's Name:			
_				
	Date Performed:			
_				
	Facility Evaluator:			
_				
	Number of Attempts:			
	Time to Complete:			
-	·		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.b rev 1	

### JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: Actions to place a Nitrogen bottle and open CN-V-65 are taken in

accordance with the procedure.

Required Materials: N/A

Safety Equipment: N/A

General References: PPM 2.8.2 rev 16, section 5.8

Time Critical Task: NO

Initial Conditions: The Control Air System has been depressurized.

## **INITIATING CUE**

You have been directed by the CRS to place a nitrogen bottle on CN-V-65 and open CN-V-65 per PPM 2.8.2 section 5.8. Inform the CRS when CN-V-65 is open.

MANIPULATIONS WILL <u>NOT</u> BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0050-A-CAS EO-1863- Validation Time: 7 minutes

A-CAS

NUREG 1123 Reference: 300000K3.02 Time Critical: NO

3.3/3.4

Location: Plant Performance Method: Simulate

Prepared/Revised by: S Hutchison Revision Date: 5/18/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.b rev 1	

## STUDENT INFORMATION

Initial Conditions: The Control Air System has been depressurized.

# **INITIATING CUE**

You have been directed by the CRS to place a nitrogen bottle on CN-V-65 and open CN-V-65 per PPM 2.8.2 section 5.8. Inform the CRS when CN-V-65 is open.

MANIPULATIONS WILL <u>NOT</u> BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.c rev 1	

Facility: WNP-2	Task No: RO-0680 EO-1957
Task Title: Inserting Control Rods by	Job Performance Measure No: B.2.c
Venting Scram Air Header	00JPM10R1
K/A Reference: 295037EA1.05 3.9/4.0	
Examinee:	NRC Examiner:
Facility Evaluator:	Date:

Method of testing:

Simulate - Plant

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### JPM SETUP INFORMATION

Initial Conditions: A scram has been initiated and all blue lights are extinguished on

P603. Reactor pressure is stable at 930 psig.

Task Standard: All steps to vent the scram air header will be SIMULATED in

accordance with PPM 5.5.11.

Required Materials: Pre-staged EOP Tools

General References: PPM 5.5.11 rev 4, tab D

Initiating Cue: The CRS has directed you to insert control rods by venting the

scram air header per PPM 5.5.11, tab D. Notify the CRS when actions have been completed to vent the Scram Air Header.

MANIPULATIONS WILL <u>NOT</u> BE PERFORMED. ALL

ACTIONS AND STEPS WILL BE SIMULATED.

Time Critical Task: NO

Validation Time: 5 minutes

Simulator ICs: N/A

Malfunctions/Remote

Triggers:

N/A

Overrides: N/A

Special Setup

N/A

**Instructions:** 

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.c rev 1	

# PERFORMANCE INFORMATION

# START TIME:

Critical Step: NO	
Performance Step: 1	5.5.11, Q-1)
	Check Rod Density.
<b>CUE: Rod density is</b>	
71%.	
Standard:	Verify Rod density prior to venting scram air header.
Comment:	
SAT / UNSAT	

Critical Step: YES	
Performance Step: 2 5.5.11, Q-2)	
_	Close CRD-V-95, Scram Air Header Isolation
	Close CRD-V-729, CRD-PI-13 isolation
CUE:	
CRD-V-95 CLOSED	
CRD-V-729 CLOSED	
Standard:	Actions simulated to close CRD-V-95 and 729 in accordance with procedure.
Comment:	
SAT / UNSAT	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.c rev 1	

5.5.11, Q-3)
Remove instrument drain plug for CRD-PI-13
Simulate removal of the drain plug as per PPM 5.5.11

Critical Step: YES*	
Performance Step: 4	5.5.11, Q-4)
_	*Open CRD-V-729, CRD-PI-13 isolation
	Notify the CRS of the results
CUE: CRD-V-729 is	
open and air is venting.	
Standard:	Simulate the opening of CRD-V-729 as per 5.5.11.
Comment:	
SAT / UNSAT	

THE EXAMINEE SHOULD ANNOUNCE THE TERMINATION POINT OF THE JPM AT THIS POINT.

JPM TERMINATION	
TIME:	
JPM START TIME: -	
JPM COMPLETION TIME:	

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.c rev 1	

VERIFICATION OF COMPLETION			
JPM Number: B.2.c	00JPM10R1		
Examinee's Name:			
Examinee s Name.			
Examiner's Name:			
Date Performed:			
Facility Evaluator:			
Number of Attempts:			
Time to Complete:			

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### JPM INFORMATION CARD

#### HAND THE STUDENT INFORMATION CARD TO THE EXAMINEE

#### READ TO THE EXAMINEE:

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

Task Standard: All steps to vent the scram air header will be SIMULATED in

accordance with PPM 5.5.11.

Required Materials: Pre-staged EOP Tools

Safety Equipment: N/A

General References: PPM 5.5.11 rev 4, tab D

Time Critical Task: NO

Initial Conditions: A scram has been initiated and all blue lights are extinguished on

P603. Reactor pressure is stable at 930 psig.

#### **INITIATING CUE**

The CRS has directed you to insert control rods by venting the scram air header per PPM 5.5.11, tab D. Notify the CRS when actions have been completed to vent the Scram Air Header.

MANIPULATIONS WILL <u>NOT</u> BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

## INFORMATION BELOW THIS LINE NOT SHARED WITH EXAMINEE

Task Number: RO-0680 EO-1957 Validation Time: 5 minutes

NUREG 1123 Reference: 295037EA1.05 Time Critical: NO

3.9/4.0

Location: Plant Performance Method: Simulate

Prepared/Revised by: S Hutchison Revision Date: 5/18/00

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Appendix C	Job Performance Measure	Form ES-C-1
	Worksheet JPM B.2.c rev 1	

## STUDENT INFORMATION

Initial Conditions: A scram has been initiated and all blue lights are extinguished on

P603. Reactor pressure is stable at 930 psig.

# **INITIATING CUE**

The CRS has directed you to insert control rods by venting the scram air header per PPM 5.5.11, tab D. Notify the CRS when actions have been completed to vent the Scram Air Header.

MANIPULATIONS WILL  $\underline{\text{NOT}}$  BE PERFORMED. ALL ACTIONS AND STEPS WILL BE SIMULATED.

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