

**Nuclear Generation Group**

**Job Performance Measure**

Review Printout of Thermal Limits Conditions

JPM Number: RO A.1.a.

Revision Number: 02

Date: 11/2002

**NOTE: Original Signed – Disk Copy No Signatures**

Developed By: \_\_\_\_\_  
Instructor Date

Validated By: \_\_\_\_\_  
SME or Instructor Date

Review By: \_\_\_\_\_  
Operations Representative Date

## JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, or simulator)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating and terminating cues are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:  
Procedure Rev. \_\_\_\_\_ Date \_\_\_\_\_
- \_\_\_\_\_ 9. Pilot test the JPM:
  - a. verify cues both verbal and visual are free of conflict, and
  - b. ensure performance time is accurate.
- \_\_\_\_\_ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor	Date
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SME/Instructor	Date
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SME/Instructor	Date
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## **SIMULATOR SETUP INSTRUCTIONS**

1. Reset the simulator to IC 21 (rst 21).
2. **IC Description:** Full power normal lineup.
3. **Manual Actuation:**
  - Ensure that the process computer is operating and capable of generating an OD-20.
4. **Malfunctions:** NONE
5. **Remotes:** NONE
6. **Overrides:** NONE
7. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs using the JPM Validation Checklist.
8. This completes the setup for this JPM.

**INITIAL CONDITIONS**

Unit 1 has been operating at rated power for the last 90 days.

You are the Unit One Nuclear Station Operator on Sunday day shift.

There are no special instructions from the QNE.

**INITIATING CUE**

Perform the Unit Operator’s Daily Surveillance of Nuclear Limits QOS 0005-03.

**Provide examinee with:**

A copy of QOS 0005-03. When the candidate locates the appropriate section of QOS 0005-S01, provide pages 13 and 14 for step 21 of Nuclear limits from powerplex. When the candidate demonstrates the ability to display an OD-20 on the process computer, provide a printout of an OD-20, “Core Performance Log”.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

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**Revision Record (Summary)**

Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A. "Administrative Topics" for RO/SRO candidates.

Revision 1 Incorporated comments from station operators review.

Revision 2 Incorporated comments from NRC exam review.

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**Information For Evaluator's Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

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JPM Start Time: \_\_\_\_\_

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
<i>Evaluator Note: Provide candidate with copy of QOS 0005-03 and once the candidate identifies the need to utilize QOS 0005-S01.step 21 “Nuclear Limits from Powerplex”, provide them with pages 13 and 14.</i>			
<i>Evaluator Note: Once candidate successfully demonstrates ability to obtain an OD-20, provide them with the prepared copy of the Core Performance Log. Explain to them that this is the printout from the OD-20 that they just demanded from the process computer.</i>			
*QCOP 9900-20	May obtain procedure to demand an OD-20 from process computer.	Types 20 and presses Return key to display an OD-20, Core Performance Log, on process computer screen.	[ ] [ ] [ ]
QOS 0005-S01 step A.	Records date and time from the current OD-20.	Using information provided from cue and enters current date and time.	[ ] [ ] [ ]
QOS 0005-S01 step B.	Records core thermal power.	Records core thermal power from the current OD-20.	[ ] [ ] [ ]
QOS 0005-S01 step C.	Calculates and records fraction of rated thermal power (FRTP).	Calculates fraction of rated thermal power (FRTP) by either dividing thermal power value, by rated power, OR, records FRTP value from OD-20 and records.	[ ] [ ] [ ]
QOS 0005-S01 step D.	Records total core flow (WT).	Records total core flow (WT) from OD-20.	[ ] [ ] [ ]
QOS 0005-S01 steps E,F,G.	Records value and location of MFLPD, and verifies less than 1.00	Records value and location of MFLPD from OD-20, and verifies less than 1.00.	[ ] [ ] [ ]
QOS 0005-S01 steps H,I,J.	Records value and location of FDLRX, and verifies less than 1.00	Records value and location of FDLRX from OD-20, and verifies less than 1.00.	[ ] [ ] [ ]
*QOS 0005-S01 steps K,L,M.	Records value and location of MAPRAT from OD-20, and verifies less than 1.00.	Records value and location of MAPRAT from OD-20, and identifies that value exceeds 1.00. Notifies Unit Supervisor and Qualified Nuclear Engineer.	[ ] [ ] [ ]
<i>Evaluator cue: Acknowledge report, as appropriate as both Unit Supervisor, and Qualified Nuclear Engineer. If candidate stops progress after finding error, as Unit Supervisor, direct them to complete the surveillance sheets.</i>			

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
QOS 0005-S01 steps N,O,P.	Records value and location of MFLCPR from OD-20, and verifies less than 1.00.	Records value and location of MFLCPR from OD-20, and verifies less than 1.00.	[ ] [ ] [ ]
*QOS 0005-S01 step Q.	Verify APRM readings from OD-20 to be current power +2% or – 1% Rated Thermal Power.	Verifies that APRM readings from OD-20 to be current power +2% or –1% rated thermal power and identifies that APRM #4 is reading more than 1% lower than current power. Notifies Unit Supervisor.	[ ] [ ] [ ]
<b><i>Evaluator cue: Acknowledge APRM report, as appropriate as Unit Supervisor.</i></b>			
QOS 0005-S01 step R.	Review QNE’s special instructions.	Determines from initial conditions that there are no QNE special instructions marks step N/A.	[ ] [ ] [ ]
<b><i>Candidate should state JPM is complete.</i></b>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

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Operator's Name: \_\_\_\_\_  
Job Title: RO

JPM Title: Review Printout of Thermal Limits Conditions

JPM Number: RO A.1.a. Revision Number: 2

Task Number and Title: SR-0005-P01  
As a Unit NSO trainee, complete the Operations Department Weekly Summary of Daily Surveillance in accordance with QOS 0005-01 and QOS 0005-S01.

K/A Number and Importance:  
K/A: 2.1.19 RATING: 3.0

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate  Perform  
**Faulted:**  Yes  No  
**Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** \_\_\_\_\_ minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** QOS 0005-03 rev.23  
QOS 0005-S01 rev 122



**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:        Satisfactory                          Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_(Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **INITIAL CONDITIONS**

(Student Copy)

Unit 1 has been operating at rated power for the last 90 days.

You are the Unit One Nuclear Station Operator on Sunday day shift.

There are no special instructions from the QNE.

### **INITIATING CUE**

Perform the Unit Operator's Daily Surveillance of Nuclear Limits QOS 0005-03.

1.1.1.1.1.1.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.2.

1.1.1.1.1.3.

Evaluate License Maintenance  
Requirements

1.1.1.1.1.4.

1.1.1.1.1.5.

1.1.1.1.1.6.

JPM Number: RO A.1.b.

1.1.1.1.1.7.

1.1.1.1.1.8.

Revision Number: 2

**1.1.1.1.1.9.**

1.1.1.1.1.10.

Date: 11/2002

**1.1.1.1.1.11. Signatures**

**NOTE: Original Signed – Disk Copy No**

1.1.1.1.1.12.

1.1.1.1.1.13.

Developed By:

\_\_\_\_\_

1.1.1.1.1.14.

**Instructor**

**Date**

1.1.1.1.1.15.

1.1.1.1.1.16.

Validated By:

\_\_\_\_\_

1.1.1.1.1.17.

**SME or Instructor**

**Date**

1.1.1.1.1.18.

1.1.1.1.1.19.

Review By:

\_\_\_\_\_

1.1.1.1.1.20.

**Operations Representative**

**Date**

1.1.1.1.1.21.

**Job Performance Measure (JPM)**

**Revision Record (Summary)**

- Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A “Administrative Topics” for RO/SRO candidates.
- Revision 1, This JPM revised to incorporate validation time and comments.
- Revision 2, This JPM revised to incorporate NRC validation comments.



**Information For Evaluator’s Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.



**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

You are an active Reactor Operator assigned as a clearance writer since the beginning of the fourth quarter of 2002.

You were scheduled for twelve-hour shifts during the November outage, which started on 11/12/02 and ended 11/30/02, and eight hours shifts for the remainder of the quarter.

You are currently assigned to relieve the assist NSO on unit two, January 2<sup>nd</sup>, 2003 on day shift.

During the past quarter:

- You covered two 8-hour afternoon shifts as a Unit NSO on December 23<sup>rd</sup> and 24<sup>th</sup>.
- You split two 12-hour midnight shifts, working six hours as the Unit NSO and the other six hours as a clearance writer during the outage on November 20<sup>th</sup>, and 21<sup>st</sup>.
- You covered three complete 12-hour day shifts as an Assist NSO during the outage on November 12<sup>th</sup>, 13<sup>th</sup>, and 14<sup>th</sup>.
- You split 8-hour day shifts working four hours as the Assist NSO and the other four hours as a clearance writer on October 1<sup>st</sup>, 2<sup>nd</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, 29<sup>th</sup> and 30<sup>th</sup>.

The remained of the time, you have worked 8-hour day shift as clearance writer Monday through Friday.

**INITIATING CUE**

You are to document your shift coverage for the 4<sup>th</sup> quarter of 2002, evaluate your standing as an active licensed RO, and determine your ability to assume shift for January 2<sup>nd</sup>, 2003. Give an explanation for your determination.

**Provide examinee with:**

**Blank Copy of Attachment 1 “Active License Tracking Log” from OP-AA-105-102.**

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

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**Job Performance Measure (JPM)**

JPM Start Time: \_\_\_\_\_

	<b><u>PERFORMANCE</u></b>	<b><u>OBJECTIVE STANDARDS</u></b>	<b><u>SAT UNSAT N/A</u></b>
<b><i>Evaluators note: Provide the candidate with a blank copy of Attachment 1 “Active License Tracking Log” from OP-AA-105-102.</i></b>			
*OP-AA-105-102 Attachment 1	Records shift coverage from 4 <sup>th</sup> quarter of 2002.	Correctly records dates, shifts, length of shift, position filled, and signs attachment 1 using information from the initial conditions.	[ ] [ ] [ ]
<b><i>Evaluators note: ONLY full shifts, either 8 or 12 hours with turnovers count towards shift coverage time allowed. Candidates should NOT record any of the split shifts. The end result should show 52 hours of time, which is short of the required 56 hours. No truncation is allowed.</i></b>			
*OP-AA-105-102	Reviews requirements to maintain active license.	Recognizes fact that he/she does NOT have the minimum number of required hours of shift watch to maintain their active license.	[ ] [ ] [ ]
*OP-AA-105-102	Reviews requirements to maintain active license.	Determines he/she is NOT eligible to stand shift on January 2 <sup>nd</sup> , 2003 due to not having the minimum number of required shifts.	[ ] [ ] [ ]
<b><i>Evaluators Cue: When candidate has determined that they will not be eligible to assume the shift, ask them what additional requirements they need to be able to stand the shift on January 2<sup>nd</sup>, 2003.</i></b>			
*OP-AA-105-102	Reviews requirements to maintain active license.	Determines that a minimum of one more complete eight hour shift is needed to fulfill the requirements to maintain their license active.	[ ] [ ] [ ]
<b><i>Evaluators Note: When the candidate determines that they can not assume the shift for January 2<sup>nd</sup>, 2003 and has determined the correct amount of time needed to maintain their license active, inform candidate that the JPM is complete.</i></b>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_



**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: RO

JPM Title: Evaluate License Maintenance Requirements

JPM Number: RO A.1.b. Revision Number: 2

Task Number and Title: Evaluate License Maintenance Requirements

K/A Number and Importance:

**K/A: 2.1.2      RATING: 3.0**

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** 17 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** OP-AA-105-102 rev2

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:     Satisfactory                     Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_(Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## INITIAL CONDITIONS

(Student Copy)

You are an active Reactor Operator assigned as a clearance writer since the beginning of the fourth quarter of 2002.

You were scheduled for twelve-hour shifts during the November outage, which started on 11/12/02 and ended 11/30/02, and eight hours shifts for the remainder of the quarter.

You are currently assigned to relieve the assist NSO on unit two, January 2<sup>nd</sup>, 2003 on day shift.

During the past quarter:

- You covered two 8-hour afternoon shifts as a Unit NSO on December 23<sup>rd</sup> and 24<sup>th</sup>.
- You split two 12-hour midnight shifts, working six hours as the Unit NSO and the other six hours as a clearance writer during the outage on November 20<sup>th</sup>, and 21<sup>st</sup>.
- You covered three complete 12-hour day shifts as an Assist NSO during the outage on November 12<sup>th</sup>, 13<sup>th</sup>, and 14<sup>th</sup>.
- You split 8-hour day shifts working four hours as the Assist NSO and the other four hours as a clearance writer on October 1<sup>st</sup>, 2<sup>nd</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, 29<sup>th</sup> and 30<sup>th</sup>.

The remained of the time, you have worked 8-hour day shift as clearance writer Monday through Friday.

## INITIATING CUE

You are to document your shift coverage for the 4<sup>th</sup> quarter of 2002, evaluate your standing as an active licensed RO, and determine your ability to assume shift for January 2<sup>nd</sup>, 2003. Give an explanation for your determination.

1.1.1.1.1.22.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.23.

1.1.1.1.1.24.

Evaluate License Maintenance  
Requirements

1.1.1.1.1.25.

1.1.1.1.1.26.

1.1.1.1.1.27.

JPM Number: RO A.1.b.

1.1.1.1.1.28.

1.1.1.1.1.29.

Revision Number: 2

**1.1.1.1.1.30.**

1.1.1.1.1.31.

Date: 11/2002

**1.1.1.1.1.32.  
Signatures**

**NOTE: Original Signed – Disk Copy No**

**1.1.1.1.1.33.**

1.1.1.1.1.34.

Developed By:

\_\_\_\_\_

1.1.1.1.1.35.

Instructor

Date

1.1.1.1.1.36.

1.1.1.1.1.37.

Validated By:

\_\_\_\_\_

1.1.1.1.1.38.

SME or Instructor

Date

1.1.1.1.1.39.

1.1.1.1.1.40.

Review By:

\_\_\_\_\_

1.1.1.1.1.41.

Operations Representative

Date

1.1.1.1.1.42.

**Job Performance Measure (JPM)**

**Revision Record (Summary)**

- Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A “Administrative Topics” for RO/SRO candidates.
- Revision 1, This JPM revised to incorporate validation time and comments.
- Revision 2, This JPM revised to incorporate NRC validation comments.



**Information For Evaluator’s Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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The timeclock starts when the candidate acknowledges the initiating cue.



**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

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- You split 8-hour day shifts working four hours as the Assist NSO and the other four hours as a clearance writer on October 1<sup>st</sup>, 2<sup>nd</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, 29<sup>th</sup> and 30<sup>th</sup>.

The remained of the time, you have worked 8-hour day shift as clearance writer Monday through Friday.

**INITIATING CUE**

You are to document your shift coverage for the 4<sup>th</sup> quarter of 2002, evaluate your standing as an active licensed RO, and determine your ability to assume shift for January 2<sup>nd</sup>, 2003. Give an explanation for your determination.

**Provide examinee with:**

**Blank Copy of Attachment 1 “Active License Tracking Log” from OP-AA-105-102.**

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

.....

**Job Performance Measure (JPM)**

JPM Start Time: \_\_\_\_\_

	<b><u>PERFORMANCE</u></b>	<b><u>OBJECTIVE STANDARDS</u></b>	<b><u>SAT UNSAT N/A</u></b>
<b><i>Evaluators note: Provide the candidate with a blank copy of Attachment 1 “Active License Tracking Log” from OP-AA-105-102.</i></b>			
*OP-AA-105-102 Attachment 1	Records shift coverage from 4 <sup>th</sup> quarter of 2002.	Correctly records dates, shifts, length of shift, position filled, and signs attachment 1 using information from the initial conditions.	[ ] [ ] [ ]
<b><i>Evaluators note: ONLY full shifts, either 8 or 12 hours with turnovers count towards shift coverage time allowed. Candidates should NOT record any of the split shifts. The end result should show 52 hours of time, which is short of the required 56 hours. No truncation is allowed.</i></b>			
*OP-AA-105-102	Reviews requirements to maintain active license.	Recognizes fact that he/she does NOT have the minimum number of required hours of shift watch to maintain their active license.	[ ] [ ] [ ]
*OP-AA-105-102	Reviews requirements to maintain active license.	Determines he/she is NOT eligible to stand shift on January 2 <sup>nd</sup> , 2003 due to not having the minimum number of required shifts.	[ ] [ ] [ ]
<b><i>Evaluators Cue: When candidate has determined that they will not be eligible to assume the shift, ask them what additional requirements they need to be able to stand the shift on January 2<sup>nd</sup>, 2003.</i></b>			
*OP-AA-105-102	Reviews requirements to maintain active license.	Determines that a minimum of one more complete eight hour shift is needed to fulfill the requirements to maintain their license active.	[ ] [ ] [ ]
<b><i>Evaluators Note: When the candidate determines that they can not assume the shift for January 2<sup>nd</sup>, 2003 and has determined the correct amount of time needed to maintain their license active, inform candidate that the JPM is complete.</i></b>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_



**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: RO

JPM Title: Evaluate License Maintenance Requirements

JPM Number: RO A.1.b. Revision Number: 2

Task Number and Title: Evaluate License Maintenance Requirements

K/A Number and Importance:

**K/A: 2.1.2      RATING: 3.0**

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** 17 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** OP-AA-105-102 rev2

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:     Satisfactory             Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_(Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## INITIAL CONDITIONS

(Student Copy)

You are an active Reactor Operator assigned as a clearance writer since the beginning of the fourth quarter of 2002.

You were scheduled for twelve-hour shifts during the November outage, which started on 11/12/02 and ended 11/30/02, and eight hours shifts for the remainder of the quarter.

You are currently assigned to relieve the assist NSO on unit two, January 2<sup>nd</sup>, 2003 on day shift.

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- You covered three complete 12-hour day shifts as an Assist NSO during the outage on November 12<sup>th</sup>, 13<sup>th</sup>, and 14<sup>th</sup>.
- You split 8-hour day shifts working four hours as the Assist NSO and the other four hours as a clearance writer on October 1<sup>st</sup>, 2<sup>nd</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, 29<sup>th</sup> and 30<sup>th</sup>.

The remained of the time, you have worked 8-hour day shift as clearance writer Monday through Friday.

## INITIATING CUE

You are to document your shift coverage for the 4<sup>th</sup> quarter of 2002, evaluate your standing as an active licensed RO, and determine your ability to assume shift for January 2<sup>nd</sup>, 2003. Give an explanation for your determination.



1.1.1.1.1.43.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.44.

1.1.1.1.1.45.

Faulted Jet Pump Operability  
Surveillance

1.1.1.1.1.46.

1.1.1.1.1.47.

1.1.1.1.1.48.

1.1.1.1.1.49.

JPM Number: RO A.2.

1.1.1.1.1.50.

1.1.1.1.1.51.

Revision Number: 2

**1.1.1.1.1.52.**

1.1.1.1.1.53.

Date: 11/2002

**1.1.1.1.1.54. Signatures**

**NOTE: Original Signed – Disk Copy No**

**1.1.1.1.1.55.**

1.1.1.1.1.56.

Developed By:

\_\_\_\_\_

1.1.1.1.1.57.

Instructor

Date

1.1.1.1.1.58.

1.1.1.1.1.59.

Validated By:

\_\_\_\_\_

1.1.1.1.1.60.

SME or Instructor

Date

1.1.1.1.1.61.

1.1.1.1.1.62.

Review By:

\_\_\_\_\_

1.1.1.1.1.63.

Operations Representative

Date

1.1.1.1.1.64.

## **Job Performance Measure (JPM)**

### **Revision Record (Summary)**

Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A “Administrative Topics” for RO/SRO candidates.

Revision 1 The JPM was revised to incorporate validation time and comments.

Revision 2 The JPM was revised to incorporate NRC validation comments.

.....

### **Information For Evaluator’s Use:**

**Copy of QCOS 0202-06 with prerequisite section D initialed off and filled out as a Unit 1 test for the QNE. The Limitations and Actions section F filled out as N/A in the surveillance. Step H.9. marked as N/A.**

**Provide cues for the various parameters using the provided completed surveillance sheet, which is separate from this JPM package.**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

.....

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

Unit 1 has been on line operating at steady state full power for 93 days.

You are the Unit 1 Administrative Nuclear Station Operator

Recirculation pump speed indication is NOT suspect.

Procedure attachments have been verified to be from the current operating cycle.

The POWERPLEX computer is NOT operable.

**INITIATING CUE**

Per QNE request, you need to perform surveillance QCOS 0202-06, Jet Pump Test for Dual Loop Operation.

Provide examinee with:

9. Copy of QCOS 0202-06 with prerequisite section D initialed off and filled out as a Unit 1 test for the QNE. The Limitations and Actions section F filled out as N/A in the surveillance. Step H.9. marked as N/A.

10. Calculator

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

.....

## Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
<i>Evaluators Note: Provide candidate with copy of QCOS 0202-06. Provide cues to the candidate, when appropriate indicator is found, with information from the Quad Cities jet pump beam failure.</i>			
<i>Evaluators Note: Provide cues to the candidate from data sheet when appropriate indicator is found. (A recirc pump speed=96%, B recirc pump speed=95%).</i>			
*QCOS 0202-06 steps H.1.	Records the recirc pump speeds.	Finds recirc pump speeds values on 1-262-25A then B, PMP A/B SPEED CONTROLLER and records into surveillance. <u>(A speed=96%, B speed=95%).</u>	[ ] [ ] [ ]
<i>Evaluators Note: Provide cues to the candidate when appropriate indicator is found from data sheet (A recirc pump flow=42,000 gpm, B recirc pump flow=49,000gpm).</i>			
*QCOS 0202-06 steps H.2.	Records recirc pump flows.	Finds recirc pump flow values on 1-260-5A then B, PMP FLOW and records into surveillance. <u>(A flow=42K, B flow=49K).</u>	[ ] [ ] [ ]
<i>Evaluators Note: Due to slight variations in reading graphs allow +/- 1/2 in the following numbers.</i>			
*QCOS 0202-06 steps H.3.a.	Records Characteristic Pump Flow from Attachment A.	Using pump speed (%) obtained in H.1. determines characteristic pump flow from attachment A for the 1A then the 1B recirc pump. <u>(A=41.5~42.5K)</u> <u>(B=44.5~45.5K).</u>	[ ] [ ] [ ]
*QCOS 0202-06 steps H.3.b.	Records difference in flow between measured pump flow and characteristic pump flow.	Determines difference between pump flow obtained in H.2. and characteristic pump flow obtained in H.3.a. <u>(A loop=0.0K~0.5K),</u> <u>(B loop=4.5~3.5K)</u>	[ ] [ ] [ ]
<i>Evaluators Note: Rounding to the hundred place is acceptable.</i>			
*QCOS 0202-06 steps H.3.c.	Determines percentage deviation between recorded pump flows and characteristic pump flows.	Divides the flow difference by the characteristic pump flow and records. <u>(A=0~0.012), (B=0.101~0.077).</u>	[ ] [ ] [ ]
<i>Evaluators note: In the following step, sign as verifier or inform candidate that verification is complete by operator AB.</i>			

### Job Performance Measure (JPM)

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
QCOS 0202-06 steps H.3.d.	Obtains verification of previous steps H.1. through H.3.c.	Asks for a verification of steps H.1. through H.3.c.	[ ] [ ] [ ]
<i>Evaluators Note: Acceptance criteria of 0.10. Due to slight variations in reading graphs, and allowing +/- ½ variance, results of 0.101 to 0.077 may be encountered. If the candidate determines flow value exceeds the acceptance criteria, then the following step becomes critical.</i>			
QCOS 0202-06 steps H.3.e.	Determines if flow value exceeds acceptance criteria.	Compares step H.3.c. with acceptance criteria value of 0.1 and determines that flow value <b>does/does not</b> exceeds acceptance criteria.	[ ] [ ] [ ]
<i>Evaluators Note: Provide cues to the candidate when appropriate indicator is found from data sheet (A recirc loop flow=57Mlb/hr, B recirc loop flow=43Mlb/hr).</i>			
*QCOS 0202-06 step H.4.	Records recirc loop flows at 1-263-107A then B.	Finds recirc loop flows values on 1-263-107A then B JET PUMP LOOP FLOW and records into surveillance.  <u>(A=57Mlb/hr, B=43Mlb/hr).</u>	[ ] [ ] [ ]
<i>Evaluators Note: Due to slight variations in reading graphs allow +/- ½ in the following numbers.</i>			
*QCOS 0202-06 step H.5.a.	Records characteristic recirc loop flows from attachment B	Using pump speed (%) obtained in H.2. determines characteristic loop flow from attachment A for the 1A then the 1B recirc loop.  <u>(A=50 to 51Mlb/hr)</u> <u>(B=49 to 50Mlb/hr).</u>	[ ] [ ] [ ]
*QCOS 0202-06 step H.5.b.	Records difference in flow between measured loop flow and characteristic loop flow.	Determines difference between loop flow obtained in H.4. and characteristic loop flow obtained in H.5.a.  <u>(A=6 to 7Mlb/hr, B=6 to 7Mlb/hr).</u>	[ ] [ ] [ ]
<i>Evaluators Note: Calculations result in the following. A=0.118 to 0.14, B=0.122 to 0.14. Rounding to the hundred place is acceptable.</i>			

### Job Performance Measure (JPM)

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
*QCOS 0202-06 step H.5.c.	Determines percentage deviation between recorded loop flows and characteristic loop flows.	Divides the flow difference by the characteristic loop flow and records.  <u>(A=0.118 to 0.14)</u> <u>B=0.122 to 0.14).</u>	[ ] [ ] [ ]
QCOS 0202-06 step H.5.d.	Obtains verification of previous steps H.4. through H.5.c.	Asks for a verification of steps H.1. through H.3.c.	[ ] [ ] [ ]
<b><i>Evaluators note: In the following step, sign as verifier or inform candidate that verification is complete by operator AB.</i></b>			
*QCOS 0202-06 step H.5.e.	Determines if flow value exceeds acceptance criteria and notifies QNE.	Compares step H.5.c. with value of 0.05 and determines that flow value <b><i>does</i></b> exceed the value and notifies QNE.	[ ] [ ] [ ]
<b><i>Evaluators Note: Acknowledge report as QNE and direct them to complete the surveillance.</i></b>			
<b><i>Evaluators Note: Provide cues to the candidate when appropriate indicator is found from data sheet (Core plate differential pressure=14.4 psid).</i></b>			
*QCOS 0202-06 step H.6.	Records core plate differential pressure.	Finds core plate differential pressure value on 1-263-110 CORE FLOW AND DP and records into surveillance.  <u>Core plate D/P=14.4psid.</u>	[ ] [ ] [ ]
<b><i>Evaluators Note: Provide cues to the candidate when appropriate indicator is found from data sheet (Total Core Flow=98.5Mlb/hr).</i></b>			
*QCOS 0202-06 step H.7.	Records total core flow.	Finds total core flow value on 1-263-110 CORE FLOW AND DP and records into surveillance.  <u>Total Core Flow=98.5Mlb/hr</u>	[ ] [ ] [ ]
<b><i>Evaluators Note: Using chart, candidate should determine total characteristic core flow 87 to 88Mlb/hr. Due to slight variations in reading the graphs.</i></b>			
*QCOS 0202-06 step H.8.a.	Records characteristic total core flow from attachment C	Using core plate d/p obtained in H.6. determines characteristic total core flow from attachment C.  <u>Characteristic total core flow 87 to 88Mlb/hr</u>	[ ] [ ] [ ]

### Job Performance Measure (JPM)

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
<i>Evaluators Note: Using total characteristic total core flow of 87 to 88Mlb/hr, candidate should determine maximum adjusted total core flow of between 95.7 to 96.8Mlb/hr</i>			
*QCOS 0202-06 step H.8.b.	Determines maximum adjusted total core flow and records.	Multiplies the characteristic total core flow obtained in step H.8.a. by 1.10 to obtain the maximum adjusted total core flow and records into surveillance. <b><u>Maximum adjusted total core flow 95.7 to 96.8Mlb/hr.</u></b>	[ ] [ ] [ ]
<i>Evaluators Note: Using total characteristic total core flow of 87 to 88Mlb/hr, candidate should determine minimum adjusted total core flow of between 78.3 to 79.2Mlb/hr</i>			
*QCOS 0202-06 step H.8.c.	Determines minimum adjusted total core flow and records.	Multiplies the characteristic total core flow obtained in step H.8.a. by .90 to obtain the minimum adjusted total core flow and records into surveillance. <b><u>Minimum adjusted total core flow 78.3 to 79.2Mlb/hr</u></b>	[ ] [ ] [ ]
QCOS 0202-06 step H.8.d.	Obtains verification of previous steps H.6. through H.8.c.	Asks for a verification of steps H.6. through H.8.c.	[ ] [ ] [ ]
<i>Evaluators note: In the following step, sign as verifier or inform candidate that verification is complete by operator AB.</i>			
*QCOS 0202-06 step H.8.e.	Determines if total core flow value exceeds the maximum or minimum adjusted total core flow and notifies US and QNE.	Compares step H.7. with maximum value determined in step H.8.b. or minimum value determined in step H.8.c. and determines that flow value exceeds the Maximum Adjusted Total Core Flow and notifies the US and QNE.	[ ] [ ] [ ]
<i>Evaluator note: Completion of the surveillance paperwork is NOT part of successfully completing this JPM.</i>			
<i>Evaluator note: Candidate should state that the JPM is complete.</i>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: RO

JPM Title: Faulted Jet Pump Operability Surveillance

JPM Number: RO A.2. Revision Number: 2

Task Number and Title: Faulted Jet Pump Operability Surveillance

K/A Number and Importance:  
**K/A: 2.2.12 RATING: 3.0**

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** 30 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:**  
QCOS 0202-06 rev18



**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:        Satisfactory                          Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **INITIAL CONDITIONS**

(Student Copy)

Unit 1 has been on line operating at steady state full power for 93 days.

You are the Unit 1 Administrative Nuclear Station Operator

Recirculation pump speed indication is NOT suspect.

Procedure attachments have been verified to be from the current operating cycle.

The POWERPLEX computer is NOT operable.

## **INITIATING CUE**

Per QNE request, you need to perform surveillance QCOS 0202-06, Jet Pump Test for Dual Loop Operation.

1.1.1.1.1.65.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.66.

1.1.1.1.1.67.

Determine Radiation Exposure

1.1.1.1.1.68.

1.1.1.1.1.69.

1.1.1.1.1.70.

JPM Number: RO A.3.

1.1.1.1.1.71.

1.1.1.1.1.72.

Revision Number: 2

**1.1.1.1.1.73.**

1.1.1.1.1.74.

Date: 11/2002

**1.1.1.1.1.75.  
Signatures**

**NOTE: Original Signed – Disk Copy No**

**1.1.1.1.1.76.**

1.1.1.1.1.77.

Developed By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.78.

Instructor

Date

1.1.1.1.1.79.

1.1.1.1.1.80.

Validated By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.81.

SME or Instructor

Date

1.1.1.1.1.82.

1.1.1.1.1.83.

Review By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.84.

Operations Representative

Date

1.1.1.1.1.85.

## **Job Performance Measure (JPM)**

### **Revision Record (Summary)**

Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A, “Administrative Topics” for RO/SRO candidates.

Revision 1 The JPM was revised to incorporate validation time and comments.

Revision 2 The JPM was revised to incorporate NRC validation comments.

.....

### **Information For Evaluator’s Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

.....

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

You have been directed to manually reverse flow in the 2A Fuel Pool Cooling heat exchanger.

You will need to operate the 4 valves shown on the heat exchanger piping on the survey map.

The valves are all located approximately chest high.

Total time spent at each valve will be 6 minutes.

**INITIATING CUE**

Review the attached survey map to determine your estimated exposure and determine if you can complete the task within the parameters of the radiation work permit.

**Provide examinee with:**

A copy of Radiation Work Permit 10000150

A copy of survey map for the Fuel Pool Cooling Heat Exchanger area for Unit 2.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

.....

**Job Performance Measure (JPM)**

JPM Start Time: \_\_\_\_\_

	<b><u>PERFORMANCE</u></b>	<b><u>OBJECTIVE STANDARDS</u></b>	<b><u>SAT UNSAT N/A</u></b>
	Determines dose rate from survey map in the area of valve manipulation.	Determines that 3 valves will be operated in a 190 mrem/hr field and 1 valve will be operated in a 300 mrem/hr field.	[ ] [ ] [ ]
	Determines amount of dose expected to receive from time spent in both of the different radiation fields.	Calculates that 3 valves @ 6 minutes apiece in a 190 mrem/hr field would result in accumulated dose of 57 mrem.  Calculates that 1 valve @ 6 minutes in a 300 mrem/hr field would result in accumulated dose of 30 mrem.	[ ] [ ] [ ]
*	Totals amount of accumulated dose expected to receive and compares to limits set in the RWP.	Calculates that total expected accumulated dose will be 87 mrem and the RWP alarm setpoint is only 80 mrem.	[ ] [ ] [ ]
*	Determines that the job can not be accomplished under this RWP.	Determines that the task can NOT be completed within the parameters of the RWP due to expected dose in excess of electronic dosimetry alarm setpoint.	[ ] [ ] [ ]

***Evaluators Note: Expectation is that the worker leave the area when electronic dosimetry accumulated dose setpoint is reached.***

***When candidate makes a determination if they can or can not complete the task along with explanation, cue them that the JPM is complete.***

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

.....

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_

Job Title: RO 

JPM Title: Determine Radiation Exposure

JPM Number: RO A.3.

Revision Number: 2

Task Number and Title: Determine Radiation Exposure

K/A Number and Importance:

**K/A: 2.3.10      RATING: 2.9****Suggested Testing Environment:** Simulator

**Actual Testing Environment:**     Simulator     Plant  
     Control Room

**Testing Method:**     Simulate                            **Faulted:**     Yes             No  
                                   Perform                            **Alternate Path:**     Yes             No

**Time Critical:**     Yes             No**Estimated Time to Complete:** 14 minutes    **Actual Time Used:** \_\_\_\_\_ minutes**References:**

RP-AA-403 rev.1

NGET Study Guide rev. 24

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:     Satisfactory                       Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## INITIAL CONDITIONS

(Student Copy)

You have been directed to manually reverse flow in the 2A Fuel Pool Cooling heat exchanger.

You will need to operate the 4 valves shown on the heat exchanger piping on the survey map.

The valves are all located approximately chest high.

Total time spent at each valve will be 6 minutes.

### INITIATING CUE

Review the attached survey map to determine your estimated exposure and determine if you can complete the task within the parameters of the radiation work permit.

1.1.1.1.1.86.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.87.

1.1.1.1.1.88.

Determine Radiation Exposure

1.1.1.1.1.89.

1.1.1.1.1.90.

1.1.1.1.1.91.

JPM Number: RO A.3.

1.1.1.1.1.92.

1.1.1.1.1.93.

Revision Number: 2

**1.1.1.1.1.94.**

1.1.1.1.1.95.

Date: 11/2002

**1.1.1.1.1.96.  
Signatures**

**NOTE: Original Signed – Disk Copy No**

**1.1.1.1.1.97.**

1.1.1.1.1.98.

Developed By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.99.

Instructor

Date

1.1.1.1.1.100.

1.1.1.1.1.101.

Validated By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.102.

SME or Instructor

Date

1.1.1.1.1.103.

1.1.1.1.1.104.

Review By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.105.

Operations Representative

Date

1.1.1.1.1.106.

## **Job Performance Measure (JPM)**

### **Revision Record (Summary)**

Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A, “Administrative Topics” for RO/SRO candidates.

Revision 1 The JPM was revised to incorporate validation time and comments.

Revision 2 The JPM was revised to incorporate NRC validation comments.

.....

### **Information For Evaluator’s Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

.....

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

You have been directed to manually reverse flow in the 2A Fuel Pool Cooling heat exchanger.

You will need to operate the 4 valves shown on the heat exchanger piping on the survey map.

The valves are all located approximately chest high.

Total time spent at each valve will be 6 minutes.

**INITIATING CUE**

Review the attached survey map to determine your estimated exposure and determine if you can complete the task within the parameters of the radiation work permit.

**Provide examinee with:**

A copy of Radiation Work Permit 10000150

A copy of survey map for the Fuel Pool Cooling Heat Exchanger area for Unit 2.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

.....

**Job Performance Measure (JPM)**

JPM Start Time: \_\_\_\_\_

	<b><u>PERFORMANCE</u></b>	<b><u>OBJECTIVE STANDARDS</u></b>	<b><u>SAT UNSAT N/A</u></b>
	Determines dose rate from survey map in the area of valve manipulation.	Determines that 3 valves will be operated in a 190 mrem/hr field and 1 valve will be operated in a 300 mrem/hr field.	[ ] [ ] [ ]
	Determines amount of dose expected to receive from time spent in both of the different radiation fields.	Calculates that 3 valves @ 6 minutes apiece in a 190 mrem/hr field would result in accumulated dose of 57 mrem.  Calculates that 1 valve @ 6 minutes in a 300 mrem/hr field would result in accumulated dose of 30 mrem.	[ ] [ ] [ ]
*	Totals amount of accumulated dose expected to receive and compares to limits set in the RWP.	Calculates that total expected accumulated dose will be 87 mrem and the RWP alarm setpoint is only 80 mrem.	[ ] [ ] [ ]
*	Determines that the job can not be accomplished under this RWP.	Determines that the task can NOT be completed within the parameters of the RWP due to expected dose in excess of electronic dosimetry alarm setpoint.	[ ] [ ] [ ]

***Evaluators Note: Expectation is that the worker leave the area when electronic dosimetry accumulated dose setpoint is reached.***

***When candidate makes a determination if they can or can not complete the task along with explanation, cue them that the JPM is complete.***

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

.....

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_

Job Title: RO

JPM Title: Determine Radiation Exposure

JPM Number: RO A.3.

Revision Number: 2

Task Number and Title: Determine Radiation Exposure

K/A Number and Importance:

**K/A: 2.3.10      RATING: 2.9**

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** 14 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:**

RP-AA-403 rev.1

NGET Study Guide rev. 24

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator’s performance was evaluated against the standards contained in this JPM,  
and has been determined to be:     Satisfactory                     Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator’s Name: \_\_\_\_\_ (Print)

Evaluator’s Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## INITIAL CONDITIONS

(Student Copy)

You have been directed to manually reverse flow in the 2A Fuel Pool Cooling heat exchanger.

You will need to operate the 4 valves shown on the heat exchanger piping on the survey map.

The valves are all located approximately chest high.

Total time spent at each valve will be 6 minutes.

### INITIATING CUE

Review the attached survey map to determine your estimated exposure and determine if you can complete the task within the parameters of the radiation work permit.



1.1.1.1.1.107.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.108.

1.1.1.1.1.109.

Activate ERDS

1.1.1.1.1.110.

1.1.1.1.1.111.

1.1.1.1.1.112.

JPM Number: RO A.4.

1.1.1.1.1.113.

1.1.1.1.1.114.

Revision Number: 2

**1.1.1.1.1.115.**

1.1.1.1.1.116.

Date: 11/2002

**1.1.1.1.1.117. NOTE: Original Signed – Disk Copy No Signatures**

**1.1.1.1.1.118.**

1.1.1.1.1.119.

Developed By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.120.

Instructor

Date

1.1.1.1.1.121.

1.1.1.1.1.122.

Validated By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.123.

SME or Instructor

Date

1.1.1.1.1.124.

1.1.1.1.1.125.

Review By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.126.

Operations Representative

Date

1.1.1.1.1.127.

## **Job Performance Measure (JPM)**

### **Revision Record (Summary)**

Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A "Administrative Topics" for RO/SRO candidates.

Revision 1 The JPM was revised to incorporate validation time and comments.

Revision 2 The JPM was revised to incorporate NRC validation comments.

.....

### **Information For Evaluator's Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue. Note that if computer is not on, approximately 5 minutes should be added to estimated time.

.....

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

The station is participating in the annual Station Emergency Plan exercise. The Shift Emergency Director has initiated the Emergency Plan and has announced that Unit 1 is in an Alert (FA1) due to unisolable reactor coolant system leakage greater than 50 gpm.

THIS JPM IS TIME CRITICAL.

**INITIATING CUE**

You are to activate ERDS for unit 1 per EP-MW-110-100 within the next 60 minutes using the EXERCISE MODE.

**Provide examinee with:**

A copy of EP-MW-110-100, pages 1 through 8.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.



### Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
<p><i>Evaluator note: Due to exam security measures, this JPM <b><u>MUST</u></b> be performed in the simulator. <b><u>CAUTION!</u></b> If during the performance of this JPM, the simulator is not isolated for exam use, the candidate must utilize the <b>EXERCISE MODE</b> of the ERDS program <b>ONLY!</b> Use of the real mode will send actual plant data to the NRC Incident Response Center in White Flint Maryland. <b><u>STOP THE JPM IF REAL MODE IS SELECTED BY THE CANDIDATE!</u></b></i></p>			
<p><i>Evaluator note: Provide candidate with copy of EP-MW-110-100, pages 1 through 8.</i></p>			
*EP-MW-110-100 steps 4.1.1 through 4.1.4	Accesses the Emergency Response Organization program using one of the station computers in the simulator.	From the desktop screen, selects START, SITE APPS, ERO APPLICATIONS, and EXERCISE MODE.	[ ] [ ] [ ]
*EP-MW-110-100 Attachment 1 Step 1.1	Accesses ERDS.	Clicks on the ERDS icon.	[ ] [ ] [ ]
*EP-MW-110-100 Attachment 1 Step 1.2 & 1.3	Selects Quad Cities Station	Chooses Quad Cities Station and clicks OK.	[ ] [ ] [ ]
*EP-MW-110-100 Attachment 1 Step 1.4	Enters the password to access ERDS.	Enters the password "scout" and clicks OK.	[ ] [ ] [ ]
*EP-MW-110-100 Attachment 1 Step 2.1	ERDS Activation	Clicks on the box labeled TURN ON to activate the program for the selected unit	[ ] [ ] [ ]
<p><i>Evaluators Note: When exam security measures are in place, ERDS will not activate or change in status to match changes in the simulator.</i></p> <p><i>Provide cue to candidate that ERDS is transmitting power plant display system parameters.</i></p>			
EP-MW-110-100 Attachment 1 Step 2.2	Verifies that ERDS is on for the appropriate unit.	Compares the status of the ERDS programs on the screen to plant or PPDS outputs to verify ERDS is on for the appropriate unit.	[ ] [ ] [ ]
<p><i>Evaluator Note: Candidate should state that the JPM is complete.</i></p>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: RO

JPM Title: Activate ERDS

JPM Number: RO A.4

Revision Number: 2

Task Number and Title: Activate ERDS

K/A Number and Importance:

**K/A:** 2.4.43      **RATING:** 2.8

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**       Simulator       Plant  
    Control Room

**Testing Method:**     Simulate                      **Faulted:**     Yes               No  
                                  Perform                      **Alternate Path:**     Yes               No

**Time Critical:**     Yes       No      60 minutes

**Estimated Time to Complete:** 08 minutes    **Actual Time Used:** \_\_\_\_\_ minutes

**References:** EP-MW-110-100 rev. 1

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:        Satisfactory                          Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## INITIAL CONDITIONS

(Student Copy)

The station is participating in the annual Station Emergency Plan exercise. The Shift Emergency Director has initiated the Emergency Plan and has announced that Unit 1 is in an Alert (FA1) due to unisolable reactor coolant system leakage greater than 50 gpm.

THIS JPM IS TIME CRITICAL.

### INITIATING CUE

You are to activate ERDS for unit 1 per EP-MW-110-100 within the next 60 minutes using the EXERCISE MODE.

1.1.1.1.1.128.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.129.

1.1.1.1.1.130. Determine Isolation Points for  
Reported System Leakage and Technical Specification  
Determination

1.1.1.1.1.131.

1.1.1.1.1.132.

1.1.1.1.1.133.

1.1.1.1.1.134.

JPM Number: SRO A.1.a.

1.1.1.1.1.135.

1.1.1.1.1.136.

Revision Number: 02

**1.1.1.1.1.137.**

1.1.1.1.1.138.

Date: 11/2002

**1.1.1.1.1.139. NOTE: Original Signed – Disk Copy No  
Signatures**

**1.1.1.1.1.140.**

1.1.1.1.1.141. Developed By: \_\_\_\_\_

1.1.1.1.1.142. Instructor Date

1.1.1.1.1.143.

1.1.1.1.1.144. Validated By: \_\_\_\_\_

1.1.1.1.1.145. SME or Instructor

Date

1.1.1.1.1.146.

1.1.1.1.1.147. Review By: \_\_\_\_\_

1.1.1.1.1.148. Operations Representative

Date

1.1.1.1.1.149.



**Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- \_\_\_\_\_ 78. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 79. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 80. Performance location specified. (in-plant, control room, or simulator)
- \_\_\_\_\_ 81. Initial setup conditions are identified.
- \_\_\_\_\_ 82. Initiating and terminating cues are properly identified.
- \_\_\_\_\_ 83. Task standards identified and verified by SME review.
- \_\_\_\_\_ 84. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 85. Verify the procedure referenced by this JPM matches the most current revision of that procedure:  
     Procedure Rev. \_\_\_\_\_ Date \_\_\_\_\_
- \_\_\_\_\_ 86. Pilot test the JPM:
  - a. verify cues both verbal and visual are free of conflict, and
  - b. ensure performance time is accurate.
- \_\_\_\_\_ 87. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 88. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

\_\_\_\_\_ SME/Instructor \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ SME/Instructor \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ SME/Instructor \_\_\_\_\_ Date \_\_\_\_\_

**Job Performance Measure (JPM)**

**Revision Record (Summary)**

- Revision 0,     This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A. "Administrative Topics" for RO/SRO candidates.
- Revision 1     The JPM was revised to incorporate validation times and comments.
- Revision 2     The JPM was revised to incorporate NRC validation comments.

.....  
**Information For Evaluator's Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.  
.....

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

Unit 1 has been operating at 97% rated power and 912 MWe for the last 90 days.

You are the Unit One Supervisor.

The Unit One Equipment Operator just called in to report a substantial leak in the Standby Liquid Control System piping he has found during plant rounds.

He has plugged the floor drains in the area

He has identified that the leak is coming from a broken 1-1/2" to 3/4" reducer near a "tee" connection just upstream from the explosive valves.

**INITIATING CUE**

Determine the minimum action required to stop the leak as soon as possible. Determine impact on plant operations, if any.

**Provide examinee with:**

Nothing, candidate is allowed to use plant drawings and procedures to complete this JPM.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

.....

**Job Performance Measure (JPM)**

JPM Start Time: \_\_\_\_\_

	<b><u>PERFORMANCE</u></b>	<b><u>OBJECTIVE STANDARDS</u></b>	<b><u>SAT UNSAT N/A</u></b>
	Using plant references, determines from cue, the location of the leak.	Using P&ID M-40, determines location of leak to be at reducer between pipe 1-1103-11/2"-A pipe and pipe 1-1142-3/4"-A pipe.	[ ] [ ] [ ]
<b><i>Evaluators note: Any combination of the following valves that effectively isolates each pump from the SBLC tank will satisfy successful completion of the next step.</i></b>			
*	Determines isolation points to stop the leak.	Determines, at a minimum, that one of the following pairs of valves be closed: 1-1101-2A and 1-1101-2B, pump discharge valves OR, 1-1101-3A and 1-1101-3B, pump suction valves OR, 1-1101-4 and 1-1199-104, tank outlet valves.	[ ] [ ]
<b><i>Evaluator Note: Give cue to candidate that the maintenance department will require two shifts to repair the leaking pipe. If asked, maintenance is working 8 hour shifts.</i></b>			
*	Using plant Technical Specifications, determines SBLC system operability.	Determines that with any of the pairs of valves in the above step closed, both subsystems of SBLC will be inoperable resulting in an 8 hour LCO.	[ ] [ ]
<b><i>Evaluator Note: .If after determining that Unit 1 is in an 8 hour LCO and the candidate does not continue, cue the candidate that 8 hours have expired.</i></b>			
*	Using plant Technical Specifications, determines impact of SBLC system operability on overall unit status.	Determines the need to start to shutdown the unit if repairs are not completed in the next 8 hours. Must be in mode 3 in the 12 hours following the 8 hour LCO period.	[ ] [ ]
<b><i>CUE: Candidate should state JPM is complete.</i></b>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

.....

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: SRO

JPM Title: Determine Isolation Points for Reported System Leakage

JPM Number: SRO A.1.a. Revision Number: 2

Task Number and Title: SR-1100-K29  
Given SBLC key parameter indications and various plant conditions, Determine from memory if the SBLC Tech Spec LCOs have been met

K/A Number and Importance:  
K/A: 2.1.33 RATING: 4.0

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** 7 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** P&ID M-40 rev 07/25/99  
T.S. 3.1.7

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:     Satisfactory                       Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## INITIAL CONDITIONS

(Student Copy)

Unit 1 has been operating at 97% rated power and 912 MWe for the last 90 days.

You are the Unit One Supervisor.

The Unit One Equipment Operator just called in to report a substantial leak in the Standby Liquid Control System piping he has found during plant rounds.

He has plugged the floor drains in the area

He has identified that the leak is coming from a broken 1-1/2" to 3/4" reducer near a "tee" connection just upstream from the explosive valves.

INITIATING CUE

Determine the minimum action required to stop the leak as soon as possible. Determine impact on plant operations, if any.

1.1.1.1.1.150.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.151.

1.1.1.1.1.152.

Authorization of Overtime IAW GL  
82-12 Requirements

1.1.1.1.1.153.

1.1.1.1.1.154.

1.1.1.1.1.155.

JPM Number: SRO A.1.b.

1.1.1.1.1.156.

1.1.1.1.1.157.

Revision Number: 2

**1.1.1.1.1.158.**

1.1.1.1.1.159.

Date: 11/2002

**1.1.1.1.1.160. NOTE: Original Signed – Disk Copy No  
Signatures**

**1.1.1.1.1.161.**

**1.1.1.1.1.162.**

**Developed By:**

\_\_\_\_\_

\_\_\_\_\_

**1.1.1.1.1.163.**

**Instructor**

**Date**

**1.1.1.1.1.164.**

**1.1.1.1.1.165.**

**Validated By:**

\_\_\_\_\_

\_\_\_\_\_

**1.1.1.1.1.166.**

**SME or Instructor**

**Date**

**1.1.1.1.1.167.**

**1.1.1.1.1.168.**

**Review By:**

\_\_\_\_\_

\_\_\_\_\_

**1.1.1.1.1.169.**

**Operations Representative**

**Date**

**1.1.1.1.1.170.**



**Job Performance Measure (JPM)**

**Revision Record (Summary)**

- Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A "Administrative Topics" for RO/SRO candidates.
- Revision 1 The JPM was revised to incorporate validation time and comments
- Revision 2 The JPM was revised to incorporate NRC validation comments

.....  
**Information For Evaluator's Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

.....

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

It is Saturday, the 21<sup>st</sup> @ 0800.

Lenny, the NSO has just left the site due to a sudden illness.

The only trained and qualified person you are able to contact is Barney Gumbel, who is on his first regular day off.

Barney is ready and willing to come in and work the overtime and can be there @ 0900 and work until 1500 to finish the shift.

Barney is NOT fatigued and IS mentally alert.

Barney has worked the following shifts that count towards GL 82-12 guidelines so far this week:

Sunday the 15th	16 hours on days and afternoon shift
Monday the 16th	8 hours on days
Tuesday the 17th	16 hours on days and afternoon shift
Wednesday the 18th	8 hours on days
Thursday the 19 <sup>th</sup>	16 hours on days and afternoon shift
Friday the 20 <sup>th</sup>	8 hours on days

Safety-related work needs to be performed by the NSO during the shift.

**INITIATING CUE**

Authorize Barney Gumbel to work the overtime in accordance with (GL) 82-12 overtime guidelines and forward paperwork, if any, to the Shift Manager.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

.....

### Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
Optional: may reference QAP 300-03.	May refer to QAP 0300-03 to determine if the NSO position is required per shift staffing requirements and Technical Specifications.	Determine that NSO position IS required both by site staffing requirements and Technical Specification 5.2.	[ ] [ ] [ ]
<b><i>Evaluators note: Shift staffing composition may be less than the minimum requirements for a period of time NOT to exceed two hours in order to accommodate unexpected absence of an on duty staff member provided immediate action is taken to restore the shift staff composition to within the minimum requirements.</i></b>			
LS-AA-119 Step 4.1.2.	Reviews procedure to determine if any overtime guidelines will be exceeded.	Determines that overtime would result in exceeding 72 hours in a 7-day period.	[ ] [ ] [ ]
LS-AA-119 Step 4.2.	Reviews procedure to determine if it allows personnel who will exceed GL 82-12 to work overtime.	Determines that if there are not enough individuals available to fill the required assignments, then trained and qualified individuals who would exceed the overtime guidelines will then be asked to work.	[ ] [ ] [ ]
LS-AA-119 Step 4.2.	Determines need to initiate Attachment 1, of procedure.	Determines that prior to an individual performing safety-related work while exceeding the GL 82-12 overtime guidelines the cognizant supervisor shall initiate Attachment 1, "Overtime Guideline Deviation Authorization."	[ ] [ ] [ ]
*LS-AA-119 Step 4.3.1.	Fills out Attachment 1.	Completes columns one through five of Attachment 1, filling in: (1)= Barney Gumbel (2) = Operations (3) = D – more than 72 hours in a seven day period. (4) = <del>0400</del> 0900/ 12/21/02 (5) = 1500 / 12/21/02	[ ] [ ] [ ]

**Job Performance Measure (JPM)**

	<b><u>PERFORMANCE</u></b>	<b><u>OBJECTIVE STANDARDS</u></b>	<b><u>SAT UNSAT N/A</u></b>
*LS-AA-119 Step 4.3.2.	Fills out Attachment 1.	Fills out a description of safety-related work to be accomplished as “NSO shift responsibilities”.	[ ] [ ] [ ]
*LS-AA-119 Step 4.3.3.	Fills out Attachment 1.	Provides justification for needed overtime such as “Only qualified person available on short notice.”	[ ] [ ] [ ]
LS-AA-119 Step 4.3.4.	Forwards Attachment 1 to the cognizant department head.	Forwards Attachment 1 to the cognizant department head. (Shift Manager)	[ ] [ ] [ ]
<b><i>Evaluators note: JPM is considered complete when candidate fills out Attachment 1 and forwards it to the Shift Manager.</i></b>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

.....

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: SRO

JPM Title: Authorization of Overtime IAW GL 82-12 Requirements

JPM Number: SRO A.1.b. Revision Number: 2

Task Number and Title:  
SRNLF-00-K08 Given symptoms and indications depicting a generic abnormal condition and the administrative procedures, describe the operator actions of the applicable administrative procedure.

K/A Number and Importance:  
**K/A: 2.1.4      RATING: 3.4**

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**     Simulator     Plant  
    Control Room

**Testing Method:**     Simulate                                    **Faulted:**     Yes                     No  
    Perform                                    **Alternate Path:**     Yes                     No

**Time Critical:**     Yes                     No

**Estimated Time to Complete:** 20 minutes    **Actual Time Used:** \_\_\_\_\_ minutes

- References:**  
QAP 0300-03                                    rev 34  
LS-AA-119                                        rev 1  
LA-AA-119 Attachment 1 rev 1

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:        Satisfactory                          Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## INITIAL CONDITIONS

(Student Copy)

It is Saturday, the 21<sup>st</sup> @ 0800.

Lenny, the NSO has just left the site due to a sudden illness.

The only trained and qualified person you are able to contact is Barney Gumbel, who is on his first regular day off.

Barney is ready and willing to come in and work the overtime and can be there @ 0900 and work until 1500 to finish the shift.

Barney is NOT fatigued and IS mentally alert.

Barney has worked the following amount of hours counted towards GL 82-12 guidelines so far this week:

Sunday the 15th	16 hours on days and afternoon shift
Monday the 16th	8 hours on days
Tuesday the 17th	16 hours on days and afternoon shift
Wednesday the 18th	8 hours on days
Thursday the 19 <sup>th</sup>	16 hours on days and afternoon shift
Friday the 20 <sup>th</sup>	8 hours on days

Safety-related work needs to be performed by the NSO during the shift.

## INITIATING CUE

Authorize Barney Gumbel to work the overtime in accordance with (GL) 82-12 overtime guidelines and forward paperwork, if any, to the Shift Manager.

**Nuclear Generation Group**

**Job Performance Measure**

Review Faulted Jet Pump Operability Surveillance

JPM Number: SRO A.2.

Revision Number: 2

Date: 11/2002

**NOTE: Original Signed – Disk Copy No Signatures**

Developed By: \_\_\_\_\_  
Instructor Date

Validated By: \_\_\_\_\_  
SME or Instructor Date

Review By: \_\_\_\_\_  
Operations Representative Date



**Job Performance Measure (JPM)**

**Revision Record (Summary)**

- Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A “Administrative Topics” for RO/SRO candidates.
- Revision 1 The JPM was revised to incorporate validation time and comments.
- Revision 2 The JPM was revised to incorporate NRC validation comments.

.....

**Information For Evaluator’s Use:**

A marked up copy of QCOS 0202-06 filled out with data from the Quad Cities Station Jet Pump Beam Block failure with failures to identify out of tolerance values in steps H.5.c. and H.8.c. that mask the problem will be used to evaluate the candidate.

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

.....

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

Unit 1 has been on line operating at steady state full power for 93 days.

You are the Unit 1 Supervisor.

The ANSO has just completed QCOS 0202-06, Jet Pump Test for Dual Loop Operation.

Recirculation pump speed indication is NOT suspect.

Procedure attachments have been verified to be from the current operating cycle.

The POWERPLEX computer is NOT operable.

QCOS 0202-07 is scheduled to be performed later in the shift.

**INITIATING CUE**

You need to review the surveillance QCOS 0202-06, Jet Pump Test for Dual Loop Operation as performed by the ANSO. Turn into the Shift Manager when review is complete.

Provide examinee with:

- 11. A marked up copy of QCOS 0202-06 filled out with data from the Quad Cities Station Jet Pump Beam Block failure with failures to identify out of tolerance values in steps H.5.c. and H.8.c. that mask the problem will be used to evaluate the candidate.
- 12. Calculator

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.  
.....

### Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
<b><i>Evaluators Note: Candidate should identify deficiencies in calculations in steps H.5.c. and H.8.c.</i></b>			
*QCOS 0202-06 steps H.5.c&e.	Checks surveillance for errors, accuracy, and performance criteria met.	Notifies that recorded value in step H.5.c. exceeds value given in step H.5.e., but is marked N/A masking potential jet pump failure.	[ ] [ ] [ ] <b>(step was not N/A, but initialed)</b>
<b><i>Evaluator Note: If candidate stops after pointing out the first error, prompt them as Shift Manager to continue the review to identify if there are any other errors.</i></b>			
*QCOS 0202-06 steps H.7. and H.8.c&e. (b)	Checks surveillance for errors, accuracy, and performance criteria met.	Notifies that the total core flow, in step H.7.exceeds the maximum adjusted total core-flow value given in step H.8.b. but step H.8.e. is marked N/A masking potential jet pump failure.	[ ] [ ] [ ] <b>(step was not N/A, but initialed)</b>
<b><i>Evaluator Note: The JPM is considered complete when both errors are identified and the remaining steps are NOT critical. If <u>both</u> errors are NOT identified at this point, allow JPM to continue until candidate informs the evaluator that the JPM is complete.</i></b>			
QCOS 0202-06 step H.10. and H.11.	Documents discrepancies.	Directs ANSO to change surveillance steps H.5.e and H.8.e appropriately. Notes discrepancies in step H.10.a. <u>OR</u> waits until QCOS 0202-07 is completed.	[ ] [ ] [ ]
<b><i>Evaluator Note: If candidate directs the ANSO to change the surveillance results state that appropriate changes have been made and an action request initiated by the ANSO.</i></b> <b><i>In the following step they may also state that they would initiate additional corrective actions, however these are not critical.</i></b>			
QCOS 0202-06 step H.10.	Approves the satisfactory surveillance.	States that they would initiate a CR, and sign for approval of the surveillance.	[ ] [ ] [ ]
<b><i>Evaluator note: JPM is considered complete when both errors are identified, OR the candidate signs the approval block of the surveillance.</i></b>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_  
.....

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: SRO

JPM Title: Review Faulted Jet Pump Operability Surveillance

JPM Number: SRO A.2. Revision Number: 2

Task Number and Title: Review Faulted Jet Pump Operability Surveillance

K/A Number and Importance:  
**K/A: 2.2.12 RATING: 3.4**

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** 17 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:**  
QCOS 0202-06 rev18  
QCOS 0202-07 rev15

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator's performance was evaluated against the standards contained in this JPM,  
and has been determined to be:     Satisfactory                     Unsatisfactory

Comments: \_\_\_\_\_  
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\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **INITIAL CONDITIONS**

(Student Copy)

Unit 1 has been on line operating at steady state full power for 93 days.

You are the Unit 1 Supervisor.

The ANSO has just completed QCOS 0202-06, Jet Pump Test for Dual Loop Operation.

Recirculation pump speed indication is NOT suspect.

Procedure attachments have been verified to be from the current operating cycle.

The POWERPLEX computer is NOT operable.

QCOS 0202-07 is scheduled to be performed later in the shift.

### **INITIATING CUE**

You need to review the surveillance QCOS 0202-06, Jet Pump Test for Dual Loop Operation as performed by the ANSO. Turn into the Shift Manager when review is complete.

1.1.1.1.1.171.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.172.

1.1.1.1.1.173.

Verify a Liquid Radwaste River  
Discharge Permit

1.1.1.1.1.174.

1.1.1.1.1.175.

1.1.1.1.1.176.

JPM Number: SRO A.3.

1.1.1.1.1.177.

1.1.1.1.1.178.

Revision Number: 2

**1.1.1.1.1.179.**

1.1.1.1.1.180.

Date: 11/2002

**1.1.1.1.1.181. NOTE: Original Signed – Disk Copy No Signatures**

**1.1.1.1.1.182.**

1.1.1.1.1.183.

Developed By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.184.

Instructor

Date

1.1.1.1.1.185.

1.1.1.1.1.186.

Validated By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.187.

SME or Instructor

Date

1.1.1.1.1.188.

1.1.1.1.1.189.

Review By:

\_\_\_\_\_

\_\_\_\_\_

1.1.1.1.1.190.

Operations Representative

Date

1.1.1.1.1.191.

**Job Performance Measure (JPM)**

**Revision Record (Summary)**

- Revision 0, This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A, “Administrative Topics” for RO/SRO candidates.
- Revision 1 The JPM was revised to incorporate validation time and comments.
- Revision 2 The JPM was revised to incorporate NRC validation comments.

.....

**Information For Evaluator’s Use:**

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

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**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

You are the Shift (Field) Supervisor.

The Radwaste River Discharge Tank is full and needs to be discharged into the river using the river discharge pump.

The Chemistry Department has sampled the contents of the river discharge tank and forwarded the sample analysis and discharge calculations envelope to you.

**INITIATING CUE**

Using the information provided on the envelope, calculate the maximum discharge rate. Forward the completed envelope on to the Shift Manager when complete.

**Provide examinee with:**

1. A sealed envelope with Chemistry calculations inside and chemistry provided information written on the outside.
2. Calculator

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.



### Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
*QOP 2000-25 step F.7.b.	Determines NET DILUTION FLOW by determining the number of circulating water pumps operating x 157,000gpm + number of service water pumps operating x 13,800gpm and subtracting 167,000gpm for ice melt line being open.	Determines NET DILUTION FLOW. 4 circulating water pumps on x 157,000gpm = 628,000gpm + 2 service water pumps on x 13,800gpm = 27,600 – 167,000gpm due to ice melt line being open. Determines total net dilution flow to be 488,600gpm.	[ ] [ ] [ ]
*QOP 2000-25 step F.7.c.	Determines effective dilution flow by dividing net dilution flow by 2.	Determines EFFECTIVE DILUTION FLOW by dividing NET DILUTION FLOW by 2. Determines effective dilution flow to be 244,300gpm.	[ ] [ ] [ ]
*QOP 2000-25 step F.7.d.	Determines maximum allowable discharge rate by multiplying the effective dilution flow by 10, and dividing the total by the total percent of 10*EC.	Determines MAXIMUM ALLOWABLE DISCHARGE RATE to be 2,443,000gpm and divides by the Total Percent of 10*EC. Determines the maximum allowable discharge rate to be 43860gpm	[ ] [ ] [ ]
QOP 2000-25 step F.8.	Writes the calculated maximum allowable discharge rate on the outside of the envelope and forwards it to the Shift Manager.	Writes the calculated maximum allowable discharge rate on the outside of the envelope and forwards it to the Shift Manager.	[ ] [ ] [ ]

***Evaluators Note: Accept envelope from the candidate as the Shift Manager. JPM is complete when envelope is forwarded to the Shift Manager.***

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

.....|

**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: SRO

JPM Title: Calculate Maximum Allowable River Discharge Rate

JPM Number: SRO A.3. Revision Number: 2

Task Number and Title: Calculate Maximum Allowable River Discharge Rate

K/A Number and Importance:  
**K/A: 2.3.6 RATING: 3.1**

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No

**Estimated Time to Complete:** 16 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** QOP 2000-25 rev.31

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator’s performance was evaluated against the standards contained in this JPM,  
and has been determined to be:        Satisfactory                          Unsatisfactory

Comments: \_\_\_\_\_  
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\_\_\_\_\_

Evaluator’s Name: \_\_\_\_\_ (Print)

Evaluator’s Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## INITIAL CONDITIONS

(Student Copy)

You are the Shift (Field) Supervisor.

The Radwaste River Discharge Tank is full and needs to be discharged into the river using the river discharge pump.

The Chemistry Department has sampled the contents of the river discharge tank and forwarded the sample analysis and discharge calculations envelope to you.

### INITIATING CUE

Using the information provided on the envelope, calculate the maximum discharge rate. Forward the completed envelope on to the Shift Manager when complete.

1.1.1.1.1.192.

**Nuclear Generation Group**

**Job Performance Measure**

1.1.1.1.1.193.

1.1.1.1.1.194.

1.1.1.1.1.195.

1.1.1.1.1.196. Determine Protective Action  
Recommendations (PARS)

1.1.1.1.1.197.

1.1.1.1.1.198. JPM Number: SRO A.4.

1.1.1.1.1.199.

1.1.1.1.1.200. Revision Number: 2

**1.1.1.1.1.201.**

1.1.1.1.1.202. Date: 11/2002

**1.1.1.1.1.203. NOTE: Original Signed – Disk Copy No Signatures**

**1.1.1.1.1.204.**

1.1.1.1.1.205. Developed By: \_\_\_\_\_  
1.1.1.1.1.206. Instructor Date

1.1.1.1.1.207.

1.1.1.1.1.208. Validated By: \_\_\_\_\_  
1.1.1.1.1.209. SME or Instructor  
Date

1.1.1.1.1.210.

1.1.1.1.1.211. Review By: \_\_\_\_\_  
1.1.1.1.1.212. Operations Representative  
Date

1.1.1.1.1.213.

## Job Performance Measure (JPM)

### Revision Record (Summary)

- Revision 0     This JPM is developed IAW guidelines established in NUREG 1021 Rev 8 ES-301 and Appendix C. This JPM meets the criteria of Category A. "Administrative Topics" for RO/SRO candidates.
- Revision 1     The JPM was revised to incorporate validation time and comments.
- Revision 2     The JPM was revised to incorporate NRC validation comments.
- .....

### Information For Evaluator's Use:

Candidate to be provided a copy of the Quad Cities Annex for classification of emergencies, a copy of EP-AA-111, and a completed Utility Message #1 NARS form if this JPM is not performed in the simulator.

If performed in the simulator, only Utility Message #1 NARS form needs to be provided.

Block #1. Status = Drill/Exercise

Block #2. Station = [F] Quad Cities

Block #3. Onsite Condition = [C] Site Area Emergency

Block #4. Accident Classified: Time = "Time 1430 hours"

Date = "today"

EAL# = "FS1"

Block #4. Accident Terminated: Time:=N/A, Date:=N/A

Block #5. Release Status = [A] None

Block #6. Type of Release = [A] N/A

Block #7. Wind Direction = 232 degrees

Block #8. Wind Speed: [A] Meters/Sec = 2.466

[B] Miles/Hr = 5.516

Block #9. Recommended Actions = [A] None

Block #10. Additional Information = None

UNSAT requires written comments on respective step.

\* Denotes CRITICAL steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

**Job Performance Measure (JPM)**

**INITIAL CONDITIONS**

Unit 1 was operating at 100% rated power when, at time 1400, a transient occurred that caused an automatic scram. The Emergency Plan was activated and a Site Area Emergency (FS1) was classified at time 1430 due to high drywell radiation of 2500 R/hr.

You are the Shift Emergency Director.

This is a Drill, NOT an actual event.

All plant personnel have been notified of the classification level, reason for the classification, and the TSC and OSC have been activated.

Another SRO is performing Emergency Response Organization (ERO), Emergency Notification System (ENS), and Emergency Response Data System (ERDS) activations and notifications.

It is now one hour after shutdown, 1500 hours, drywell radiation has just exceeded 8800 R/hr. and a General Emergency FG1 has been declared.

All other containment parameters are normal.

There is NO Change in release status or meteorological data since message #1 was sent.

THIS JPM IS TIME CRITICAL

INITIATING CUE

As the Shift Emergency Director, fill out the NARS form for the General Emergency as Utility Message #2 and submit for transmittal.

**Provide examinee with:**

Candidate needs to have access to all Emergency Plan procedures as found in the simulator.

Copy of EP-MW-114-100 Attachment 1 “Nuclear Accident Reporting System” (NARS) Utility Message #1 form completely filled out as a Site Area Emergency.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

.....



### Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

	<u>PERFORMANCE</u>	<u>OBJECTIVE STANDARDS</u>	<u>SAT UNSAT N/A</u>
<b><i>Refers to EP-MW-114-100 MWROG OFFSITE NOTIFICATIONS as necessary to fill out NARS form.</i></b>			
NARS form	Fills out Utility Message Number.	Records Utility Message #2 on NARS form.	[ ] [ ] [ ]
NARS form	Fills out State Message Number.	Records N/A for State Message Number on NARS form.	[ ] [ ] [ ]
Block #1	Fills out block #1 information regarding Status.	Records [B] Drill/Exercise in block #1 on NARS form.	[ ] [ ] [ ]
Block #2	Fills out block #2 information regarding Station.	Records [F] Quad Cities in block #2 on NARS form.	[ ] [ ] [ ]
Block #3	Fills out block #3 information regarding onsite condition.	Records [D] General Emergency on NARS form.	[ ] [ ] [ ]
Block #4	Fills out block #4 information regarding Accident Classified & Accident Terminated.	Records accident classification.as Time= 1500 hours Date= today's date EAL=FG1 Records N/A for accident terminated on NARS form.	[ ] [ ] [ ]
Block #5	Fills out block #5 information regarding Release Status.	Records [A] None on NARS form.	[ ] [ ] [ ]
Block #6	Fills out block #6 information regarding Type of Release.	Records [A] N/A on NARS form.	[ ] [ ] [ ]
Block #7	Fills out block #7 information regarding Wind Direction.	Records 232 degrees on NARS form.	[ ] [ ] [ ]
<b><i>Evaluators Note: Candidate may take information from initial conditions that state "meteorological conditions have not changed OR they may look up the data on the station computer. If they choose to look up real data, when they find the real data, give them the following cue "Wind Direction is 232 degrees with speed of 5.51 miles per hour/2.46 meters per second".</i></b>			
Block #8	Fills out block #8 information regarding Wind Speed.	Records [A] Meters/Sec = 2.46 and [B] Miles/Hr = 5.51 on NARS form.	[ ] [ ] [ ]

**Job Performance Measure (JPM)**

	<b><u>PERFORMANCE</u></b>	<b><u>OBJECTIVE STANDARDS</u></b>	<b><u>SAT UNSAT N/A</u></b>
	Refers to ASSESSMENT of EMERGENCIES as necessary (Quad Cities Annex)	Obtains and uses the Quad Cities Annex as necessary to determine loss of fuel clad barrier, loss of RCS barrier, and a potential loss of containment exists.	[ ] [ ] [ ]
<i>Evaluator note: The candidate should utilize graph 1.d, 2.c, and 3.c. to determine the losses and potential losses of fission product barriers in the following step.</i>			
*Block #9	Fills out block #9 information regarding Recommended Actions.	Utilizes EP-AA-111 Attachment 6 Quad Cities Plant Based PAR Flowchart and determines PARS of "Evacuate 2 Mile Radius & 5 Miles Downwind on the NARS form. [B] Illinois sectors 1 & 2 [C] Iowa sectors 1, 2 & 5.	[ ] [ ] [ ]
Block #10	Fills out block #10 information regarding Additional Information.	Records NONE on NARS form.	[ ] [ ] [ ]
NARS form	Submits NARS form for submittal.	Submits NARS form for submittal.	[ ] [ ] [ ]
<b><i>CUE: When candidate makes submits the NARS form for transmittal, state that the JPM is complete.</i></b>			

\*CRITICAL STEP

JPM Stop Time: \_\_\_\_\_

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**Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_  
Job Title: SRO

JPM Title: Determine Protective Action Recommendations (PARS)

JPM Number: SRO A.4. Revision Number: 2

Task Number and Title: S-GSEP-P02  
Given a GSEP event, determine the public Protective Action Recommendation in accordance with EP-AA-111.

K/A Number and Importance:  
K/A: 2.4.44 RATING: 4.0

**Suggested Testing Environment:** Simulator

**Actual Testing Environment:**  Simulator  Plant  
 Control Room

**Testing Method:**  Simulate **Faulted:**  Yes  No  
 Perform **Alternate Path:**  Yes  No

**Time Critical:**  Yes  No 15 minutes

**Estimated Time to Complete:** 10 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** EP-AA-111 rev. 4  
EP-AA-112 rev 3  
EP-MW-114-100 rev 1

**Job Performance Measure (JPM)**

**EVALUATION SUMMARY:**

Were all the Critical Elements performed satisfactorily?        Yes        No

The operator’s performance was evaluated against the standards contained in this JPM,  
and has been determined to be:        Satisfactory                          Unsatisfactory

Comments: \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_

Evaluator’s Name: \_\_\_\_\_ (Print)

Evaluator’s Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Job Performance Measure (JPM)**

### **INITIAL CONDITIONS**

(Student Copy)

**Provide examinee with:**

Unit 1 was operating at 100% rated power when, at time 1400, a transient occurred that caused an automatic scram. The Emergency Plan was activated and a Site Area Emergency (FS1) was classified at time 1430 due to high drywell radiation of 2500 R/hr.

You are the Shift Emergency Director.

This is a Drill, NOT an actual event.

**All** plant personnel have been notified of the classification level, reason for the classification, and the TSC and OSC have been activated.

Another SRO is performing Emergency Response Organization (ERO), Emergency Notification System (ENS), and Emergency Response Data System (ERDS) activations and notifications.

It is now one hour after shutdown, 1500 hours, drywell radiation has just exceeded 8800 R/hr. and a General Emergency FG1 has been declared.

All other containment parameters are normal.

There is NO Change in release status or meteorological data since message #1 was sent.

**THIS JPM IS TIME CRITICAL**

**INITIATING CUE**

As the Shift Emergency Director, fill out the NARS form for the General Emergency as Utility Message #2 and submit for transmittal.