

JOB PERFORMANCE MEASURE APPROVAL SHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC A.1.1

Revision: 0

Task Title: Evaluate Technical Specifications and Technical Requirements

System: NA

Time Critical Task: () YES (X) NO

Validated Time (minutes): 10

Task Number(s): 119-03-003

Applicable To: SRO X RO PEO

K/A Number: GEN 2.1.12 K/A Rating: 2.9 / 4.0

Method of Testing: Simulated Performance: Actual Performance: X

Location: Classroom: X Simulator: In-Plant:

Task Standards: Correctly determine applicable Technical Specifications and Technical Requirements.

Required Materials: Unit 3 Technical Specifications, Technical Requirements Manual

General References: Unit 3 Technical Specifications, Technical Requirements

*****READ TO THE STUDENT*****

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC SRO A.1.1

Revision: 0

Simulator Requirements: None

Initial Conditions: The plant was at 100% power with charging and letdown in a normal lineup. The "B" Charging pump tripped on overcurrent. The crew is completing the actions in EOP 3506, "Loss Of All Charging Pumps." The "A" charging pump is now running. The "C" charging pump is not yet aligned to the "B" train.

Initiating Cues: The SM has directed you to determine the applicable Technical Specifications and Technical Requirements for the present plant condition. Keep a rough log of any applicable LCOs.

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, ALL critical steps must be completed correctly. The student's performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.1.1

Revision: 0

Task Title: Evaluate Technical Specifications and Technical Requirements

Start Time: _____

STEP	<u>1</u>		Performance Step:	Obtain copy of MP3 Technical Specifications and MP3 Technical Requirements manual.
GRADE	_____	_____	Standards:	Obtains proper copies.
			Grade:	SAT _____ UNSAT _____
STEP	<u>2</u>	<u>X</u>	Performance Step:	Determine the applicable Technical Specifications.
GRADE	_____	_____	Standards:	Refers to T/S 3.5.2, ECCS Subsystems – Tav _g Greater Than or Equal to 350°F.
GRADE	_____	<u>X</u>	Standards:	Recognizes that T/S 3.5.2 applies and enters LCO 3.5.2, ACTION a. (72 hour allowed outage time)
GRADE	_____	_____	Standards:	Records applicable LCO in rough log.
			Grade:	SAT _____ UNSAT _____
STEP	<u>3</u>	<u>X</u>	Performance Step:	Determine the applicable Technical Requirements.
GRADE	_____	_____	Standards:	Refers to T/R 3.1.2.2, Boration Systems Flow Paths – Operating.
GRADE	_____	<u>X</u>	Standards:	Recognizes that T/R 3.1.2.2 applies and enters LCO 3.1.2.2, ACTION 1. (72 hour allowed outage time)
GRADE	_____	_____	Standards:	Records applicable LCO in rough log.
			Grade:	SAT _____ UNSAT _____
GRADE	_____	_____	Standards:	Refers to T/R 3.1.2.4, Boration Systems - Charging Pump – Operating.

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.1.1

Revision: 0

Task Title: Evaluate Technical Specifications and Technical Requirements

GRADE X Standards: Recognizes that T/R 3.1.2.4 applies and enters LCO 3.1.2.4. (72 hour allowed outage time)

GRADE Standards: Records applicable LCO in rough log.
Grade: SAT UNSAT

GRADE Standards: Refers to T/R 7.4.1, Fire Related Safe Shutdown Components.

GRADE X Standards: Recognizes that T/R 7.4.1 applies and enters LCO 7.4.1, ACTION a.1 and a.3. (14 and 30 day allowed outage time respectively)

NOTE: "B" Charging Pump is a listed component on TRM Table 7.4-1. If a component listed on the Table is inoperable, LCO 7.4.1 Action a applies.

GRADE Standards: Records applicable LCO in rough log.
Grade: SAT UNSAT

STEP Performance Step: NA

GRADE Standards: Candidate informs the SM that all applicable Technical Specifications and Technical Requirements have been entered for current plant conditions.

Grade: SAT UNSAT

CUE: The evaluation for this JPM is complete

Stop Time:

VERIFICATION OF JPM COMPLETION

JPM Number: NRC SRO A.1.1

Revision: 0

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number:

NRC SRO A.1.1

Initial Conditions:

The plant was at 100% power with charging and letdown in a normal lineup. The "B" Charging pump tripped on overcurrent. The crew is completing the actions in EOP 3506, "Loss Of All Charging Pumps." The "A" charging pump is now running. The "C" charging pump is not yet aligned to the "B" train.

Initiating Cues:

The SM has directed you to determine the applicable Technical Specifications and Technical Requirements for the present plant condition. Keep a rough log of any applicable LCOs.

JOB PERFORMANCE MEASURE APPROVAL SHEET

I. JPM Title: Notifications and Reportability.

JPM ID Number: NRC SRO A.1.2

Revision: 0

II. Initiated:

D. Minnich
Developer

D. Minnich

1/10/07

Date

III. Reviewed:

Martin
Technical Reviewer

Martin

1/24/07

Date

IV. Approved:

N/A
Cognizant Plant Supervisor (optional)

Date

Hesterma
Nuclear Training Supervisor

1/24/07

Date

JOB PERFORMANCE MEASURE APPROVAL SHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC SRO A.1.2

Revision: 0

Task Title: Notifications and Reportability.

System: N/A

Time Critical Task: () YES (X) NO

Validated Time (minutes): 10

Task Number(s): 301-05-366

Applicable To: SRO X RO _____ PEO _____

K/A Number: 2.1.6 K/A Rating: 4.3

Method of Testing: Simulated Performance: _____ Actual Performance: X

Location: Classroom: X Simulator: _____ In-Plant: _____

Task Standards: Determine the proper notifications and event reporting requirements given a particular event.

Required Materials: RAC 14, *Non-Emergency Station Events*

General References: RAC 05, *Reportability Determinations and Licensee Event Reports*
10CFR50.72 / .73

*****READ TO THE STUDENT*****

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC SRO A.1.2

Revision: 0

Simulator Requirements: None

Initial Conditions: The plant is at 100% power, and you are the Extra Senior Licensed Operator on shift. 10 minutes ago, a maintenance technician was injured while working in a contaminated area in the Waste Disposal Building. The work area has been placed in a safe condition. The worker's injuries are severe and treatment is required at Lawrence and Memorial hospital. The worker is also contaminated. The worker is stabilized, ready for transport and the ambulance is enroute.

Initiating Cues: The SM has directed you to determine the NRC and State reporting requirements associated with this event.

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. The student's performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

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JPM Number: NRC SRO A.1.2

Revision: 0

Task Title: Notifications and Reportability.

Start Time: _____

STEP 1 _____ **Performance Step:** Obtains proper procedure.
GRADE _____ _____ **Standards:** Obtains and refers to a copy of RAC 14, *Non-Emergency Station Events*.
Grade: **SAT** _____ **UNSAT** _____

STEP 2 _____ **Performance Step:** Review Precautions.
RAC 14, Section 3
GRADE _____ _____ **Standards:** Applicant reviews precautions 3.1 through 3.8.
Grade: **SAT** _____ **UNSAT** _____

STEP 3 _____ **Performance Step:** **Initial Event Reportability Determination**
RAC 14, step 4.1.1.a
IF sufficient cause exists for reporting a non-emergency event, **PERFORM** the following:
a. **ANALYZE** available information and **DEVELOP** a general understanding of event in progress.

GRADE _____ _____ **Standards:** Applicant recognizes that cause exists for reporting this event.

Evaluator NOTE: If the applicant requests additional event related information beyond the initial conditions provide the following cue:

CUE: A representative from Site Fire Protection and Health physics will brief you shortly on the specific injuries.

Grade: **SAT** _____ **UNSAT** _____

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.1.2

Revision: 0

Task Title: Notifications and Reportability.

STEP	<u> 4 </u>	<u> </u>	Performance Step: RAC 14, step 4.1.1.b	ASSIGN staff to collect and track information.
GRADE	<u> </u>	<u> </u>	Standards:	Applicant requests additional staff.
			Evaluator NOTE:	If the applicant requests additional personnel to track the event provide the following cue:
			CUE:	No additional staff is presently available.
			Grade:	SAT <u> </u> UNSAT <u> </u>

STEP	<u> 5 </u>	<u> </u>	Performance Step: RAC 14, step 4.1.1.c	IF necessary, REQUEST assistance from any of the following, as applicable, to determine reportability and respond to event:
GRADE	<u> </u>	<u> </u>	Standards:	Requests assistance as necessary.
			Evaluator NOTE:	If the applicant requests additional assistance provide the following cue:
			CUE:	Additional assistance will be available shortly.
			Grade:	SAT <u> </u> UNSAT <u> </u>

STEP	<u> 6 </u>	<u> </u>	Performance Step: RAC 14, step 4.1.1.d	As required, REQUEST Station Duty Officer (typically the non-affected unit STA) and Emergency Communicator (typically the non-affected unit WC SRO) report to the Control Room and prepare to send a Non Emergency Event Report.
GRADE	<u> </u>	<u> </u>	Standards:	Applicant calls Unit 2 and requests the Station Duty Officer and Emergency Communicator report to the Unit 3 Control Room.
			Grade:	SAT UNSAT

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JPM Number: NRC SRO A.1.2

Revision: 0

Task Title: Notifications and Reportability.

Evaluator NOTE: RAC 14, steps 4.1.1.e through 4.1.1.i pertain to event types NOT related to the event in progress. The applicant should recognize that these steps do not apply and move to step 4.1.1.j.

STEP	<u>7</u>	<u>X</u>	Performance Step: RAC 14, step 4.1.1.J	For all events, Refer To appropriate Attachment 1 through 7 and DETERMINE State and NRC reporting requirements.
GRADE	_____	<u>X</u>	Standards:	Applicant refers to Attachments 1 through 7 and determines that Attachment 2, "Radiological Events", is the applicable attachment.
			Grade:	SAT _____ UNSAT _____
GRADE	_____	<u>X</u>	Standards:	Applicant matches the event in progress with the following event description in attachment 2: "An event requiring the transport of a radioactively contaminated person to an offsite medical facility for treatment."
			Grade:	SAT _____ UNSAT _____
GRADE	_____	<u>X</u>	Standards:	Applicant correctly determines the NRC Reporting Requirement for the event is as follows: "Within 8 hours via ENS" (10CFR50.72(b)(3))
			Grade:	SAT _____ UNSAT _____
GRADE	_____	_____	Standards:	Applicant correctly determines the State posture code for the event is an "Echo".

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JPM Number: NRC SRO A.1.2

Revision: 0

Task Title: Notifications and Reportability.

Grade: **SAT** _____ **UNSAT** _____

GRADE _____ X **Standards:** Applicant correctly determines the State Reporting Requirement for the event is as follows:

“Within 1 hour of report to NRC”
(State Reg. 22a-135-1)

Grade: **SAT** _____ **UNSAT** _____

Evaluator NOTE: For this Event, Attachment 2 list NOTES 1, 2 and 3 to reference in Attachment 7. The Applicant should review these notes for applicability.

STEP 8 _____ **Performance Step:** Refer To Attachment 15 for additional notifications.
RAC 14, Att 7 NOTE 1

GRADE _____ _____ **Standards:** Applicant reviews NOTE 1 and refers to Attachment 15.

Grade: **SAT** _____ **UNSAT** _____

GRADE _____ _____ **Standards:** Applicant determines the following additional notifications are required for Transport of Contaminated Injured Person:

- Refer To C OP 200.3, "Response to Medical Emergencies" (Cont./Injured Person Off-site) Required:
- a. Site Fire Protection personnel (EMTs)
 - b. Health Physics Technician
 - c. Security Shift Supervisor
 - d. Waterford Ambulance (911)
 - e. Lawrence and Memorial Hospital List
 - f. Middlesex Hospital List (Alternate)

CUE: These notifications have already been made.

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JPM Number: NRC SRO A.1.2

Revision: 0

Task Title: Notifications and Reportability.

Grade: _____ **SAT** _____ **UNSAT** _____

STEP 9 _____ **Performance Step:** RAC 14, Att 7 **NOTE 2**
In the event of an incident involving a fatality or serious injury, off-site release or contamination, and for planned exercise, a telephone notification within one (1) hour to American Nuclear Insurers (9-561-3433) is warranted.

GRADE _____ _____ **Standards:** Applicant reviews NOTE 2 and determines it applies.

Grade: _____ **SAT** _____ **UNSAT** _____

GRADE _____ _____ **Standards:** Applicant directs the SDO to notify ANI of the event or the applicant initiates the call.

Grade: _____ **SAT** _____ **UNSAT** _____

STEP 10 _____ **Performance Step:** RAC 14, Att 7 **NOTE 3**
Follow-up notification. Telephone notifications made for non-emergency one (1), four (4), eight (8), and 24 hour events will require follow-up notifications

GRADE _____ _____ **Standards:** Applicant reviews NOTE 3 and determines that follow-up notifications may be required.

Grade: _____ **SAT** _____ **UNSAT** _____

STEP 11 _____ **Performance Step:** RAC 14, step 4.1.1.k
IF required, Refer To and PERFORM Section 4.7, "Radiopager Notifications."

GRADE _____ _____ **Standards:** Applicant refers to section 4.7.

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JPM Number: NRC SRO A.1.2

Revision: 0

Task Title: Notifications and Reportability.

Grade: SAT UNSAT

CUE: The Emergency Communicator will prepare and send the Non Emergency Event Report and the Station Duty Officer will notify the NRC Resident and NRC Operations Center.
The evaluation for this JPM is complete.

Stop Time:

VERIFICATION OF JPM COMPLETION

JPM Number: NRC SRO A.1.2

Revision: 0

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number:

NRC SRO A.1.2

Initial Conditions:

The plant is at 100% power, and you are the Extra Senior Licensed Operator on shift. 10 minutes ago, a maintenance technician was injured while working in a contaminated area in the Waste Disposal Building. The work area has been placed in a safe condition. The worker's injuries are severe and treatment is required at Lawrence and Memorial hospital. The worker is also contaminated. The worker is stabilized, ready for transport and the ambulance is enroute.

Initiating Cues:

The SM has directed you to determine the NRC and State reporting requirements associated with this event.

JOB PERFORMANCE MEASURE APPROVAL SHEET

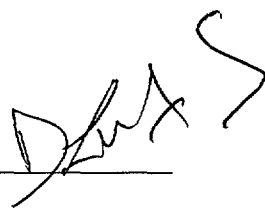
I. JPM Title: Response to Door Inoperability.

JPM ID Number: NRC SRO A.2

Revision: 0

II. Initiated:

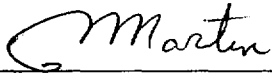
D. Minnich
Developer



1/9/07
Date

III. Reviewed:

Martin
Technical Reviewer



1/24/7
Date

IV. Approved:

N/A
Cognizant Plant Supervisor (optional)

Date

M. Kultima
Nuclear Training Supervisor

1/24/07
Date

JOB PERFORMANCE MEASURE APPROVAL SHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability.

System: N/A

Time Critical Task: () YES (X) NO

Validated Time (minutes): 20

Task Number(s): 341-01-014

Applicable To: SRO X RO _____ PEO _____

K/A Number: 2.2.21 K/A Rating: 2.3 / 3.5

Method of Testing: Simulated Performance: _____ Actual Performance: X

Location: Classroom: X Simulator: _____ In-Plant: _____

Task Standards: Correctly determine the required actions for an INOPERABLE MP3 door.

Required Materials: OP 3261, Response to Door Inoperability

General References: Unit 3 Technical Specifications, Technical Requirements

READ TO THE STUDENT

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC SRO A.2

Revision: 0

Simulator Requirements: None

Initial Conditions: The plant is at 100 % power and you are the Work Control SRO on shift. An emergent repair is required on the "A" RPCCW Heat Exchanger. Maintenance requires door A-24-4 be blocked open and have its center post removed, to move in equipment and scaffolding.

Initiating Cues: You are asked to determine any compensatory actions necessary before blocking open door A-24-4, and then to brief the SM.

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. The students performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

Start Time: _____

STEP 1 _____ **Performance Step:** Obtains copy of OP 3261 "Response to Door Inoperability".

GRADE _____ _____ **Standards:** Obtains proper procedure.

Grade: **SAT** _____ **UNSAT** _____

STEP 2 X **Performance Step:** Refer To Attachment 2, "Unit 3 Door Attributes," and DETERMINE applicable attributes to door in question.

GRADE _____ X **Standards:** Applicant refers to Attachment 2 and determines that for door A-24-4, the following attributes apply:

- TRM Fire Door
- Locked TRM Fire Door
- SLCRS Door
- Radiation Door

Grade: **SAT** _____ **UNSAT** _____

STEP 3 _____ **Performance Step:** For doors listed as "Dual Train Protected Door," both trains are potentially impacted. A door with a D attribute will also have one or more other attributes. IF the compensatory actions of this procedure for the other attributes are met, train separation is not an issue ...

GRADE _____ _____ **Standards:** Applicant recognizes that door A-24-4 is NOT a Dual Train Protection Door, and moves on to OP 3261, step 1.3.

Grade: **SAT** _____ **UNSAT** _____

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

STEP 4 X **Performance Step:** IF one of the following types of doors is not capable of performing its intended function, PERFORM the specified actions:

OP 3261, step 1.3.1

IF door is a "TRM Related Fire Door," PERFORM the following:

- Refer To TRM 3.7.13, "Fire Protection Systems, Fire Rated Assemblies," and PERFORM applicable actions.
- Refer To the Shift Turnover Log and RECORD door status.
- NOTIFY the Site Fire Protection Department.

GRADE _____ X **Standards:** Applicant recognizes that door A-24-4 is a TRM Related Fire Door and obtains and refers to TRM 3.7.13, "Fire Protection Systems, Fire Rated Assemblies,"

Grade: **SAT** _____ **UNSAT** _____

GRADE _____ X **Standards:** Recognizes that TRM 3.7.13 applies and it will be necessary to enter LCO 3.7.13, ACTION a. (1 hour allowed outage time)

Grade: **SAT** _____ **UNSAT** _____

GRADE _____ _____ **Standards:** Applicant logs in a rough log or otherwise states that door A-24-4 will be blocked open and needs to be recorded in the Shift Turnover Log.

Evaluator NOTE: The requirement to record door status in the Shift Turnover Log need only be done once

Grade: **SAT** _____ **UNSAT** _____

GRADE _____ _____ **Standards:** Applicant notifies Site Fire Protection Department that door A-24-4 will be blocked open. Telephone call is adequate for this notification.

CUE: All notifications to Site Fire Protection are

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JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

		Grade:	complete SAT _____	UNSAT _____
STEP	<u>5</u>	Performance Step: OP 3261, step 1.3.2	IF door is a "Locked TRM Related Fire Door," PERFORM the following: <ul style="list-style-type: none"> • Refer To TRM 3.7.13, "Fire Protection Systems, Fire Rated Assemblies," and PERFORM applicable actions. • Refer To the Shift Turnover Log and RECORD door status. • IF the only action performed is to unlock door to provide temporary access • NOTIFY the Site Fire Protection Department. 	
GRADE	_____	Standards:	Applicant recognizes door A-24-4 is a Locked TRM Related Fire Door, and that the door will NOT be just unlocked door to provide temporary access. Also recognizes that the other actions specified are redundant to the previous step.	
		Grade:	SAT _____	UNSAT _____
STEP	<u>6</u>	Performance Step: OP 3261, step 1.3.3	IF door is a non-TRM fire door, NOTIFY the Site Fire Protection Department.	
GRADE	_____	Standards:	Applicant recognizes that door A-24-4 is not a non-TRM Fire Door and moves on to OP 3261, step 1.3.4.	
		Grade:	SAT _____	UNSAT _____

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

STEP	<u>7</u>	<u>X</u>	Performance Step: OP 3261, step 1.3.4	<p>IF door is a SLCRS door, PERFORM the following:</p> <ol style="list-style-type: none"> a. Refer To T/S 3.6.6.2, "Containment Systems Secondary Containment," and PERFORM applicable actions. b. Refer To the Shift Turnover Log and RECORD door status. c. IF SLCRS door A-24-6 is inoperable AND crediting stairwell boundaries is desired, Refer To Attachment 3 and PERFORM listed actions to credit alternate barriers. d. IF alternate barriers are successfully credited, Refer To T/S 3.6.6.2, "Containment Systems Secondary Containment," for continued applicability and actions.
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GRADE	_____	<u>X</u>	Standards:	Applicant recognizes that door A-24-4 is a SLCRS Door and obtains and refers to T/S 3.6.6.2, "Containment Systems Secondary Containment."
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Grade:	SAT _____	UNSAT _____
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GRADE	_____	<u>X</u>	Standards:	Recognizes that T/S 3.6.6.2 applies and it will be necessary to enter the LCO 3.6.6.2 ACTION. (24 hour allowed outage time)
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Grade:	SAT _____	UNSAT _____
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GRADE	_____	_____	Standards:	Applicant recognizes that alternate SLCRS barriers apply only to door A-24-6 and moves on to OP 3261, step 1.3.5.
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Grade:	SAT _____	UNSAT _____
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STEP	<u>8</u>	_____	Performance Step: OP 3261, step 1.3.5	IF door is a Control Room habitability door, PERFORM the following:
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GRADE	_____	_____	Standards:	Applicant recognizes that door A-24-4 is
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PERFORMANCE INFORMATION

JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

not a Control Room habitability door and moves on to OP 3261, step 1.3.6.

Grade: **SAT** _____ **UNSAT** _____

STEP 9 _____

Performance Step:
OP 3261, step 1.3.6

IF door is a CO2 boundary door, PERFORM the following:

GRADE _____ _____

Standards:

Applicant recognizes that door A-24-4 is not a CO2 boundary door and moves on to OP 3261, step 1.3.7.

Grade: **SAT** _____ **UNSAT** _____

STEP 10 _____

Performance Step:
OP 3261, step 1.3.7

IF door is a water and flooding boundary door, PERFORM the following:

GRADE _____ _____

Standards:

Applicant recognizes that door A-24-4 is not a water and flooding boundary door and moves on to OP 3261, step 1.3.8.

Grade: **SAT** _____ **UNSAT** _____

STEP 11 _____

Performance Step:
OP 3261, step 1.3.8

IF door is a high energy line break boundary door (HELB), PERFORM the following:

GRADE _____ _____

Standards:

Applicant recognizes that door A-24-4 is not a HELB boundary door and moves on to OP 3261, step 1.3.9.

Grade: **SAT** _____ **UNSAT** _____

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

STEP 12 _____ **Performance Step:** IF door is a PRA HELB boundary door
OP 3261, step 1.3.9 AND IF in MODEs 1 through 4,
PERFORM the following:

GRADE _____ _____ **Standards:** Applicant recognizes that door A-24-4 is
not a PRA HELB boundary door and
moves on to OP 3261, step 1.3.10.

Grade: **SAT** _____ **UNSAT** _____

STEP 13 _____ **Performance Step:** IF door is a tornado door
OP 3261, step 1.3.10

GRADE _____ _____ **Standards:** Applicant recognizes that door A-24-4 is
not a tornado door and moves on to OP
3261, step 1.3.11.

Grade: **SAT** _____ **UNSAT** _____

STEP 14 X **Performance Step:** IF door is a radiation boundary door, AND
OP 3261, step 1.3.11 door is damaged OR to be removed for
any reason, NOTIFY Health Physics
Department.

GRADE _____ X **Standards:** Applicant recognizes that door A-24-4 is a
radiation boundary door and notifies
Health Physics Department that door A-
24-4 will be blocked open. Telephone call
is adequate for this notification.

CUE: All notifications to Health Physics are
complete.

Grade: **SAT** _____ **UNSAT** _____

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

STEP	<u>15</u>	<u> </u>	Performance Step: OP 3261, step 1.3.12	IF door is a security door, PERFORM the following: a. Refer To Attachment 1 for list of security door number cross references. b. NOTIFY Security Department of problems with doors or expected maintenance.
GRADE	<u> </u>	<u> </u>	Standards:	Applicant recognizes that door A-24-4 is a security door and refers to Attachment 1 that the security door number is 306.
			Grade:	SAT <u> </u> UNSAT <u> </u>
GRADE	<u> </u>	<u> </u>	Standards:	Applicant notifies Security Department that door 306 will be blocked open. Telephone call is adequate for this notification.
			CUE:	All notifications to Security are complete.
			Grade:	SAT <u> </u> UNSAT <u> </u>
STEP	<u>16</u>	<u> </u>	Performance Step: OP 3261, step 1.3.13	IF door is a Fuel Building Integrity Boundary door PERFORM the following:
GRADE	<u> </u>	<u> </u>	Standards:	Applicant recognizes that door A-24-4 is not a Fuel Building Integrity Boundary door and moves on to OP 3261, step 1.3.14.
			Grade:	SAT <u> </u> UNSAT <u> </u>
STEP	<u>17</u>	<u> </u>	Performance Step: OP 3261, step 1.3.14	IF door is a "Halon Door," PERFORM the following:
GRADE	<u> </u>	<u> </u>	Standards:	Applicant recognizes that door A-24-4 is not a Halon Door and moves on to OP 3261, step 1.3.15.

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.2

Revision: 0

Task Title: Response to Door Inoperability

Grade: SAT _____ UNSAT _____

STEP 18 _____ Performance Step: IF door is a "Technical Support Center Habitability Door," PERFORM the following:

GRADE _____ Standards: Applicant recognizes that door A-24-4 is not a Technical Support Center Habitability Door.

Grade: SAT _____ UNSAT _____

STEP 19 _____ Performance Step: Applicant Reports Task Completion.

GRADE _____ Standards: Applicant reports to the SM that the required compensatory actions necessary to take door A-24-4 out of service have been determined.

CUE: The evaluation for this JPM is complete.

Stop Time: _____

VERIFICATION OF JPM COMPLETION

JPM Number: NRC SRO A.2

Revision: 0

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number:

NRC SRO
A.2

Initial Conditions:

The plant is at 100 % power and you are the Work Control SRO on shift. An emergent repair is required on the "A" RPCCW Heat Exchanger. Maintenance requires door A-24-4 be blocked open and have its center post removed, to move in equipment and scaffolding.

Initiating Cues:

You are asked to determine any compensatory actions necessary before blocking open door A-24-4, and then to brief the SM.

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

I. JPM Title: Review and Approve a Radioactive Liquid Waste Discharge Permit

JPM ID Number: NRC SRO A.3

Revision: 0 chg 1

II. Initiated:

Steve Jackson
Developer

11/01/01
Date

III. Reviewed:

Ray Martin
Technical Reviewer

11/15/01
Date

IV. Approved:

NA
Cognizant Plant Supervisor (optional)

Date

D. Ketterman
Nuclear Training Supervisor

1/24/07
Date

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description
1/19/07	0 chg 1	Revised JPM to update to revision 018 to OP 3335D, "Radioactive Liquid Waste System." DLM

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC SRO A.3

Revision: 0 chg 1

Task Title: Review and Approve a Radioactive Liquid Waste Discharge Permit

System: Radioactive Liquid Waste System

Time Critical Task: () YES (X) NO

Validated Time (minutes): 10

Task Number(s): 068-01-064, Discharge the contents of a Low Level Waste Drain Tank
068-03-001, Adhere to the requirements of the Radwaste Management Program

Applicable To: SRO X RO PEO

K/A Number: GEN- 2.3.6 K/A Rating: 2.1/3.1

Method of Testing: Simulated Performance: X Actual Performance: X

Location: Classroom: In-Plant: X Simulator: X

Task Standards: Review and Approve a Radioactive Liquid Waste Discharge Permit

Required Materials: OP 3335D, Radioactive Liquid Waste System
Liquid Discharge Permit
Screen Print of Rad Monitor LWS70-1

General References: None

READ TO THE STUDENT

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC SRO A.3

Revision: 0 chg 1

Simulator Requirements: None

Initial Conditions: The unit is at 100% power with all systems in normal line-ups. The "A" and "B" Service Water pumps and all Circulating Water pumps are running.

Initiating Cues: The Radwaste PEO has presented OP 3335D sign off copy and a Liquid Discharge Permit for discharging the "A" Waste Test Tank to the Circulating Water discharge tunnel for your approval. Review and approve the permit and report to the examiner when complete.

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, ALL critical steps must be completed correctly. The students performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: SRO A.3

Revision: 0 chg 1

Task Title: Review and Approve a Radioactive Liquid Waste Discharge Permit

Start Time:

STEP 1 X **Performance Step:** Go to the correct procedure step, OP3335D, Section 4.21.5.i.

GRADE X **Standards:** Locates the correct procedure step. Candidate may review previous steps.

Grade: **SAT** **UNSAT**

Cue: Steps 4.21 1, 2, 3 & 4 and step 4.21.5 a through h have been completed

STEP 2 X **Performance Step:** PERFORM Independent Verification of liquid effluent monitor alarm and alert settings. [step 4.21.5.i.1)]

GRADE X **Standards:** Locates liquid effluent monitor alarm and alert settings on Liquid Discharge Permit.

GRADE X **Standards:** Locates liquid effluent monitor alarm and alert current settings on RMS Console.

Comments:

Since this JPM is done in a classroom setting the RMS Console is not available. When candidate requests information and specifies that he would access the RMS screen for LWS70-1, Liquid Waste discharge process radiation monitor, exercise the cue.

Cue: This is the screen for LWS70-1 (hand candidate screen printout).

GRADE X **Standards:** Compares permit settings and RMS information and identifies that RMS is incorrect. Recommends changing RMS to match the permit. Initials permit after receiving the cue.

PERFORMANCE INFORMATION

JPM Number: SRO A.3

Revision: 0 chg 1

Task Title: Review and Approve a Radioactive Liquid Waste Discharge Permit

Cue: IF candidate identifies error, state that the setpoints have been corrected.

			Grade:	SAT _____	UNSAT _____
STEP	<u>3</u>	<u>X</u>	Performance Step:	Refer to CHEM Form 3800P-001 and CHECK "EST Activity this Discharge (Ci) on Liquid Discharge Permit is less than action level specified. [step 4.21.5.i.2)]	

			Grade:	SAT _____	UNSAT _____
GRADE	_____	<u>X</u>	Standards:	COMPARE CHEM Form 3800P-001 and CHECK "EST Activity this Discharge (Ci) to Discharge permit "Estimated activity this discharge (Ci)". Determines that values are below the limits. Initials permit.	

Cue: Step 4.21.5.i.3) is N/A since no limits are exceeded.

			Grade:	SAT _____	UNSAT _____
STEP	<u>4</u>	<u>X</u>	Performance Step:	CHECK required dilution flowrate is met. [step 4.21.5.i.4)]	
GRADE	_____	<u>X</u>	Standards:	COMPARES permit requirement of 2 SWP and 3 CWP to actual plant condition of 2 SWP and 6 CWP. Determines that dilution flow is met. Initials permit.	

Termination Cue: The Evaluation of this JPM is Complete
 Stop Time: _____

VERIFICATION OF JPM COMPLETION

JPM Number: NRC SRO A.3

Revision: 0 chg 1

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

 Number of Questions: _____

 Number of Correct Responses: _____

 Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number: SRO A.3

Initial Conditions: The unit is at 100% power with all systems in normal line-ups. The "A" and "B" Service Water pumps and all Circulating Water pumps are running.

Initiating Cues: The Radwaste PEO has presented OP 3335D sign off copy and a Liquid Discharge Permit for discharging the "A" Waste Test Tank to the Circulating Water discharge tunnel for your approval. Review and approve the permit and report to the examiner when complete.

JOB PERFORMANCE MEASURE APPROVAL SHEET

I. JPM Title: Emergency Plan Classification for General Emergency

JPM ID Number: NRC SRO A.4

Revision: 0 chg 1

II. Initiated:

Paul Malzahn
Developer

8/31/05
Date

III. Reviewed:

Barry Pinkowitz
Technical Reviewer

8/31/05
Date

IV. Approved:

T. Butler
Cognizant Plant Supervisor (optional)

8/31/05
Date

Tim Kulterman
Nuclear Training Supervisor

8/31/05
Date

JOB PERFORMANCE MEASURE APPROVAL SHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description
1/8/07	Rev 0 chg 1	Revised JPM to correspond to the standard NTP format. DLM

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC SRO A.4

Revision: 0 chg 1

Task Title: Emergency Plan Classification for General Emergency

System: N/A

Time Critical Task: () YES () NO

Validated Time (minutes): 30

Task Number(s): 301-05-366, 301-05-449

Applicable To: SRO RO PEO

K/A Number: 2.4.41 K/A Rating: 4.1 / 2.3
2.4.44 4.0 / 2.1

Method of Testing: Simulated Performance: Actual Performance:

Location: Classroom: Simulator: In-Plant:

Task Standards:

- Determine the EAL and State Posture Code
- Determine the minimum required PAR

Required Materials:

- MP-26-EPI-FAP06-003, MILLSTONE UNIT 3 EMERGENCY ACTION LEVELS
- MP-26-EPI-FAP-01-001, CONTROL ROOM DIRECTOR OF STATION EMERGENCY OPERATION (CR DSEO)
- MP-26-EPI-FAP06, CLASSIFICATION AND PARs
- MP-26-EPI-FAP06-005, CONTROL ROOM PROTECTIVE ACTION RECOMMENDATIONS
- MP-26-EPI-FAP-07-001, NUCLEAR INCIDENT REPORT FORM (IRF)

General References:

*****READ TO THE STUDENT*****

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC SRO A.4

Revision: 0 chg 1

Simulator Requirements: None

Initial
Conditions:

You are the Shift Manager at Millstone. The time is 02:45. The plant has been on-line for 200 days. The "A" RHR pump is tagged out for an oil change. All other major plant equipment is in service.

The following events occur:

1. (0245) A severe earthquake (0.10g ZPA) occurs.
2. (0246) Reactor trip and Safety Injection on low Pressurizer pressure. The "B" RHR pump does not start; all other ESF equipment operates normally.
3. (0247) The RO reports RCS pressure is 65 psia and stops all RCPs.
4. (0255) The following plant conditions exist:
 - RCS Subcooling is 0°F
 - RMS*RE04A/05A read 4 R/hr, as confirmed by RMS*RE41/42
 - Containment Pressure is 15 psia
 - RVLMS (Plenum) is 19%

The current wind speed is five (5) miles per hour. The current wind direction is from 040 and into 220.

Initiating Cues:

DETERMINE THE APPLICABLE EMERGENCY ACTION LEVEL AND MAKE ANY APPROPRIATE PROTECTIVE ACTION RECOMMENDATIONS.

This is a time critical task.

ARE THERE ANY QUESTIONS? YOU MAY BEGIN.

**** **NOTES TO EVALUATOR** ****

JOB PERFORMANCE MEASURE GUIDE (Continued)

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. The students performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.4

Revision: 0 chg 1

Task Title: Emergency Plan Classification for General Emergency

Start Time:

STEP 1 **Performance Step:** Obtain Proper procedure.

GRADE **Standards:** Applicant obtains or requests copy of MP-26-EPI-FAP06-003, MP3 Emergency Action Levels.

Evaluator NOTE: Applicant may also request copies of:

- MP-26-EPI-FAP-01-001, CR-DSEO Checklist
- MP-26-EPI-FAP06, Classification and PARs
- MP-26-EPI-FAP06-005, CR PARs
- MP-26-EPI-FAP07, Notifications & Comms
- MP-26-EPI-FAP07-001, Incident Report Form

The CR DSEO Notebook contains all these procedures.

Grade: **SAT** **UNSAT**

STEP 2 X **Performance Step:** **Classify the Event.**

GRADE X **Standards:** Applicant recognizes a potential loss of the Fuel Clad Barrier, based on RVLMS \leq 19% (plenum) (FCB4).

Grade: **SAT** **UNSAT**

GRADE X **Standards:** Applicant recognizes a loss of the RCS Barrier based on RCS Subcooling $<$ 32°F Due to RCS Leak (RCB2).

Grade: **SAT** **UNSAT**

GRADE X **Standards:** Applicant recognizes a loss of the CTMT Barrier based on No CTMT Pressure Increase when Expectation exists. (CNB3)

Grade: **SAT** **UNSAT**

GRADE X **Standards:** Applicant reviews MP-26-EPI-FAP06-003

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.4

Revision: 0 chg 1

Task Title: Emergency Plan Classification for General Emergency

and determines that a NRC EAL of GENERAL EMERGENCY, BG1 exists. Fuel Clad Barrier (P), RCS Barrier (L) and CTMT Barrier (L)

Grade: SAT _____ UNSAT _____

STEP 3 X Performance Step: **Determine State Posture Code**

GRADE _____ X Standards: Applicant reviews MP-26-EPI-FAP06-003 and determines that the block for BG1 is the same color as State Posture ALPHA Tables are color coded to reflect the State Posture.

Evaluator NOTE:

Grade: SAT _____ UNSAT _____

NOTE: Record the Time Classification is Completed:

STEP 4 X Performance Step: **Determine the State Protective Action Recommendation**

GRADE _____ _____ Standards: Applicant uses MP-26-EPI-FAP06-005, Section B, Control Room PAR Process Flowchart, to determine the PAR.

Grade: SAT _____ UNSAT _____

GRADE _____ X Standards: Reviews flowchart and diagnoses that all 3 barriers are NOT lost and transitions over to "CTMT Radiation"

Grade: SAT _____ UNSAT _____

GRADE _____ X Standards: Reviews flowchart and determines that CTMT radiation does NOT exceed Table 1 values. Transitions over to "5 Mile Doses"

Grade: SAT _____ UNSAT _____

GRADE _____ X Standards: Reviews flowchart and determines that 5

PERFORMANCE INFORMATION

JPM Number: NRC SRO A.4

Revision: 0 chg 1

Task Title: Emergency Plan Classification for General Emergency

Mile Doses do NOT exceed Table 2 values.

Evaluator NOTE: When applicant requests dose projections, provide the following cue:

CUE: The Chem Tech Initial Dose Assessment is not yet available.

Grade: SAT _____ UNSAT _____

GRADE _____ X

Standards: Applicant indicates the minimum required PAR is to evacuate a 5 mile radius. (The IRF will serve as the necessary PAR notification to the state so no additional DEP communication is required.)

Grade: SAT _____ UNSAT _____

NOTE: Record the Time Classification is Completed:

NOTE:

- 15 minutes to determine Emergency Action Level and State Posture Code.
- 15 minutes after classifying event to determine minimum required PAR.

CUE: The evaluation for this JPM is complete.

VERIFICATION OF JPM COMPLETION

JPM Number: NRC SRO A.4

Revision: 0 chg 1

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES X NO _____

Validated Time (minutes): 30

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number: NRC SRO A.4

Initial Conditions: You are the Shift Manager at Millstone. The time is 02:45. The plant has been on-line for 200 days. The "A" RHR pump is tagged out for an oil change. All other major plant equipment is in service.

The following events occur:

1. (0245) A severe earthquake (0.10g ZPA) occurs.
2. (0246) Reactor trip and Safety Injection on low Pressurizer pressure. The "B" RHR pump does not start; all other ESF equipment operates normally.
3. (0247) The RO reports RCS pressure is 65 psia and stops all RCPs.
4. (0255) The following plant conditions exist:
 - RCS Subcooling is 0°F
 - RMS*RE04A/05A read 4 R/hr, as confirmed by RMS*RE41/42
 - Containment Pressure is 15 psia
 - RVLMS (Plenum) is 19%

The current wind speed is five (5) miles per hour. The current wind direction is from 040 and into 220.

Initiating Cues: DETERMINE THE APPLICABLE EMERGENCY ACTION LEVEL AND MAKE ANY APPROPRIATE PROTECTIVE ACTION RECOMMENDATION.

This is a time critical task.

JOB PERFORMANCE MEASURE APPROVAL SHEET

I. JPM Title: Determine the maximum rate of power increase and control rod withdrawal restrictions.

JPM ID Number: NRC RO A.1.1

Revision: 0 chg 1

II. Initiated:

Nuclear Regulatory Commission
Developer

12 May 2004
Date

III. Reviewed:

Martin
Technical Reviewer

1/24/07
Date

IV. Approved:

N/A
Cognizant Plant Supervisor (optional)

Date

D. Welterman
Nuclear Training Supervisor

1/24/07
Date

JOB PERFORMANCE MEASURE APPROVAL SHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description
1/3/06	0 chg 1	Revised JPM to correspond to the standard NTP format. Made minor modifications to the initial conditions and initiating cue for clarity. DLM

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC RO A.1.1

Revision: 0 chg 1

Task Title: Determine the maximum rate of power increase and control rod withdrawal restrictions.

System: NA

Time Critical Task: () YES (X) NO

Validated Time (minutes): 15

Task Number(s): _____

Applicable To: SRO X RO X PEO _____

K/A Number: 2.1.25

K/A Rating: 3.1 / 2.8

Method of Testing: Simulated Performance: _____ Actual Performance: X

Location: Classroom: X Simulator: _____ In-Plant: _____

Task Standards:

- Applicant recognizes the Fuel Condition Category as "Partially Conditioned" up to power level, P, of 80% and rod position, N, of 218 steps on CBD.
 - Applicant correctly identifies the following limits:
 - ◆ 10% per hour to power level "P" where P=80%.
 - ◆ 4% over any 1 hour period, 7% over any 2 hour period, 10% over any 3 hour period to achieve a nominal 3% full power per hour rate, and
 - ◆ Control Rod Withdrawal restricted to 3 steps per hour above 218 steps on CBD.
- Applicant correctly applies the limits to determine that schedule adherence is possible without exceeding authorized fuel condition load increase restrictions.

Required Materials:

- Operating Procedure OP 3204, At Power Operations.
- Attachment 4 of OP 3204

General References:

Operating Procedure OP 3204, At Power Operations.

*****READ TO THE CANDIDATE*****

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC RO A.1.1

Revision: 0 chg 1

Simulator Requirements: None

Initial Conditions: You are the Reactor Operator currently on shift. The plant has recently completed a refueling outage and subsequent plant startup, which started on Monday, 12 July 2004.

On **Wednesday, 14 July 2004 at 09:00**, the plant reached 80% reactor power with CBD at 218 steps. The plant remained at 80% power until **Saturday, 17 July 2004 at 13:00** when a Turbine Driven Feedwater Pump malfunctioned and had to be shutdown for repairs. The plant reached 50% power on **Saturday, 17 July 2004 at 19:30**. Since then the plant has been operating steady at 50% power with **CBD at 218 steps**.

Now the time is **Wednesday, 21 July 2004 at 08:00** hours. Turbine Driven Feedwater Pump repairs and testing are complete. The plant is ready to begin its return to full power.

According to the current schedule, the plant should be at full (100%) power by the end of shift today, **Wednesday, 21 July 2004 at 18:00** hours.

Initiating Cues: **Based on fuel conditioning, determine whether the plant can achieve 100% power by the end of shift without exceeding any maneuvering limits. Assume that control rods will remain at CBD step 218 throughout the power ascension and that the power ascension begins immediately.**

**ARE THERE ANY QUESTIONS?
YOU MAY BEGIN.**

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. The student's performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: NRC RO A.1.1

Revision: 0 chg 1

Task Title: Determine the maximum rate of power increase

Start Time: _____

NOTE: Order or sequence of performance is NOT critical

STEP 1 _____ Performance Step: Applicant obtains/requests a copy of OP 3204, "At Power Operation."

GRADE _____ Standards: Obtains OP 3204.
Grade: SAT _____ UNSAT _____

STEP 2 _____ Performance Step: NA

GRADE _____ Standards: Applicant reviews the initial conditions to determine recent power history
Grade: SAT _____ UNSAT _____

STEP 3 _____ Performance Step: Determine the correct attachment to determine load increase restrictions based on fuel condition.

GRADE _____ Standards: Applicant finds and refers to Attachment 4, "Fuel Condition Load Increase Restrictions."
Grade: SAT _____ UNSAT _____

STEP 4 X Performance Step: Determine Fuel Condition category.

GRADE _____ X Standards: Applicant recognizes that the Fuel Condition Category is "Partially Conditioned".
Grade: SAT _____ UNSAT _____

PERFORMANCE INFORMATION

JPM Number: NRC RO A.1.1

Revision: 0 chg 1

Task Title: Determine the maximum rate of power increase

STEP 5 X **Performance Step:** Determine Applicable Range of Power Level

GRADE _____ _____ **Standards:** Applicant determines that the Applicable Range of Power change for current plant conditions is 50% to 100% power.

GRADE _____ X **Standards:** Applicant correctly determines that the plant has been at 80% power ("P") and CBD at 218 steps ("N") for at least 72 hours.

Grade: **SAT** _____ **UNSAT** _____

STEP 6 X **Performance Step:** Determine Maximum Rate of Power Increase.

GRADE _____ X **Standards:** Applicant recognizes the maximum rate of power increase as 'unlimited' to 80% and 3% per hour to 100%.

Grade: **SAT** **UNSAT**

Evaluator NOTE: The applicant may request from the US what the maximum rate of power increase should be up to 80% power. If so, give the flowing cue:

CUE: Use a maximum power ascension rate of 10% per hour.

STEP 7 X **Performance Step:** Determine Time Required for the Power Ascension.

GRADE _____ X **Standards:** Applicant applies the identified limits to determine the following times:

- 3 hours to raise power 30% (from 50% to 80%).
- 6 hours, 40 minutes to raise power 20% (from 80% to 100%).
- Total time = 9 hours: 40 minutes.

NOTE: Critical Step is to calculate a number below 10 hours. The procedure wording is ambiguous and allows for

PERFORMANCE INFORMATION

JPM Number: NRC RO A.1.1

Revision: 0 chg 1

Task Title: Determine the maximum rate of power increase

answers between 8:00 to 9:40.
Possible answers
8:00 - 4% over any 1 hour period
8:43 - 7% over any 2 hour period
9:00 - 10% over any 3 hour period
9:40 - nominal 3% per hour
other combinations possible

		Grade:	SAT	UNSAT
STEP	<u>8</u>	<u>X</u>	Performance Step:	Determine If 100% Power Can Be Reached By Shift End.
GRADE	<u> </u>	<u>X</u>	Standards:	Applicant recognizes and reports that there are 10 hours scheduled to complete the power ascension and based on fuel conditioning alone, it is possible to reach full power by 18:00 (or similar words).
		Grade:	SAT	UNSAT
		CUE:	The evaluation for this JPM is complete.	

Stop Time:

VERIFICATION OF JPM COMPLETION

JPM Number: NRC RO A.1.1

Revision: 0 chg 1

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number:

NRC RO A.1.1

Initial Conditions:

You are the Reactor Operator currently on shift. The plant has recently completed a refueling outage and subsequent plant startup, which started on Monday, 12 July 2004.

On **Wednesday, 14 July 2004 at 09:00**, the plant reached 80% reactor power with CBD at 218 steps. The plant remained at 80% power until **Saturday, 17 July 2004 at 13:00** when a Turbine Driven Feedwater Pump malfunctioned and had to be shutdown for repairs. The plant reached 50% power on **Saturday, 17 July 2004 at 19:30**. Since then the plant has been operating steady at 50% power with CBD at 218 steps.

Now the time is **Wednesday, 21 July 2004 at 08:00** hours. Turbine Driven Feedwater Pump repairs and testing are complete. The plant is ready to begin its return to full power.

According to the current schedule, the plant should be at full (100%) power by the end of shift today, **Wednesday, 21 July 2004 at 18:00** hours.

Initiating Cues:

Based on fuel conditioning, determine whether the plant can achieve 100% power by the end of shift without exceeding any maneuvering limits. Assume that control rods will remain at CBD step 218 throughout the power ascension and that the power ascension begins immediately.

JOB PERFORMANCE MEASURE APPROVAL SHEET

I. JPM Title: Determine the Required Boration Time and Final Control Rod Height For a Rapid Downpower.

JPM ID Number: NRC RO A.1.2

Revision: 0

II. Initiated:

D. Minnich
Developer

[Handwritten Signature]

1/3/06
Date

III. Reviewed:

[Signature]
Technical Reviewer

1/27/07
Date

IV. Approved:

Cognizant Plant Supervisor (optional)

Date

[Signature]
Nuclear Training Supervisor

1/24/07
Date

JOB PERFORMANCE MEASURE APPROVAL SHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC RO A.1.2

Revision: 0

Task Title: Determine the Required Boration Time and Final Control Rod Height For a Rapid Downpower.

System: NA

Time Critical Task: () YES (X) NO

Validated Time (minutes): 10

Task Number(s): 009-01-004

Applicable To: SRO X RO X PEO

K/A Number: 2.1.20 K/A Rating: 4.3 / 4.2

Method of Testing: Simulated Performance: Actual Performance: X

Location: Classroom: X Simulator: In-Plant:

Task Standards: Correctly Determine the Required Boration Time and Final Control Rod Height For a Rapid Downpower.

Required Materials: AOP 3575, *Rapid Downpower*, and Cycle 11 End of Life RE Curve and Data Book with the January 2007 Monthly Reactivity Data Sheet

General References:

*****READ TO THE STUDENT*****

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC RO A.1.2

Revision: 0

Simulator Requirements: None

Initial Conditions: The plant is at 100% power, core burnup is 17,000 MWD / MTU and current boron concentration is 300 ppm. You are the Extra Licensed Operator on shift. CONVEX has requested MP3 conduct an emergency load reduction of 480 Mwe (1200 to 720 Mwe).

Initiating Cues: The US has directed you to calculate the required boration time in accordance with AOP 3575. Assume a boration flowrate of 80 gpm. You are also directed to determine the final control rod height for the rapid downpower. Use the Cycle 11 End of Life RE Curve and Data Book, and use curves when possible.

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. The students performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: NRC RO A.1.2

Revision: 0

Task Title: Determine Boration Time / Final Control Rod Height For Rapid Downpower.

Start Time: _____

STEP 1 _____ **Performance Step:** Obtain proper Abnormal Operating Procedure and Curve Book.

GRADE _____ _____ **Standards:** Applicant obtains a copy of AOP 3575, *Rapid Downpower* and MP3 Cycle 11 EOL RE Curve and Data Book.

Grade: **SAT** _____ **UNSAT** _____

STEP 2 X **Performance Step:** Determine required boration time. AOP 3575 Step 5.j

GRADE _____ X **Standards:** Applicant correctly determines the total power change:

- 480 Mwe / 12 Mwe per % power = **40%**

Evaluator NOTE: The applicant may question the US what to assume for a boration flowrate.

CUE (if required): Respond as the US to assume a boration flowrate of 80 gpm.

GRADE _____ X **Standards:** Applicant correctly determines the required boration time using the following formula:

$$\frac{\text{Total Power Change (\%)} \times 15}{\text{BA Flow Rate}} = \text{Time (min)}$$

- [40% X 15] / 80 gpm = **7.5 minutes**

Grade: **SAT** _____ **UNSAT** _____

STEP 3 X **Performance Step:** Determine the total power defect associated with the 40% power change.

GRADE _____ X **Standards:** Applicant refers to the "Total Power Defect vs Percent Power" curves (RE-E-01)

PERFORMANCE INFORMATION

JPM Number: NRC RO A.1.2

Revision: 0

Task Title: Determine Boration Time / Final Control Rod Height For Rapid Downpower.

GRADE X **Standards:** Applicant selects the 300 ppm curve and determines the power defect associated with a power change from 100% to 60% power.

- $-2800 - (-1725) = 1075 \text{ pcm}$

Evaluator NOTE: Allow for minor curve interpolation error. A power defect between 1100 and 1050 pcm is acceptable.

Grade: **SAT** **UNSAT**

STEP 4 X **Performance Step:** Determine boron concentration change associated with the boration.

GRADE X **Standards:** Applicant calculates the volume of boric acid added:
 • $\text{Power Change (\%)} \times 15 = 600 \text{ gal}$

GRADE X **Standards:** Applicant refers to the monthly reactivity data sheet for the guideline value for "Gallons boric acid per ppm RCS (B) increase" (9.1 gal BA / ppm) and calculates RCS boron concentration change:
 • $600 \text{ gal} / 9.1 \text{ gal per ppm} \sim 66 \text{ ppm}$

Grade: **SAT** **UNSAT**

STEP 5 X **Performance Step:** Determine the negative reactivity added as a result of the boration.

GRADE X **Standards:** Applicant refers to the "Differential Boron Worth vs Burnup" curves (RE-F-02).

GRADE X **Standards:** Applicant selects the HFP DBW curve and determines differential boron worth for 17,000 MWD/MTU.
 • -6.96 pcm / ppm

PERFORMANCE INFORMATION

JPM Number: NRC RO A.1.2

Revision: 0

Task Title: Determine Boration Time / Final Control Rod Height For Rapid Downpower.

Evaluator NOTE: Allow for minor curve interpolation error. A DBW between - 6.90 and - 7.00 pcm / ppm is acceptable.

GRADE X **Standards:** Applicant calculates the negative reactivity added:
 • 66 ppm x (- 6.96 pcm / ppm) = - 459 pcm

Grade: **SAT** **UNSAT**

STEP 6 X **Performance Step:** Determine the negative reactivity added as a result of rod insertion.

GRADE X **Standards:** Applicant calculates the negative reactivity due to rod insertion by subtracting the reactivity change due to boron from the reactivity change for total power defect:
 • 1075 pcm - 459 pcm = 616 pcm

Grade: **SAT** **UNSAT**

STEP 7 X **Performance Step:** Determine the predicted final control rod height.

GRADE X **Standards:** Applicant refers to the "Integral Rod Worth versus Steps Withdrawn" curve for control banks D and C in overlap, EOL, HFP, equilibrium Xe (RE-D-02).

GRADE X **Standards:** Applicant determines the predicted final control rod height for an integral rod worth of 616 pcm:

• **CB D at 90 steps**

Evaluator NOTE: Allow for minor curve interpolation error. A control rod height between 85 and 95 steps is acceptable.

Grade: **SAT** **UNSAT**

PERFORMANCE INFORMATION

JPM Number: NRC RO A.1.2

Revision: 0

Task Title: Determine Boration Time / Final Control Rod Height For Rapid Downpower.

STEP 8 _____

Performance Step: Applicant Reports Task Completion.

GRADE _____

Standards: Applicant reports to the US that the required boration time and final control rod height has been determined.

CUE: Please turn in all notes and calculations. The evaluation for this JPM is complete.

Stop Time: _____

VERIFICATION OF JPM COMPLETION

JPM Number: NRC RO A.1.2

Revision: 0

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number: NRC RO A.1.2

Initial Conditions: The plant is at 100% power, core burnup is 17,000 MWD / MTU and current boron concentration is 300 ppm. You are the Extra Licensed Operator on shift. CONVEX has requested MP3 conduct an emergency load reduction of 480 MWe (1200 to 720 MWe).

Initiating Cues: The US has directed you to calculate the required boration time in accordance with AOP 3575. Assume a boration flowrate of 80 gpm. You are also directed to determine the final control rod height for the rapid downpower. Use the Cycle 11 End of Life RE Curve and Data Book, and use curves when possible.

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

- I. JPM Title: Given a maintenance repair recommendation and reference material, recommend a clearance boundary.

JPM ID Number: NRC RO
A.2

Revision 0 chg 1

- II. Initiated:

Steve Jackson
Developer

10/31/01
Date

- III. Reviewed:

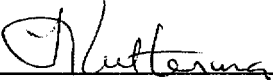
Ray Martin
Technical Reviewer

11/15/01
Date

- IV. Approved:

Cognizant Plant Supervisor (optional)

Date


Nuclear Training Supervisor

1/24/07
Date

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description
1/23/06	0 chg 1	Revised JPM to update to revision 007-00 to WC 2, <i>Tagging</i> . Also modified initial conditions and cue to correspond to a maintenance team lead request instead of a recommendation to add realism. Removed tagging the pump control switch from the critical nature of the electrical tagout step. DLM

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC RO A.2

Revision: 0 chg 1

Task Title: Given a maintenance repair recommendation and reference material, recommend a clearance boundary.

System: Tagging and Clearance

Time Critical Task: () YES (X) NO

Validated Time (minutes): 10 min

Task Number(s): 341-01-079, Develop and/or modify, review, authorize, install, verify, and clear a tag clearance in accordance with plant and/or site procedural and safety requirements

Applicable To: SRO RO X PEO

K/A Number: GEN.2.2.13, Knowledge of Tagging and Clearance Procedures K/A Rating: 3.6/3.8

Method of Testing: Simulated Performance: Actual Performance: X

Location: Classroom: X Simulator: In-Plant:

Task Standards: Develop and review a tag clearance

Required Materials: Team Lead Tagout Request
P&IDs, EM-109A
EE One-Line diagrams
OP 3337, Radioactive Gaseous Waste System

General References: WC 2, Tagging
OP 3250, Removing Equipment from Service for Maintenance

*****READ TO THE STUDENT*****

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC RO A.2

Revision 0 chg 1

Simulator Requirements: NONE

Initial Conditions: The pump impeller on the "B" Degasifier Recirculation Pump, 3GWS-P1B, has seized. Repair efforts are planned and the maintenance first line supervisor has made a work package tagout request for the repair. The request includes the need to isolate, vent and drain, and to tagout electrically.

Initiating Cues: Your task is to develop a clearance boundary for this repair activity based on the maintenance first line supervisor's request.

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. The student's performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: NRC RO A.2

Revision: 0chg1

Task Title: Given a maintenance repair recommendation and reference material, recommend a clearance boundary.

Start Time: _____

		Comments:	Electrical and mechanical isolation of the pump can be done in any order
STEP	<u>1</u>	<u>X</u>	Performance Step: Identifies correct piping isolation boundary for the "B" Degasifier Recirculation Pump, 3GWS-P1B
GRADE	_____	<u>X</u>	Standards: Uses P&ID EM-109A or OP3337-001 and other appropriate references and identifies the correct boundary: <ul style="list-style-type: none"> • Pump Discharge (V10) CLOSED • Pump Suction (V6) CLOSED • Casing Drain (V107) OPEN • Discharge Vent (V972) OPEN
		Grade:	SAT _____ UNSAT _____
STEP	<u>2</u>	<u>X</u>	Performance Step: Identifies correct electrical isolation boundary for the "B" Degasifier Recirculation Pump, 3GWS-P1B
GRADE	_____	<u>X</u>	Standards: Uses OP3337-004, electrical line-up, or EE-1AC and other appropriate references and identifies the correct boundary: <ul style="list-style-type: none"> • At MCC 32-3H(2M) OFF • Pump Control Switch OFF
		Evaluator NOTE:	Tagging the pump control switch is not required to meet the critical nature of this step.
		Grade:	SAT _____ UNSAT _____
		Comments:	Submits completed tagout to examiner as the Shift Manager. Tagout should substantially match the JPM attachment (filled out WC 2, attachment 6).

PERFORMANCE INFORMATION

JPM Number: NRC RO A.2

Revision: 0chg1

Task Title: Given a maintenance repair recommendation and reference material, recommend a clearance boundary.

Termination Cue: The Evaluation For This JPM is Complete.

Stop Time: _____

VERIFICATION OF JPM COMPLETION

JPM Number: NRC RO A.2

Revision 0 chg 1

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number: NRC RO A.2

Initial Conditions: The pump impeller on the "B" Degasifier Recirculation Pump, 3GWS-P1B, has seized. Repair efforts are planned and the maintenance first line supervisor has made a work package tagout request for the repair. The request includes the need to isolate, vent and drain, and to tagout electrically.

Initiating Cues: Your task is to develop a clearance boundary for this repair activity based on the maintenance first line supervisor's request.

Attachment 6
Tagout Request
(Sheet 1 of 1)

NOTE: When this request is used, all sections should be filled out in detail.

AWO Number: M3-07-00100 **Component:** 3GWS-PIB

Brief Job Description: Replace seal package

Amplifying Instructions:

Tagging IS / IS NOT required for personal protection (circle one).

- Isolate, vent and drain
- Isolate and depressurize
- Isolate flowpath through _____
- Other

tag out electrically also

Recommended Tags

Color	Isolation Point	Position ⁽¹⁾

⁽¹⁾For Blue Tags indicate initial position or if initial position is not required enter N/A.

Contact Person (for multiple shifts, Contact Person is required for each shift)

F. L. Supervisor

Phone:

Ø123

Approved By:

Phone:

Team Leader / Planner / Engineering

Date:

Level of Use
Information

STOP THINK ACT REVIEW

KEY

Attachment 6
Tagout Request
(Sheet 1 of 1)

NOTE: When this request is used, all sections should be filled out in detail.

AWO Number: M3-07-00100 Component: 3GWS-PIB

Brief Job Description: Replace seal package

Amplifying Instructions:

Tagging (S) IS NOT required for personal protection (circle one).

- Isolate, vent and drain
- Isolate and depressurize
- Isolate flowpath through _____
- Other

tag out electrically also

not a critical tag

Recommended Tags

Color	Isolation Point	Position ⁽¹⁾
Red	3GWS-V10, 3GWS-PIB discharge isolation	closed
Red	3GWS-V6, 3GWS-PIB suction isolation	closed
Red	3GWS-V107, 3GWS-PIB casing drain	Open
Red	3GWS-V972, discharge vent	Open
Red	mcc 32-3H (2M)	off
Red	3GWS-PIB control switch (Gaseous Waste Panel)	off

(1) For Blue Tags indicate initial position or if initial position is not required enter N/A.

Contact Person (for multiple shifts, Contact Person is required for each shift) F. L. Supervisor Phone: 0123

Approved By: _____ Phone: _____
Team Leader / Planner / Engineering

Date:

Level of Use Information

STOP THINK ACT REVIEW

JOB PERFORMANCE MEASURE APPROVAL SHEET

SUMMARY OF CHANGE(S)

Date	Chg/Rev	Description

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: NRC RO A.3

Revision: 0

Task Title: Actions and Expected Response for RMS Equipment failure Alarms

System: N/A

Time Critical Task: () YES (X) NO

Validated Time (minutes): 10

Task Number(s): 073-01-043

Applicable To: SRO _____ RO X PEO _____

K/A Number: 2.3.1 K/A Rating: 2.6 / 3.0

Method of Testing: Simulated Performance: _____ Actual Performance: X

Location: Classroom: X Simulator: _____ In-Plant: _____

Task Standards: Correctly determines the required actions for an RMS Equipment failure Alarm.

Required Materials: OP 3362, Radiation Monitor System Display and Control System (rev. 007-06)

General References:

READ TO THE STUDENT

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objectives for this JPM will be satisfied. You may use any approved reference material normally available in the Control Room, including logs. Make all written reports, oral reports, alarm acknowledgements, and log entries as if the evolution was actually being performed.

JOB PERFORMANCE MEASURE GUIDE (Continued)

JPM Number: NRC RO A.3

Revision: 0

Simulator Requirements: None

Initial Conditions: The plant is at 100% power and you are the Extra Licensed Operator on shift. MB2B 2-9 "RMS TROUBLE" alarms. At the RMS Console you determine that an equipment failure alarm is in for 3CMS*RE22. Specifically, 'filter step' is in alarm.

Initiating Cues: The US has directed you to determine and perform required actions as a result of the 3CMS*RE22 equipment failure alarm.

**** NOTES TO EVALUATOR ****

1. Critical steps for this JPM are indicated by an "X" after the step number. For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. The student's performance is graded by an "S" for satisfactory or a "U" for unsatisfactory on each step.
2. When the student states what his/her simulated action/observation would be, read the appropriate "Cue".
3. If necessary, question the student for details of simulated actions/observations (i.e. "What are you looking at?" or "What are you observing?").

PERFORMANCE INFORMATION

JPM Number: NRC RO A.3

Revision: 0

Task Title: Actions and Expected Response for RMS Equipment failure Alarms

Start Time: _____

STEP 1 _____ **Performance Step:** Obtain proper Annunciator Response Procedure.

GRADE _____ _____ **Standards:** Obtains OP 3353.MB2B and refers to "RMS TROUBLE" (2-9).

Grade: **SAT** _____ **UNSAT** _____

Evaluator NOTE: The applicant may go directly to OP 3362, Radiation Monitor System Display and Control. This is acceptable.

STEP 2 _____ **Performance Step:** IF alarm is due to equipment failure, Refer To OP 3362, "Radiation Monitor System Display and Control," and TAKE required actions for equipment failure alarms.

GRADE _____ _____ **Standards:** Applicant obtains and refers to OP 3362, Section 4.13, Equipment Failure Alarms.

Grade: **SAT** _____ **UNSAT** _____

STEP 3 X **Performance Step:** Refer To Attachment 6 and PERFORM the following:
OP 3362, Section 4.13 Step 4.13.1.a

CHECK monitor number is listed.

GRADE _____ X **Standards:** Applicant refers to OP 3362, Attachment 6 and verifies that 3CMS*RE22 is listed.

Grade: **SAT** _____ **UNSAT** _____

STEP 4 X **Performance Step:** IF monitor is listed, DETERMINE applicable "Trouble Response(s)."
OP 3362, Section 4.13 Step 4.13.1.b

GRADE _____ X **Standards:** Applicant refers to Attachment 6 and determines that for 3CMS*22, trouble responses 1, 2, 3, 6, 7, 10, and 12 are required.

PERFORMANCE INFORMATION

JPM Number: NRC RO A.3

Revision: 0

Task Title: Actions and Expected Response for RMS Equipment failure Alarms

Grade: **SAT** _____ **UNSAT** _____

STEP 5 _____ **Performance Step:** PERFORM applicable Trouble
OP 3362, Section 4.13
Step 4.13.1.c Response(s)" listed.

GRADE _____ _____ **Standards:** Applicant refers to Attachment 6 begins to
perform the identified responses.

Evaluators NOTE: The applicant may ask whether the US
desires him/her to perform the applicable
trouble responses. If so, provide the
following cue
CUE (if required): Yes, perform the applicable trouble
responses.

Grade: **SAT** _____ **UNSAT** _____

STEP 6 _____ **Performance Step:** NOTIFY Instrument and Control
OP 3362, Att 6
Action 1. Department to check monitor.

GRADE _____ _____ **Standards:** Applicant notifies I & C that 3CMS*RE22
has an equipment failure alarm and to
check the monitor. Telephone call is
adequate for this notification.

CUE: All notifications to I & C are complete.

Grade: **SAT** _____ **UNSAT** _____

STEP 7 _____ **Performance Step:** NOTIFY Health Physics Department for
OP 3362, Att 6
Action 2. area monitoring and sampling.

GRADE _____ _____ **Standards:** Applicant notifies Health Physics that
3CMS*RE22 has an equipment failure
alarm and to conduct necessary
monitoring and sampling. Telephone call
is adequate for this notification.

CUE: All notifications to Health Physics are
complete.

PERFORMANCE INFORMATION

JPM Number: NRC RO A.3

Revision: 0

Task Title: Actions and Expected Response for RMS Equipment failure Alarms

		Grade:	SAT	UNSAT
STEP	<u>8</u>			
		Performance Step:	NOTIFY Chemistry Department for sampling medium.	
		OP 3362, Att 6 Action 3.		
GRADE		Standards:	Applicant notifies Chemistry Department that 3CMS*RE22 has an equipment failure alarm and to ready appropriate sampling medium. Telephone call is adequate for this notification.	
		CUE:	All notifications to Chemistry are complete.	

		Grade:	SAT	UNSAT
STEP	<u>9</u>	<u>X</u>		
		Performance Step:	IF a filter step alarm is recorded, ATTEMPT to step the filter as follows: Safety related Monitor (CMS*22):	
		OP 3362, Att 6 Action 6.	<ol style="list-style-type: none"> 1. At the appropriate KERIC, TURN the keyswitch to "ENABLE." 2. PRESS "STP -2 ENT." 3. TURN keyswitch to "DISABLE." 	
GRADE		<u>X</u>	Standards:	Informs the US that an attempt must be made to step the 3CMS*22 filter at the 'RIC'.
		CUE:	As US, inform the Applicant that another RO will attempt to step the filter.	

		Grade:	SAT	UNSAT
		CUE:	As US, inform the Applicant that the filter step alarm did not clear after the filter step attempt.	

PERFORMANCE INFORMATION

JPM Number: NRC RO A.3

Revision: 0

Task Title: Actions and Expected Response for RMS Equipment failure Alarms

STEP 10 X **Performance Step:** IF the filter step alarm clears, the monitor may be considered OPERABLE with respect to the filter paper. IF another filter step alarm is recorded, the particulate channel is not OPERABLE. REQUEST I&C to repair.

GRADE _____ X **Standards:** Informs the US that the particulate channel of 3CMS*22 must be considered INOPERABLE.

CUE: As US, acknowledge the applicant's report.

Grade: **SAT** **UNSAT**

STEP 11 _____ **Performance Step:** IF a radiation monitor indicates "OFF-LINE," DECLARE the radiation monitor INOPERABLE and LOG into all applicable LCOs.

GRADE _____ _____ **Standards:** Applicant informs the US that 3CMS*22 does not indicate "OFF-LINE".

Evaluators NOTE: The applicant may ask whether 3CMS*22 indicates "OFF-LINE". If so, provide the following cue.

CUE (if required): 3CMS*22 indicates "ON-LINE".

Grade: **SAT** **UNSAT**

STEP 12 X **Performance Step:** Refer To T/S 3.3.3.1 and Table 3.3-6, "Radiation Monitoring Instrumentation for Plant Operations," and PERFORM applicable actions.

GRADE _____ X **Standards:** Applicant informs the US that T/S 3.3.3.1, "Radiation Monitoring Instrumentation for Plant Operations," must be referred to.

CUE: Acknowledge the applicant's report and reply that the US will refer to T/S 3.3.3.1.

PERFORMANCE INFORMATION

JPM Number: NRC RO A.3

Revision: 0

Task Title: Actions and Expected Response for RMS Equipment failure Alarms

			Grade:	SAT	UNSAT
STEP	<u>13</u>	<u>X</u>	Performance Step:	Refer To T/S 3.4.6.1, "Reactor Coolant System Leakage Detection Systems," and PERFORM applicable actions.	
GRADE	<u> </u>	<u>X</u>	Standards:	Applicant informs the US that "T/S 3.4.6.1, "Reactor Coolant System Leakage Detection Systems," must be referred to.	
			CUE:	Acknowledge the applicant's report and reply that the US will refer to T/S 3.4.6.1.	

			Grade:	SAT	UNSAT
STEP	<u>14</u>	<u> </u>	Performance Step:	Applicant Reports Task Completion.	
GRADE	<u> </u>	<u> </u>	Standards:	Applicant reports to the US that the applicable trouble responses have been performed.	
			CUE:	The evaluation for this JPM is complete.	

Stop Time:

VERIFICATION OF JPM COMPLETION

JPM Number: NRC RO A.3

Revision: 0

Date Performed: _____

Student: _____

Evaluator: _____

For the student to achieve a satisfactory grade, **ALL** critical steps must be completed correctly. If task is Time Critical, it **MUST** be completed within the specified time to achieve a satisfactory grade.

Time Critical Task? YES _____ NO X

Validated Time (minutes): 10

Actual Time to Complete (minutes): _____

Result of JPM: _____ ("S" for satisfactory, "U" for unsatisfactory)

Result of oral questions (if applicable):

Number of Questions: _____

Number of Correct Responses: _____

Score: _____

Areas for Improvement:

STUDENT HANDOUT

JPM Number:

NRC RO A.3

Initial Conditions:

The plant is at 100% power and you are the Extra Licensed Operator on shift. MB2B 2-9 "RMS TROUBLE" alarms. At the RMS Console you determine that an equipment failure alarm is in for 3CMS*RE22. Specifically, 'filter step' is in alarm.

Initiating Cues:

The US has directed you to determine and perform required actions as a result of the 3CMS*RE22 equipment failure alarm.