

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

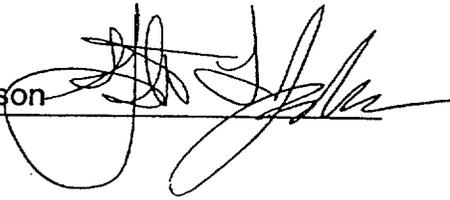
I. JPM Title: SRO Shift Turnover; Review Shift Log

JPM ID Number: SRO-A1.1

Revision: 0

II. Initiated:

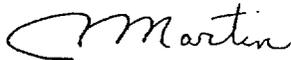
Steve Jackson
Developer



4/24/02
Date

III. Reviewed:

Martin
Technical Reviewer



6/18/02
Date

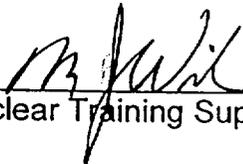
IV. Approved:

N/A
Cognizant Plant Supervisor (optional)



Date

M. J. Wil
Nuclear Training Supervisor



6/19/02
Date

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: SRO-A1.1

Revision: 0

Task Title: SRO Shift Turnover; Review Shift Log

System: Admin

Time Critical Task: () YES (X) NO

Validated Time (minutes): 10

Task Number(s): 119-03-208, Perform a Shift Relief and Turnover

Applicable To: SRO X RO _____ PEO _____

K/A Number: GEN.2.1.18, Accurate, Clear, Concise, Logs K/A Rating: 2.9/3.0

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

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

Task Standards: Perform a Shift Relief and Turnover

Required Materials: MP3 Shift Log
MP3 Tech Specs

General References: MP-14-OPS-GDL02, Operations Standards

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: SRO-A1.1

Revision: 0

Simulator Requirements: none

Initial Conditions: You are the relieving Shift Manager. You have been presented with the Shift Log for your review.

Initiating Cues: Review the Shift Log as prior to shift turnover. Report to the examiner when you are completed. The examiner will act as the off-going Shift Manager to answer any questions.

**** 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-A1.1

Revision: 0

Task Title: SRO Shift Turnover; Review Shift Log

Start Time:

STEP 1 **Performance Step:** Review pertinent information identified on applicable shift logs relating to the past 12 hours. If coming on shift after days off, consider reviewing the last 24 hours. (from MP-14-OPS-GDL02, Att. 3, sheet 11 of 32)

GRADE **Standards:** Reviews logs relating to the past 12 hours for pertinent information which may include:

- Unusual event in last 24 hours
- Review of system status
- Inoperable equipment and ACTION statements
- Any work in progress

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

STEP 2 X **Performance Step:** Identify Inoperable equipment and ACTION statements

GRADE X **Standards:** Candidate identifies that due to 3FWS*CTV41A inoperability, Tech Spec 3.6.3.a should have been entered on 7/14/02 at 21:45.

 X **Standards:** Candidate should also identify that this condition would have required a plant shutdown if it had not been corrected prior to 7/15/02 at 01:45

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

Cue: (If candidate identifies Tech Spec) Under what conditions would a plant shutdown be required? If it had not been corrected prior to 7/15/02 at 01:45

PERFORMANCE INFORMATION

JPM Number: SRO-A1.1

Revision: 0

Task Title: SRO Shift Turnover; Review Shift Log

Cue: (If candidate identifies Tech Spec)

What times are specified under the action statement?

Restore valve to operable status in 4 hours or be in HOT STANDBY in 6 hours and COLD SHUTDOWN in the following 30 hours.

Termination cue: The evaluation for this JPM is complete.

Stop Time: _____

VERIFICATION OF JPM COMPLETION

JPM Number: SRO-A1.1

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:

SRO-A1.1

Initial Conditions:

You are the relieving Shift Manager. You have been presented with the Shift Log for your review..

Initiating Cues:

Review the Shift Log prior to shift turnover. The examiner will act as the off-going Shift Manager to answer any questions.

Millstone Unit 3 Shift Log

07/15/02 05:58:02

Shift	A	B	C	D	E	F
SM						
STA						
US						
US						

<u>Date/Time</u>	<u>Entry</u>
07/14/02	Shift Hours: 1800-0600 Mode: 1 Reactor Power: 100% MWe: 1200 RCS Pressure: 2250 PSIA RCS Tavg: 587 Degrees Shift Manager: Ray Martin Unit Supervisor: Rich Sadler STA: Brian Koshmerl Shift Tech: John Favreau Reactor Operator: Jeff Cote BOP Operator: Kelly Underwood Secondary Rounds Operator: Chris Chatman Outside Rounds Operator: Bill Forrestt Plant Equipment Operator: Mike Frechette Radwaste Operator: Ricky Kauffman Primary Rounds Operator: Rob Wade
07/14/02 19:50	Performed RCS Dilution, 50 gallons @ 80 GPM.
07/14/02 20:42	3VPS-P1A. A STATION VACUUM PRIMING PUMP, started
07/14/02 20:44	3VPS-P1B. B STATION VACUUM PRIMING PUMP, stopped for AWO's
07/14/02 21:07	3VPS-P1B. B STATION VACUUM PRIMING PUMP, started to troubleshoot seal water pressure indication on 3VPS-P1A
07/14/02 21:09	3VPS-P1B. B STATION VACUUM PRIMING PUMP, stopped
07/14/02 21:41	Performed RCS Dilution, 50 gallons @ 80 GPM.
07/14/02 21:45	Received the Accumulator Low Press annunciator (MB5B 1-2) for 3FWS*CTV41A.
07/14/02 21:55	Primary rounds operator reports both accumulator pressures are reading 4600 psig for 3FWS*CTV41A.
07/14/02 22:01	Placed D Condensate Demin on Recycle.
07/14/02 22:05	Evening maintenance investigating 3FWS*CTV41A hydraulic system.
07/14/02 22:10	Accepted procedure 3665.2-1 Intake Structure Condition Determination satisfactorily.
07/14/02 22:10	Accepted procedure 3670.1-1 Mode 1-4 Daily and Shiftly Control Room Rounds satisfactorily.
07/14/02 22:11	Accepted procedure 3670.2-10 Shiftly Primary PEO Tech Spec Rounds (Mode 1-4) satisfactorily.
07/14/02 22:11	Accepted procedure 3670.2-11 Shiftly Secondary PEO Tech Spec Rounds (Mode 1-4) satisfactorily.
07/14/02 22:11	Accepted procedure 3670.2-12 Shiftly Radwaste PEO Tech Spec Rounds (Mode 1-4) satisfactorily.
07/14/02 22:12	Accepted procedure C SP 600.11-002 Millstone Station Common Plant Equipment Operator Logs satisfactorily.
07/14/02 22:20	Selecting Check N2 on 3FWS*CTV41A for maintenance.
07/14/02 22:44	D condensate demineralizer placed in service, G demineralizer removed from service.
07/15/02 00:12	Performed RCS Dilution, 50 gallons @ 80 GPM.
07/15/02 00:30	Maintenance has completed the PM on 3FWS*CTV41A and all connections are tight.
07/15/02 00:45	Placed 3FWS*CTV41A Hydraulic system in Control (CONT) at MB5.
07/15/02 01:11	Accumulator Low Press annunciator (MB5B 1-2) 3FWS*CTV41A has cleared.
07/15/02 01:16	Accepted procedure 3604C.2-1 Boration Flow Path Verification, MODE 1, 2, 3 satisfactorily.
07/15/02 01:17	Accepted procedure 3680.1-1 Main Generator Hydrogen Use Rate satisfactorily.

Page Number _____

Shift Manager _____

Millstone Unit 3 Shift Log

07/15/02 05:58:02

07/15/02 01:17 Accepted procedure 3680.1-3 Containment Unidentified Leakage Trending satisfactorily.

07/15/02 01:21 Primary rounds operator reports both accumulator pressures are reading 5200 psig for 3FWS*CTV41A.

07/15/02 02:25 Performed RCS Dilution, 50 gallons @ 80 GPM.

07/15/02 04:07 3CNS-P3A, COMPONENT COOLING WATER MAKEUP PUMP, started to support CPF operations.

07/15/02 04:07 Chemistry placing TK11 on recirc for discharge.

07/15/02 04:40 Performed RCS Dilution, 50 gallons @ 80 GPM.

Millstone Unit 3 Shift Log

Active LCO's

07/15/02 05:58:02

Shift	A	B	C	D	E	F
SM						
STA						
US						
US						

<u>LCO</u>	<u>Action</u>	<u>EntryDate</u>	<u>ExpDate</u>	<u>Reason</u>
3TRM-3.7.12.1	a	07/10/02 10:20	07/17/02 10:20	Diesel fire pump is inoperable due to failed battery surveillance SP788A. Diesel fire pump remains available
3TRM-3.7.12.3	a	01/15/99 20:57	01/15/99 21:57	Cable spreading Room CO2 System disabled per Temp Mod 3-01-035
3TRM-3.7.13	a	07/05/02 14:51	07/05/02 15:51	Pyrocrete on ceiling in Terry Turbine room failed surveillance criteria. Impairment # 34525 -02-H
3TRM-3.7.13	a	06/27/02 15:30	06/27/02 16:30	Fire Damper 3HVQ*DMPF9 failed surveillance CR-02-03738, Fire Impairment #34510-02-H
3TRM-3.7.13	a	06/02/01 01:00	06/02/01 02:00	Fire Seals 1317-2 and 1316-2 between Aux Bldg and turbine bldg tunnel do not meet design, 34074-01-H
3TRM-7.4.1	c.2	06/26/02 07:44	07/09/02 08:44	ELUs AB-21,23,24,25,28,45,60,72,73 inop, temporary lighting installed, temporary log established
3TRM-7.4.1	c.2	06/22/02 00:00	07/05/02 00:00	ELUs AB-4, AB-8, AB-9, and AB-16 inop, temporary lighting installed, temporary log established
REMODCM V.C.1	b	07/15/02 13:56	08/15/02 13:56	3CND-RE07 inoperable due to failed surveillance SP3450F.11

Millstone Unit 3 Shift Log
Active LCO's

KEY

07/15/02 01:00:00

Shift	A	B	C	D	E	F
SM						
STA						
US						
US						

<u>LCO</u>	<u>Action</u>	<u>EntryDate</u>	<u>ExpDate</u>	<u>Reason</u>
3TRM-3.7.12.1	a	07/10/02 10:20	07/17/02 10:20	Diesel fire pump is inoperable due to failed battery surveillance SP788A. Diesel fire pump remains available
3TRM-3.7.12.3	a	01/15/99 20:57	01/15/99 21:57	Cable spreading Room CO2 System disabled per Temp Mod 3-01-035
3TRM-3.7.13	a	07/05/02 14:51	07/05/02 15:51	Pyrocrete on ceiling in Terry Turbine room failed surveillance criteria. Impairment # 34525 -02-H
3TRM-3.7.13	a	06/27/02 15:30	06/27/02 16:30	Fire Damper 3HVQ*DMPF9 failed surveillance CR-02-03738, Fire Impairment #34510-02-H
3TRM-3.7.13	a	06/02/01 01:00	06/02/01 02:00	Fire Seals 1317-2 and 1316-2 between Aux Bldg and turbine bldg tunnel do not meet design, 34074-01-H
3TRM-7.4.1	c.2	06/26/02 07:44	07/09/02 08:44	ELUs AB-21,23,24,25,28,45,60,72,73 inop, temporary lighting installed, temporary log established
3TRM-7.4.1	c.2	06/22/02 00:00	07/05/02 00:00	ELUs AB-4, AB-8, AB-9, and AB-16 inop, temporary lighting installed, temporary log established
REMODCM V.C.1	b	07/15/02 13:56	08/15/02 13:56	3CND-RE07 inoperable due to failed surveillance SP3450F.11
3.6.3	a	07/14/02 21:45	07/15/02 01:45	Restore the inoperable valve, 3FWS*CTV41A, to operable status within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

C

C

C

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

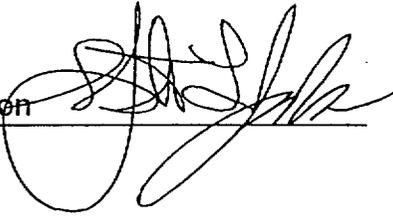
I. JPM Title: Evaluate Current Decay Heat Removal Requirements

JPM ID Number: SRO-A1.2

Revision: 0

II. Initiated:

Steve Jackson
Developer



2/26/02
Date

III. Reviewed:

Technical Reviewer



6/18/02
Date

IV. Approved:

Cognizant Plant Supervisor (optional)



Date

Nuclear Training Supervisor



6/19/02
Date

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: SRO-A1.2

Revision: 0

Task Title: Evaluate Current Decay Heat Removal Requirements

System: Admin

Time Critical Task: () YES (X) NO

Validated Time (minutes): 15

Task Number(s): 341-01-135, Evaluate Current Decay Heat Removal Requirements

Applicable To: SRO X RO PEO

K/A Number: GEN.2.1.25 K/A Rating: 2.8 / 3.1

Method of Testing: Simulated Performance: Actual Performance: X

Location: Classroom: X Simulator: In-Plant:

Task Standards: Maintaining defense in depth requirement for key safety systems and equipment associated with minimizing shutdown risk.

Required Materials: OP 3260A, Conduct of Outages, Rev. 013-04

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: SRO-A1.2

Revision: 0

Initial Conditions:

Millstone Unit 3 is completing a refueling outage. Fuel has been reloaded and plant conditions are as described on the handout. A bus outage on 34C is being considered. SBO to Bus 34A Tie Breaker 34A1-2 (3NNS-ACB-AH) was damaged requiring replacement and repair of breaker electrical connections. The SBO may not be started or loaded during repair activities. Total duration of the bus outage is estimated as 2.5 hours.

Initiating Cues:

You are the Unit Supervisor. Using OP3260A, Conduct of Outages, evaluate the current decay heat removal requirements and make a recommendation to the Shift Manager regarding the proposed bus outage.

****** 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-A1.2

Revision: 0

Task Title: Evaluate Current Decay Heat Removal Requirements

Start Time:

STEP	<u> 1 </u>	<u> </u>	Performance Step:	Locate correct procedure section.
GRADE	<u> </u>	<u> </u>	Standards:	Candidate refers to OP 3260A and locates Section 1.3, Decay Heat Removal Requirements
			Grade:	SAT <u> </u> UNSAT <u> </u>
STEP	<u> 2 </u>	<u> </u>	Performance Step:	VERIFY one train of RHR in operation. (step 1.3.2)
GRADE	<u> </u>	<u> </u>	Standards:	Refers to or remembers initial conditions and determines that the B RHR pump and train is in operation.
			Grade:	SAT <u> </u> UNSAT <u> </u>
STEP	<u> 3 </u>	<u> X </u>	Performance Step:	IF in MODE 5, PERFORM one of the following to ensure a backup for decay heat removal (step 1.3.3) <ul style="list-style-type: none"> • MAINTAIN the non-operating RHR train available
GRADE	<u> </u>	<u> X </u>	Standards:	Candidate analyses initial conditions and cues and determines that the non-operating RHR train will NOT be available.
			Grade:	SAT <u> </u> UNSAT <u> </u>

PERFORMANCE INFORMATION

JPM Number: SRO-A1.2

Revision: 0

Task Title: Evaluate Current Decay Heat Removal Requirements

STEP 4 X **Performance Step:** VERIFY all of the following are satisfied to ensure two steam generators available and proper RCS condition are established to support natural circulation

- Both available SG NR levels greater than 17%

GRADE X **Standards:** Candidate refers to initial conditions: **B & C S/Gs filled to >50% NR**

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

Performance Step: VERIFY all of the following are satisfied to ensure two steam generators available and proper RCS condition are established to support natural circulation

- Capability to feed available SG's with a MD AFW pump

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

GRADE X **Standards:** Candidate refers to initial conditions: **B MDFW pump available to fill S/Gs**

Performance Step: VERIFY all of the following are satisfied to ensure two steam generators available and proper RCS condition are established to support natural circulation

- Capability to release steam from available SGs

GRADE X **Standards:** Candidate refers to initial conditions: **Steam release capability available**

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

Performance Step: VERIFY all of the following are satisfied to ensure two steam generators available and proper RCS

PERFORMANCE INFORMATION

JPM Number: SRO-A1.2

Revision: 0

Task Title: Evaluate Current Decay Heat Removal Requirements

condition are established to support natural circulation

- RCS pressurized or capable of being pressurized to between 170 psia and 330 psia prior to core boiling

GRADE X

Standards: Candidate refers to initial conditions:
RCS re-pressurization contingency plans prepared

Grade: SAT UNSAT

Performance Step: VERIFY all of the following are satisfied to ensure two steam generators available and proper RCS condition are established to support natural circulation

- RCS openings being tracked

GRADE X

Standards: Candidate refers to initial conditions:
RCS openings being tracked

Grade: SAT UNSAT

Performance Step: VERIFY all of the following are satisfied to ensure two steam generators available and proper RCS condition are established to support natural circulation

- RCS loops associated with the available SGs: filled, swept, vented and unisolated

GRADE X

Standards: Candidate refers to initial conditions:
RCS Loops B & C filled, swept, vented and unisolated

Grade: SAT UNSAT

Performance Step: VERIFY all of the following are satisfied to ensure two steam

PERFORMANCE INFORMATION

JPM Number: SRO-A1.2

Revision: 0

Task Title: Evaluate Current Decay Heat Removal Requirements

generators available and proper RCS condition are established to support natural circulation

- Pressurizer cold calibrated level >50% unless a steam bubble is established in the pressurizer

GRADE X

Standards:

Candidate refers to initial conditions:
PZR Cold Calibrated Level >50%

Grade:

SAT **UNSAT**

STEP 5 X

Performance Step:

IF natural circulation is the only available backup for decay heat removal, (only 1 RHR pump is available) **PERFORM** the following:
IF the time to core boiling is less than one hour, **MAINTAIN** one of the following:

- RCS pressure greater than 170 psia
- Contingency plan to re-pressurize the RCS to greater than 170 psia prior to core boiling

GRADE X

Standards:

1. Candidate uses initial condition information and Attachment 20 of OP 3260A to determine Time of Boil After Fuel Shuffle Vented Case and determines time to boil 2.3 hours.
2. Determines time to boil >1 hour and steps need not be implemented (though the contingency plan does exist)

Grade:

SAT **UNSAT**

PERFORMANCE INFORMATION

JPM Number: SRO-A1.2

Revision: 0

Task Title: Evaluate Current Decay Heat Removal Requirements

STEP 6 X **Performance Step:** IF a Bus 34C or 34D bus outage is planned, PRESSURIZE the RCS to greater than 170 psia unless either:

- The outage Bus Recovery Time is less than the time to core boiling, or
- The non-outage bus can be re-energized by the SBO diesel generator prior to core boiling

GRADE _____ X **Standards:**

1. Candidate analyses time to core boil (from previous step or calculates) compared to Bus Recovery Time from initial conditions. Determines Bus Recovery Time to be greater than time to core boiling
2. Candidate evaluates availability of SBO diesel. Since bus outage work prohibits starting or loading SBO diesel, candidate determines that the non-outage bus cannot be re-energized by SBO.

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

STEP 7 X **Performance Step:** Make a recommendation to the Shift Manager regarding the proposed bus outage.

GRADE _____ X **Standards:**

Based on Bus Recovery Time to be greater than time to core boiling and the non-outage bus cannot be re-energized by SBO candidate recommends that the RCS should be pressurized to greater than 170 psia prior to commencing bus outage.

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

Cue: Make a recommendation to the Shift Manager regarding the proposed bus

PERFORMANCE INFORMATION

JPM Number: SRO-A1.2

Revision: 0

Task Title: Evaluate Current Decay Heat Removal Requirements

outage.

Cue (contingency): Are all conditions ready to support the bus outage?

Cue (contingency): Would you recommend any changes in the current plant conditions to support the bus outage?

Termination cue: The evaluation for this JPM is complete.

Stop Time: _____

VERIFICATION OF JPM COMPLETION

JPM Number: SRO-A1.2

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): 15

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-A1.2

Initial Conditions:

Millstone Unit 3 is completing a refueling outage. Fuel has been reloaded and plant conditions are as described on the handout. A bus outage on 34C is being considered. SBO to Bus 34A Tie Breaker 34A1-2 (3NNS-ACB-AH) was damaged requiring replacement and repair of breaker electrical connections. The SBO may not be started or loaded during repair activities. Total duration of the bus outage is estimated as 2.5 hours.

Initiating Cues:

You are the Unit Supervisor. Using OP3260A, Conduct of Outages, evaluate the current decay heat removal requirements and make a recommendation to the Shift Manager regarding the proposed bus outage.

STUDENT HANDOUT

UNIT STATUS:

Millstone Unit 3 is completing a refueling outage. The plant is in Mode 5. Fuel has been reloaded and plant conditions are as described on the handout. A bus outage on 34C is being considered..

CRITICAL PARAMETERS		
	PARAMETER	VALUE
	B train of RHR in operation	
	B & C Steam Generators	filled to >50% NR
	B & C Steam Generators	Steam release capability available
	B MDFW pump	available to fill S/Gs
	Reactor Coolant System	<ul style="list-style-type: none"> • vented • openings being tracked • Loops B & C filled, swept vented and unisolated • RCS pressure = 45 psia • RCS temperature = 135°F
	PZR Cold Calibrated Level	>50%
	Rx Shutdown	for 30 days
	RCS re-pressurization contingency plans prepared	
	Outage Bus Recovery Time	2.5 hours
	SBO to Bus 34A Tie Breaker 34A1-2 (3NNS-ACB-AH) damaged requiring replacement and repair of breaker electrical connections	
	SBO may not be started or loaded during repair.	

0

1

2

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

I. JPM Title: Given a completed clearance boundary and reference material, review, amend and approve the clearance boundary.

JPM ID Number: SRO-A2

Revision: 0

II. Initiated:

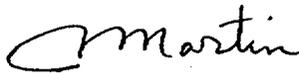
Steve Jackson
Developer



02/27/02
Date

III. Reviewed:

Technical Reviewer



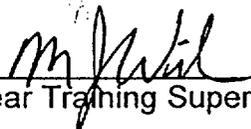
6/18/02
Date

IV. Approved:

Cognizant Plant Supervisor (optional)

Date

Nuclear Training Supervisor



6/19/02
Date

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: SRO-A2

Revision: 0

Task Title: Given a completed clearance boundary and reference material, review, amend and approve the 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 X RO 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: Review and approve a tag clearance boundary

Required Materials: Completed work package boundary sheet
P&IDs
EE One-Line Electrical Drawings
OP 3300 series procedures

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: SRO-A2

Revision: 0

Simulator Requirements: NONE

Initial Conditions: You are a licensed SRO. A tagout clearance boundary for the impeller replacement for the "B" Auxiliary Feedwater (FWA) pump has been developed.

Initiating Cues: Your task is to review the recommended tagout clearance boundary using available references so that the work package boundary sheet is ready for approval.

**** 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: SRO-A2

Revision: 0

Task Title: Given a completed clearance boundary and reference material,
review, amend and approve the clearance boundary.

Start Time:

STEP 1

Performance Step: Reviews the Work Package Boundary Sheet and selects appropriate reference materials

GRADE

Standards: Selects:
P&ID EM-130B, (FWA), EE Drawing.
1M, OP 3322

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

STEP 2

Performance Step: Reviews FWA-P1B-CS, "B" AFW Pump Control Switch

GRADE

Standards: Uses selected references and determines the Pump Control Switch tagging is **correct**.

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

STEP 3 X

Performance Step: Reviews power supply 34D5-2, 3FWA*P1B breaker racked down and red tagged.

GRADE X

Standards: Uses selected references and determines power supply 34D5-2 is **INCORRECT**.
34D15-2 is the correct breaker (EE Drawing. 1M,).
Tag and tagged position are correct.

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

Cue: When error is identified: "What would you do to if you found this error?"

Cue: If the response is correct it then:
"Correct the error."

PERFORMANCE INFORMATION

JPM Number: SRO-A2

Revision: 0

Task Title: Given a completed clearance boundary and reference material,
review, amend and approve the clearance boundary.

STEP	<u> 4 </u>	<u> X </u>	Performance Step:	Reviews 3FWA*V16, SGAFW PP B DWST SUCT HDR ISOLATION, red tagged closed.
GRADE	<u> </u>	<u> X </u>	Standards:	Uses selected references and determines that 3FWA*V16 selection, position and tagging is correct .
			Grade:	SAT <u> </u> UNSAT <u> </u>

STEP	<u> 5 </u>	<u> X </u>	Performance Step:	IDENTIFIES that boundary 3FWA*V64, SGAFW PP B SUCT FM COND STOR TK is missing .
GRADE	<u> </u>	<u> X </u>	Standards:	Uses selected references and determines that 3FWA*V64 should be ADDED . 3FWA*V64 is the correct boundary (P&ID EM-130B) <u>CLOSED</u> position and <u>RED</u> tagging is the correct tag and position.
			Grade:	SAT <u> </u> UNSAT <u> </u>

Cue: When error is identified: "What would you do to if you found this error?"
Cue: If the response is add the valve then: "Correct the error."

STEP	<u> 6 </u>	<u> X </u>	Performance Step:	Reviews 3FWA*V32, SGAFW PP B DISCHARGE HDR ISOLATION, red tagged closed.
GRADE	<u> </u>	<u> X </u>	Standards:	Uses selected references and determines that 3FWA*V32 selection is INCORRECT . 3FWA*V18 is the correct boundary (P&ID EM-130B) <u>CLOSED</u> position and <u>RED</u> tagging is correct .

PERFORMANCE INFORMATION

JPM Number: SRO-A2

Revision: 0

Task Title: Given a completed clearance boundary and reference material,
review, amend and approve the clearance boundary.

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

Cue: When error is identified: "What would you do to if you found this error?"

Cue: If the response is correct it then: "Correct the error."

STEP 7 X

Performance Step: Reviews 3FWA*V984 SGAFW PP B RTN TO DWST ISOL, red tagged closed.

GRADE X

Standards: Uses selected references and determines that 3FWA*V984 selection, position and tagging is **correct**.

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

STEP 8 X

Performance Step: Reviews 3FWA*V976, SGAFW PP B SUCT HDR DRAIN, red tagged open.

GRADE X

Standards: Uses selected references and determines that 3FWA*V976 selection, position and tagging is **correct**.

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

Comment: 3FWA*V960 could also be an acceptable drain path. Local observation would actually determine the best drain point. Candidate may comment on choice of drain point.

STEP 9 X

Performance Step: Reviews 3FWA*V965, SGAFW PP B DISCHARGE VENT, red tagged open.

GRADE X

Standards: Uses selected references and determines that 3FWA*V965 selection, position and tagging is **correct**.

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

PERFORMANCE INFORMATION

JPM Number: SRO-A2

Revision: 0

Task Title: Given a completed clearance boundary and reference material, review, amend and approve the clearance boundary.

Comment: 3FWA*V970 could also be an acceptable vent path. Local observation would actually determine the best vent point. Candidate may comment on choice of vent point.

STEP	<u> 10 </u>	<u> X </u>	Performance Step:	Reviews SPOOLPIECE, SERVICE WATER TO SGAFW PP B, red tagged removed.
-------------	-------------------	------------------	--------------------------	--

GRADE	<u> </u>	<u> X </u>	Standards:	Uses selected references and determines that SPOOLPIECE selection, position and tagging is correct .
--------------	-----------------	------------------	-------------------	---

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

STEP	<u> 11 </u>	<u> </u>	Performance Step:	Amend and approve the clearance boundary
-------------	-------------------	-----------------	--------------------------	--

GRADE	<u> </u>	<u> </u>	Standards:	Makes indicated changes to the clearance boundary, and recommends approval as amended.
--------------	-----------------	-----------------	-------------------	--

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

Cue: "Are you recommending the tagout clearance boundary?"

Termination Cue: The Evaluation For This JPM is Complete.

Stop Time:

VERIFICATION OF JPM COMPLETION

JPM Number: SRO-A2

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:

SRO-A2

Initial Conditions:

You are a licensed SRO. A tagout clearance boundary for the impeller replacement for the “B” Auxiliary Feedwater (FWA) pump has been developed.

Initiating Cues:

Your task is to review the recommended tagout clearance boundary using available references so that the work package boundary sheet is ready for approval.

KEY---WORK PACKAGE BOUNDARY SHEET ---KEY

Clearance Number:

AWO Number: M30110525	Clearance Adequate for Personnel Safety: Contact Person / Designee Sign	Date:
--	--	--------------

Step Number	Tag Type	Tagged Position	Tag Serial Number	Equipment ID	Equipment Description	Equipment Location	Notes	Tag Placed	Tag Verified	Worker Verified
1	YEL			3FWA-P1B-CS	B AFW PUMP CONTROL SWITCH		POWER IS RED TAGGED OFF			
2	RED	RACKED DOWN		34D15-2	3FWA*P1B					
3	RED	CLOSED		3FWA*V16	SGAFW PP B DWST SUCT HDR ISOLATION					
4	RED	CLOSED		3FWA*V64	SGAFW PP B SUCT FM COND STOR TK					
5	RED	CLOSED		3FWA*V18	SGAFW PP B DISCHARGE HDR ISOLATION					
6	RED	CLOSED		3FWA*V984	SGAFW PP B RTN TO DWST ISOL					

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

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

JPM ID Number: SRO-A3

Revision: 0

II. Initiated:

Steve Jackson
Developer



02/25/02
Date

III. Reviewed:

J. Martin
Technical Reviewer

6/18/02
Date

IV. Approved:

N/A
Cognizant Plant Supervisor (optional)

Date

M. J. [Signature]
Nuclear Training Supervisor

6/19/02
Date

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: SRO-A3

Revision: 0

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): _____

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, Rev. 016-04
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: SRO-A3

Revision: 0

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 the permit using the supporting documentation, approve the permit and report to the examiner.

**** 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-A3

Revision: 0

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 4.25.4.j

GRADE X

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

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

Cue: Steps 4.25.1, 2, & 3 and step 4.25.4.a through i have been completed.

STEP 2 X

Performance Step: PERFORM Independent Verification of liquid effluent monitor alarm and alert settings. [step 4.25.4.j.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.

PERFORMANCE INFORMATION

JPM Number: SRO-A3

Revision: 0

1

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

Initials procedure after receiving the cue.

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

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

STEP 3 X

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 4.25.4.j.2)]

GRADE X

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 procedure.

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

Cue: Step 4.25.4.j.3) is N/A since no limits are exceeded.

STEP 4 X

Performance Step: CHECK required dilution flowrate is met. [step 4.25.4.j.4)]

GRADE X

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 procedure.

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

Termination Cue: The Evaluation of this JPM is Complete

Stop Time:

VERIFICATION OF JPM COMPLETION

JPM Number: SRO-A3

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:

SRO-A3

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 the permit using the supporting documentation, approve the permit and report to the examiner.

JOB PERFORMANCE MEASURE APPROVAL WORKSHEET

I. JPM Title: Provide the State a Protective Action Recommendation

JPM ID Number: SRO-A4

Revision: 0

II. Initiated:

Steve Jackson
Developer



2/25/02
Date

III. Reviewed:

J. Martin
Technical Reviewer



6/18/02
Date

IV. Approved:

N/A
Cognizant Plant Supervisor (optional)



Date

M. [Signature]
Nuclear Training Supervisor



6/19/02
Date

JOB PERFORMANCE MEASURE GUIDE

Facility: Millstone Unit 3

JPM ID Number: SRO-A4

Revision: 0

Task Title: Provide the State a Protective Action Recommendation

System: Admin, SERO

Time Critical Task: () YES () NO

Validated Time (minutes): 10

Task Number(s): 345-05-006, Provide the State a Protective Action Recommendation

Applicable To: SRO RO PEO

K/A Number: GEN.2.4.44 K/A Rating: 4.0

Method of Testing: Simulated Performance: Actual Performance:

Location: Classroom: Simulator: In-Plant:

Task Standards: Provide the State a Protective Action Recommendation

Required Materials: MP-26-EPI-FAP01-001, Control Room DSEO, Rev. 000
MP-26-EPI-FAP06, Classification and PARs, Rev. 000
MP-26-EPI-FAP06-005, Control Room PARs, Rev. 000
MP-26-EPA-REF-08B, Millstone E-Plan Resource Book, Rev. 001
(Emergency Phone List / previously EPUG-08),

General References: MP-26-EPI-FAP06-001, EAL Tables, Rev. 000

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: SRO-A4

Revision: 0

Simulator Requirements: none

Initial Conditions: The Initial Conditions are covered in the Event Description.

Initiating Cues: You are the Shift Manager. You have assumed responsibility in the Control Room DSEO role. You are implementing EPI-FAP01-001, Control Room DSEO, section E. You have classified the event as a General Emergency - Alpha (GE-A) based on events in progress and the Incident Report Form (IRF) has been reviewed, approved and transmitted. Your task is to determine the State Protective Action Recommendation of the following event. Report to the examiner the conditions that support your recommendation, and inform the examiner when you have completed the task.

**** 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-A4

Revision: 0

Task Title: Provide the State a Protective Action Recommendation

Cue: (contingency) Are any "Shelter" recommendations indicated?

STEP 4 X

Performance Step: Contact the DEP Dispatcher in Hartford

GRADE X

Standards: Obtains telephone number from EPUG-08B and attempts to call

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

Cue: Examiner acts as DEP Dispatcher

STEP 5 X

Performance Step: Identify self and read Evacuate and Shelter recommendations from Section B, "ALPHA - 10 Mile PARs."

GRADE X

Standards: Identifies self and state recommended zones to evacuate as **A** and **B** and **Montville** and **Waterford** in **C** and **Ledyard** in **E**, and shelter ALL other zones

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

Cue: Acknowledge receipt of PARs

STEP 6

Performance Step: Request the dispatcher inform the DEP Duty Officer that a PAR has been issued

GRADE

Standards: Requests the dispatcher inform the DEP Duty Officer that a PAR has been issued

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

Cue: Acknowledge receipt of request

PERFORMANCE INFORMATION

JPM Number: SRO-A4

Revision: 0

Task Title: Provide the State a Protective Action Recommendation

STEP 7 _____

Performance Step: Log date and time of notification

GRADE _____

Standards: Uses either Auto-Log, SERO Log Sheet from EPI-FAP15-012 or other means to log date and time of DEP notification

Cue: Acknowledge candidate's attempt to log date and time of notification.

Grade: SAT _____ UNSAT _____

Comments: Mark Time. Time should be **less than 15 minutes**

Comments: Go to termination cue.

Termination Cue: The evaluation for this JPM is complete

Record Stop Time: _____

VERIFICATION OF JPM COMPLETION

JPM Number: SR0-A4

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 _____

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-A4

Initial Conditions:

The Initial Conditions are covered in the Event Description.

Initiating Cues:

You are the Shift Manager. You have assumed responsibility in the Control Room DSEO role. You are implementing EPI-FAP01-001, Control Room DSEO, section E. You have classified the event as a General Emergency - Alpha (GE-A) based on events in progress and the Incident Report Form (IRF) has been reviewed, approved and transmitted. Your task is to determine the State Protective Action Recommendation of the following event. Report to the examiner the conditions that support your recommendation, and inform the examiner when you have completed the task.

STUDENT HANDOUT

INITIATING CUE:

The plant is in Mode 3 performing a startup after a 24 outage to repair a TDFWP vibration problem.

CRITICAL PARAMETERS		
TIME	INFORMATION	SOURCE
0	RO reports pressurizer level going down rapidly.	MB indications
15	The following parameters exist:	MB indications
	RCS pressure	120 psia
	PZR level	offscale low
	CTMT Pressure	35 psia and rising
	CETCs Subcooling	0°F
	SPDS	Red Path - Integrity Orange Path - CTMT
	CTMT temperature	230°F and rising
	CTMT radiation RE04A/05A	575 R/hr and rising
	Rx Tripped/SI Actuated	Operating normally
	CDA Actuated	Operating normally
	Security reports steam escaping from the containment equipment hatch.	Security report
	Met Tower- All levels of the Met Tower indicate the wind is from the South (190°) at 4 mph	PPC indication

Classification: NRC: GENERAL EMERGENCY State Posture Code: ALPHA
 MP3 EAL: All Three Barriers (BG1)

EAL Table Designation: CNB4 (Loss Ctmt) Steam escaping from the equipment hatch.
 RCB2 (Loss RCS) subcooling <32°F.
 FCB3 (Loss of fuel Clad) RE-04A/05A reading > 500 R/hr