JOB PERFORMANCE MEASURE
NRC EXAM 2003-301-A1.A

Job Position Nuclear Supervising Operator	No. NRC Exam 2003-301-A1.a	Revision 1
JPM Title Obtain a copy of an Approved Procedure	Duration 15 Minutes	Page COVER SHEET

Examinee: _____ SRO / RO / NLO / SROC / STA

Evaluator: _____

Evaluation Method: Perform / Plant or Simulator

(Circle method used)

Start Time _____

Stop Time _____

Total Time _____

PERFORMANCE EVALUATION							
Element	S	U	Comments	Element	S	U	Comments
*1.							
*2.							
*3.							
*4.							
*5.							
*6.							
*7.							
*8.							
*9.							

_____ SATISFACTORY _____ UNSATISFACTORY

ORAL EVALUATION (Not Required for LOR Annual Exams)							
Question #	S	U	Comments	Question #	S	U	Comments

_____ SATISFACTORY _____ UNSATISFACTORY

Evaluator Signature / Date: _____ /

JOB PERFORMANCE MEASURE

JPM Title Obtain a copy of an Approved Procedure	No.: NRC Exam 2003-301-A1.a Revision: 1 Page 2

References: Required (R) / Available (A)
Web ARMS (R)
Tools and Equipment Required:
Computer Terminal Access (R)

Preferred Evaluation Method:

Perform	X	Walkthrough		Discuss	
Plant	X	Simulator	X	Classroom	

Evaluator Notes:

ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED.

The Plant can be in any mode of operation to conduct this JPM.

K/A Reference 2.1.21 Ability to obtain and verify controlled procedure copy (3.1)

Task Standard:

Obtain and verify an approved copy of SOP 23.316, “RPS 120 VAC and RPS MG Sets” in accordance with WebARMS.

Initial Conditions:

Plant conditions are as you see them.

Your shift is responsible for conducting a electrical lineup verification of the Reactor Protection System 120 VAC System this shift.

Initiating Cue(s):

The reactor building Nuclear Operator (NO) on your shift is going to conduct an electrical alignment verification of the Reactor Protection System 120 VAC System. The CRS has requested that you obtain and verify a controlled copy of procedure 23.316, “RPS 120 VAC and RPS MG Sets” to support this task. The computer in the rear of the simulator may be used for this purpose, but any plant computer terminal may be used.

JOB PERFORMANCE MEASURE

JPM Title Obtain a copy of an Approved Procedure	No.: NRC Exam 2003-301-A1.a Revision: 1 Page 3

PERFORMANCE EVALUATION

Time Start _____

Elements	**Standards**
* 1. At any computer terminal, from the Fermi 2 Nucleus Home Page, select ARMS.	* 1. ARMS login screen appears on the screen.
* 2. From the ARMS login screen, Select the "Login as Guest button" on the page	* 2. The ARMS document portal page appears on the computer screen.
* 3. Select the "WebARMS Search " link **OR** "DrillDown WebARMS Search Options" link	* 3. **IF** the "WebARMS Search" link is used **THEN** the "Main Record Search" Page will appear on the computer screen. Continue on to step 4. **IF** the "Search" button is used **THEN** continue at Step 5.
NOTE: The candidate may enter "AFC" in the Status Code field. This will ensure the latest revision is selected.	
* 4. Enter the procedure number in the "Document Serial Number" field.	* 4 Enters 23.316 in the "Document Serial Number" field. **GO TO** Step 8.
* 5. Select "Plant Technical Procedures" link	* 5. Plant Technical Drill Down Lookup appears on page
* 6 Select "23s-Systems" link	* 6. Search Results page appears
* 7 Select page with 23.316	* 7. Page 6 is the screen with 23.316
NOTE: If the candidate did not enter "AFC" in the Status Code field using the "WebARMS Search" method, then the latest revision must be selected.	
* 8. Press the printer icon on the left side of the screen by procedure 23.316.	* 8. The Fermi 2 Information Systems page appears
CUE:This will print to a remote location if the candidate selects print. Have the candidate simulate selecting "PRINT" and hand them a copy of the procedure as if it had come from the printer.	
* 9. From the Fermi 2 Information Systems page, "Control Information" drop down box, select "Controlled_for_Job"	* 9. Procedure will print to the designated printer
* 10. Obtains controlled copy of procedure.	* 10. Obtains the controlled copy of the procedure and verifies the procedure has "controlled copy" printed on the cover sheet.

Time Stop _____

* Critical Steps

Terminating Cue(s):

The CRNSO obtains a controlled copy of 23. 316 in accordance with WebArms

JOB PERFORMANCE MEASURE

JPM Title Obtain a copy of an Approved Procedure	No.: NRC Exam 2003-301-A1.a Revision: 1 Page 5

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for Followup question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JOB PERFORMANCE MEASURE
NRC EXAM 2003-301-A1.B

JPM A1.a Cue Sheet

Initial Conditions: **Plant conditions are as you see them.** **Your shift is responsible for conducting a electrical lineup verification of the Reactor Protection System 120 VAC System this shift**
Initiating Cue(s): **The reactor building Nuclear Operator (NO) on your shift is going to conduct an electrical alignment verification of the Reactor Protection System 120 VAC System.** **The CRS has requested that you obtain and verify a controlled copy of procedure 23.316, "RPS 120 VAC and RPS MG Sets" to support this task.** **The computer in the rear of the simulator may be used for this purpose.**

JOB PERFORMANCE MEASURE

JPM Title Locate and use mechanical drawings to isolate a leak	No.: NRC Exam 2003-301-A1.b Revision: Rev. 0 Page 2

Job Position Control Room Supervisor	No. NRC Exam 2003-301-A1.b	Revision 0
JPM Title Locate and use mechanical drawings to isolate a leak.	Duration 10 Minutes	Page COVER SHEET

Examinee: _____ SRO / RO / NLO / SROC / STA

Evaluator: _____

Evaluation Method: Perform / Plant / Simulator

Start Time _____

Stop Time _____

Total Time _____

PERFORMANCE EVALUATION							
Element	S	U	Comments	Element	S	U	Comments
1.							
2.							
3.							
*4.							

_____ SATISFACTORY _____ UNSATISFACTORY

ORAL EVALUATION (Not Required for LOR Annual Exams)							
Question #	S	U	Comments	Question #	S	U	Comments

_____ SATISFACTORY _____ UNSATISFACTORY

Evaluator Signature / Date: _____ /

JOB PERFORMANCE MEASURE

JPM Title Locate and use mechanical drawings to isolate a leak	No.: NRC Exam 2003-301-A1.b Revision: Rev. 0 Page 3

References: Required (R) / Available (A)

Mechanical Drawings

6M721-5703-1, Control Rod Drive System (A)

Tools and Equipment Required:

None

Preferred Evaluation Method:

Perform	X	Walkthrough		Discuss	X
Plant	X	Simulator	X	Classroom	

Evaluator Notes:

ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED.

The Plant can be in any mode of operation to conduct this JPM.

K/A Reference : 2.1.24 Ability to locate and interpret electrical and mechanical drawings 2.8

Task Standard:

Using the station mechanical drawings, find the valve required to isolate the A CRD Flow Control Valve

Initial Conditions:

You are an extra NSO assigned to the shift.

Plant conditions are ***stable*** and 97 % power.

During shift rounds the reactor building Nuclear Operator (NO) calls the control room and reports that he has discovered the air line supplying C11-F002A is broken and there is a lot of noise due to the air leaking. He has found what he thinks is the isolation valve, but needs confirmation before he closes the valve.

Initiating Cue(s):

The CRS directs you to find C11-F002A and which valve(s) are required to isolate the leak using the station prints. Once you have researched and identified the valve(s), provide this information to the CRS.

JOB PERFORMANCE MEASURE

JPM Title Locate and use mechanical drawings to isolate a leak	No.: NRC Exam 2003-301-A1.b Revision: Rev. 0 Page 4

PERFORMANCE EVALUATION

Time Start _____

Elements	**Standards**
1. Locate the control room mechanical drawings.	1. Retrieves the mechanical drawings.
2. Select the CRD system FOS drawing.	2. Locates drawing 6M721-5703-1, CRD System Drawing.
3. Locates the A Flow Control Valve.	3. Locates on the drawing the A Flow Control Valve in section D-4.
*4. Locates isolation valves	*4. Determines that P500-F093A will isolate the air leak.

Time Stop _____

NOTE: Sequence of drawing selection is not critical.

* Critical Steps

Terminating Cue(s):

Identifies to the CRS the valves required to isolate the leak on the A CRD Flow Control Valve

JOB PERFORMANCE MEASURE

JPM Title Locate and use mechanical drawings to isolate a leak	No.: NRC Exam 2003-301-A1.b Revision: Rev. 0 Page 5

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for Followup question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JPM A1.b Cue Sheet

Initial Conditions: **You are an extra NSO assigned to the shift.** **Plant conditions are *stable* and 97 % power.** **During shift rounds the reactor building Nuclear Operator calls the control room and reports that he has discovered the air line supplying C11-F002A is broken and there is a lot of noise due to the air leaking. He has found what he thinks is the isolation valve, but needs confirmation before he closes the valve.**
Initiating Cue(s): **The CRS directs you to find C11-F002A and which valve(s) are required to isolate the leak using the station prints. Once you have researched and identified the valve(s), provide this information to the CRS.**

JOB PERFORMANCE MEASURE

JPM Title Review a completed procedure that has an error	No.: NRC Exam 2003-301-A2 Revision: 1 Page 2

Job Position Nuclear Supervising Operator	No. NRC Exam 2003-301-A2	Revision 1
JPM Title Review a completed surveillance that has an errror	Duration 15 Minutes	Page COVER SHEET

Examinee: _____ **SRO** / **RO** / NLO / SROC / STA

Evaluator: _____

Evaluation Method: Perform / Plant / Simulator

Start Time _____

Stop Time _____

Total Time _____

PERFORMANCE EVALUATION							
Element	S	U	Comments	Element	S	U	Comments
*1.							

_____ SATISFACTORY _____ UNSATISFACTORY

ORAL EVALUATION (Not Required for LOR Annual Exams)							
Question #	S	U	Comments	Question #	S	U	Comments

_____ SATISFACTORY _____ UNSATISFACTORY

Evaluator Signature / Date: _____ /

JOB PERFORMANCE MEASURE

JPM Title Review a completed procedure that has an error	No.: NRC Exam 2003-301-A2 Revision: 1 Page 3

References: Required (R) / Available (A) MWC03 (A) Surveillance/Performance package control. (A)
Tools and Equipment Required: Marked up completed copy of 24.630 Remote Shutdown Instrument Channel Checks with faulted data.

Preferred Evaluation Method:

Perform	X	Walkthrough		Discuss	
Plant		Simulator	X	Classroom	

Evaluator Notes: **ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED.** The Plant can be in any mode of operation to conduct this JPM. Start this JPM at the CRS Desk in the simulator or the control room. K/A Reference: 2.2.12 Knowledge
Task Standard: Review a completed surveillance that has an error
Initial Conditions: You are an extra CRNSO on shift. 24.630 Remote Shutdown Instrument Channel Checks has just been completed.
Initiating Cue(s): Review the surveillance and verify all items meet the acceptance criteria.

JOB PERFORMANCE MEASURE

JPM Title Review a completed procedure that has an error	No.: NRC Exam 2003-301-A2 Revision: 1 Page 4

PERFORMANCE EVALUATION

Time Start _____

Elements	Standards
CUE: Present the candidate with the attached completed 24.630 surveillance.	
*1. Reviews the surveillance	*1. Determines Acceptance Criteria for drywell pressure NOT met

Time Stop _____

* Critical Steps

Terminating Cue(s):

Informs the CRS the review is complete.

JOB PERFORMANCE MEASURE

JPM Title Review a completed procedure that has an error	No.: NRC Exam 2003-301-A2 Revision: 1 Page 5

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for Followup question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JPM A2 Cue Sheet

Initial Conditions: **You are an extra CRNSO on shift.** **24.630 Remote Shutdown Instrument Channel Checks has just been completed.**
Initiating Cue(s): **Review the surveillance and verify all items meet the acceptance criteria.**

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 2

Job Position Nuclear Supervising Operator	No. NRC Exam 2003-301-A3	Revision 1
JPM Title Calculate Stay time and determine a dose extension is needed	Duration 20 Minutes	Page COVER SHEET

Examinee: _____ SRO / **RO** / NLO / SROC / STA

Evaluator: _____

Evaluation Method: Perform / Simulator

Start Time _____

Stop Time _____

Total Time _____

PERFORMANCE EVALUATION							
Element	S	U	Comments	Element	S	U	Comments
*1.							
*2.							
*3.							

_____ SATISFACTORY _____ UNSATISFACTORY

ORAL EVALUATION (Not Required for LOR Annual Exams)							
Question #	S	U	Comments	Question #	S	U	Comments

_____ SATISFACTORY _____ UNSATISFACTORY

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 3

Evaluator Signature / Date: _____ /

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 4

References: Required (R) / Available (A)
MRP 12, Authorization To Exceed Dose Control Thresholds (R)
Training RWP for RWCU room (A)
Tools and Equipment Required:
None

Preferred Evaluation Method:

Perform	X	Walkthrough		Discuss	
Plant		Simulator	X	Classroom	

Evaluator Notes:
ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED.
The Plant can be in any mode of operation to conduct this JPM.
Start this JPM at the CRS Desk in the Simulator.
K/A Reference: 2.3.4 Knowldege of Radiation exposure limits and contamination control / including permissible levels in excess of those authorized. (2.5/3.1)
Task Standard:
Authorization to exceed Fermi 2 Administrative Guidelines is obtained in accordance with MRP 12
Initial Conditions:
A CRNSO must enter the RWCU pump room to perform an investigation of a G33-F012A.
The estimated time necessary to perform the inspection is 6 minutes.
Initiating Cue(s):
You are the CRNSO desigated to perform the entry.
Your total exposure for the year is 753 mrem TEDE
The situation is NOT an emergency but there is no alternative to performing the inspection.
Determine if you meet the requirements to perform this inspection.

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 5

PERFORMANCE EVALUATION

Time Start _____

Elements	**Standards**
CUE: Provide candidate copy of RWP with RWCU pump room **The radiation levels in the area of the valve to be inspected is 6 Rem/hr**	
*1. Determines that a RWP survey results are needed for estimation of radiation dose.	*1. Determines radiation level in the area of the valve is 6 Rem/hr
*2. Calculates dose.	*2. Dose = 6/60 hr * 6 Rem/hr = 600 mrem. 600 mrem + 753 mrem = 1353 mrem or 1.353 Rem (Fermi Admin Guideline = 1 REM/yr TEDE)
*3. Informs SM that dose will exceed Fermi2 administrative guidleines	*3. Determines dose extension is necessary.

Time Stop _____

* Critical Steps

Terminating Cue(s):

Candidate informs NSS that dose extension has been obtained

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 6

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for Followup question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JPM A3 Cue Sheet

Initial Conditions:

A CRNSO must enter the RWCU pump room to perform an investigation of a G33-F012A.

The estimated time necessary to perform the inspection is 6 minutes.

Initiating Cue(s):

You are the CRNSO desigated to perform the entry.

Your total exposure for the year is 753 mrem TEDE

The situation is NOT an emergency but there is no alternative to performing the inspection.

Determine if you meet the requirements to perform this inspection.

JOB PERFORMANCE MEASURE

JPM Title Perform actions as Emergency Communicator during declaration of a General Emergency	No.: NRC Exam 2003-301-A4 Revision: 1 Page 2

Job Position Nuclear Supervising Operator	No. NRC Exam 2003-301-A4	Revision 1
JPM Title Perform actions as Emergency Communicator during declaration of a General Emergency	Duration 20 Minutes	Page COVER SHEET

Examinee: _____ SRO / **RO** / NLO / SROC / STA

Evaluator: _____

Evaluation Method: Perform / Simulator

Start Time _____

Stop Time _____

Total Time _____

PERFORMANCE EVALUATION							
Element	S	U	Comments	Element	S	U	Comments
*1.							
*2.							
3.							
*4.							

_____ SATISFACTORY _____ UNSATISFACTORY

ORAL EVALUATION (Not Required for LOR Annual Exams)							
Question #	S	U	Comments	Question #	S	U	Comments

_____ SATISFACTORY _____ UNSATISFACTORY

JOB PERFORMANCE MEASURE

JPM Title Perform actions as Emergency Communicator during declaration of a General Emergency	No.: NRC Exam 2003-301-A4 Revision: 1 Page 3

Evaluator Signature / Date: _____ /

JOB PERFORMANCE MEASURE

JPM Title Perform actions as Emergency Communicator during declaration of a General Emergency	No.: NRC Exam 2003-301-A4 Revision: 1 Page 4

References: Required (R) / Available (A) EP 290 (R)
Tools and Equipment Required: None

Preferred Evaluation Method:

Perform	X	Walkthrough		Discuss	
Plant		Simulator	X	Classroom	

Evaluator Notes:

ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED.

K/A Reference: 2.4.43 knowledge of emergency communications systems and techniques 2.8

Whenever possible, allow the examinee to use the ERIS terminal to obtain weather information. Otherwise, information is provided in attached cue.

Task Standard:

All steps required are completed within 15 minutes, including:

- Emergency Director approval (signature) of the notification form.
- Completion of telephone notifications to Offsite Authorities.
- All steps are completed, including 2B (phone calls).

Initial Conditions:

This is a drill

The Emergency Director has declared a General Emergency due to an event in progress. (**AG1**)

The event caused the Site boundary dose rates, resulting from a gaseous release, to exceed 1000 mrem TEDE for the projected duration of the release.

Currently the plant is degrading and a confirmatory sample is in progress.

There is currently no precipitation.

The protective action recommendations are to evacuate Area 1 at this time based on dose calculations. There are no in place shelter requirements.

NOTE: The examinee may request the information from the evaluator in accordance with the enclosure in EP-290. Be prepared to provide this information as requested, including meteorological data.

IF ERIS NOT AVAILABLE:

Wind direction is from 0 to 180 degrees.

Wind speed is 2 MPH

Stability class of C

Down wind sectors can be calculated (HJK).

No precipitation.

Initiating Cue(s):

You are the Control Room Emergency Communicator. Your duties are to perform the following:

Fill out the required information for a Nuclear Plant Event Notification Form.

Present the form to the Emergency Director for approval.

Make the required 15 minute Offsite Authority Telephone Notifications.

JOB PERFORMANCE MEASURE

JPM Title Perform actions as Emergency Communicator during declaration of a General Emergency	No.: NRC Exam 2003-301-A4 Revision: 1 Page 5

This task is time critical.

JOB PERFORMANCE MEASURE

JPM Title Perform actions as Emergency Communicator during declaration of a General Emergency	No.: NRC Exam 2003-301-A4 Revision: 1 Page 6

PERFORMANCE EVALUATION

Time Start _____

Elements	**Standards**
CUE: Provide copy of Event Notification Form (ENF). 1. Obtains copy of ENF	1. No action
CUE: Plant message number is the sequential number of the message, i.e. 1, 2, 3, etc. **Initiating condition/ description comes from EP-101 Enclosure A** **Meteorological data can be obtained from the 10 meter MET TOWER screen of ERIS. It may also be obtained by calling the National Weather Service. It may also be obtained by going to the meteorological computer above the control room. (Each sector is equivalent to 22.5 degrees.) Give the candidate the met data from the STA** **Protective action recommendations are only provided for a general emergency and IAW EP-545.** **Telephone numbers are listed on the copy of the ENF, and will ring in the simulator Control Booth** *2. Complete ENF	* 2. Completes ENF
CUE: Give the candidate the completed Technical Data Form (TDF). 3. Obtains completed TDF	3. Obtains completed TDF
NOTE: When the candidate makes notifications from the simulator using speed dial, the phone numbers will ring in the Simulator Control Booth. *4. Makes notifications to offsite agencies	*4. Makes notifications

Time Stop _____

* Critical Steps

Terminating Cue(s):

Informs the Emergency Director initial notifications have been made.

JOB PERFORMANCE MEASURE

JPM Title Perform actions as Emergency Communicator during declaration of a General Emergency	No.: NRC Exam 2003-301-A4 Revision: 1 Page 8

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for Followup question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JPM A4 Cue Sheet

Initial Conditions:

This is a drill

The Emergency Director has declared a General Emergency due to an event in progress. (AG1)

The event caused the Site boundary dose rates, resulting from a gaseous release, to exceed 1000 mrem TEDE for the projected duration of the release.

Currently the plant is degrading and a confirmatory sample is in progress.

There is currently no precipitation.

Initiating Cue(s):

You are the Control Room Emergency Communicator. Your duties are to perform the following:

- **Fill out the required information for a Nuclear Plant Event Notification Form.**
- **Present the form to the Emergency Director for approval.**
- **Make the required 15 minute Offsite Authority Telephone Notifications.**

This task is time critical.

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 2

Job Position Control Room Supervisor	No. NRC Exam 2003-301-A3	Revision 1
JPM Title Determine dose limit will be exceeded and complete a dose extension	Duration 20 Minutes	Page COVER SHEET

Examinee: _____ **SRO** / RO / NLO / SROC / STA

Evaluator: _____

Evaluation Method: Perform / Simulator

Start Time _____

Stop Time _____

Total Time _____

PERFORMANCE EVALUATION							
Element	S	U	Comments	Element	S	U	Comments
*1.							
*2.							
*3.							
*4.							
*5.							
*6.							
*7.							
*8.							
*9.							

_____ SATISFACTORY _____ UNSATISFACTORY

ORAL EVALUATION (Not Required for LOR Annual Exams)							
Question #	S	U	Comments	Question #	S	U	Comments

_____ SATISFACTORY _____ UNSATISFACTORY

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 3

Evaluator Signature / Date: _____ /

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 4

References: Required (R) / Available (A)

MRP 12, Authorization To Exceed Dose Control Thresholds (R)

Training RWP for RWCU room (A)

Tools and Equipment Required:

None

Preferred Evaluation Method:

Perform	X	Walkthrough		Discuss	
Plant		Simulator	X	Classroom	

Evaluator Notes:

ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED.

The Plant can be in any mode of operation to conduct this JPM.

Start this JPM at the CRS Desk in the Simulator.

K/A Reference: 2.3.4 Knowldege of Radiation exposure limits and contamination control / including permissible levels in excess of those authorized. 2.5 / 3.1

Task Standard:

Authorization to exceed Fermi 2 Administrative Guidelines is obtained in accordance with MRP 12

Initial Conditions:

A CRNSO must enter the RWCU pump room to perform an investigation of a G33-F012A.

The estimated time necessary to perform the inspection is 6 minutes.

Initiating Cue(s):

You are the CRS.

The CRNSOs total exposure for the year is 753 mrem TEDE.

The situation is NOT an emergency but there is no alternative to performing the inspection.

Perform the necessary requirements to allow this entry to occur.

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 5

PERFORMANCE EVALUATION

Time Start _____

Elements	**Standards**
CUE: Provide candidate copy of RWP with RWCU pump room **The radiation levels in the area of the valve to be inspected is 6 Rem/hr**	
*1. Determines that a RWP survey results are needed for estimation of radiation dose.	*1. Determines radiation level in the area of the valve is 6 Rem/hr
*2. Calculates dose and concludes that dose extension is necessary.	*2. Dose = 6/60 hr * 6 Rem/hr = 600 mrem. 600 mrem + 753 mrem = 1353 mrem or 1.353 Rem (Fermi Admin Guideline = 1 REM/yr TEDE)
*3. Obtains Procedure MRP 12 and form MRP 12001	*3. Obtains procedure and form
CUE: Enters Hans Blix **111-11-1111**	
*4. Completes part 1A of form MRP 12001	*4. Enters correct information
*5. Completes part 1B of MRP 12001	*5. Enters: • Checks TEDE • Accumulated: 753 mrem • Fermi guideline: 1 Rem/yr • 50% Federal Limit (1353-2500mr)
CUE: If the candidate requests information as to why another worker cannot be substituted or job dose reduced, act as the NSS and inform the candidate there are no qualified workers available with a lower dose. Also, the exposure time is so short that attempts to reduce the dose by installing temporary shielding would result in more total Man-rem than with just the short exposure.	
*6. Completes part 1C	*6. Enters: No other individual available with lower dose, exposure time to short for other practical dose reduction methods (or similar).

Elements	**Standards**
Cue: When requested by the candidate, acknowledge the extension request by completing part 1D *7. Requests NO to sign part 1D	*7. Examiner signs for Hans Blix
*8. Complete Part E	*8. Signs Part E
Cue: **Act as Radiological health personnel and accept form.** *9. Routes form to Radiological Health.	*9. Routes form to Radiological Health.
CUE: Acting as Radiation health, tell candidate that part 2 of MRP 12001 is complete and return the form to candidate instructing to obtain required approvals. Ask who has to sign for approval of extension. **NOTE: If the candidate obtains the Site VP signature , make an exam comment.** *10. Obtains appropriate approvals as required by MRP12 enclosure B.	*10. Obtains approvals from: • Operations Superintendent • Radiation Protection Manager • Plant Manager

Time Stop _____

* Critical Steps

Terminating Cue(s):

Candidate completes dose extension.

JOB PERFORMANCE MEASURE

JPM Title Calculate Stay time and determine a dose extension is needed	No.: NRC Exam 2003-301-A3 Revision: 1 Page 7

FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for Followup question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JPM A3 Cue Sheet

Initial Conditions:

A CRNSO must enter the RWCU pump room to perform an investigation of a G33-F012A.

The estimated time necessary to perform the inspection is 6 minutes.

Initiating Cue(s):

You are the CRS.

The CRNSOs total exposure for the year is 753 mrem TEDE.

The situation is NOT an emergency but there is no alternative to performing the inspection.

Perform the necessary requirements to allow this entry to occur.

JOB PERFORMANCE MEASURE

JPM Title Event Classification in accordance with EP-101, Classification of Emergencies.	No.: NRC Exam 2003-301-A4 Revision: Rev. 1 Page 2

Job Position Control Room Supervisor	No. NRC Exam 2003-301-A4	Revision 1
JPM Title Event Classification in accordance with EP-101, Classification of Emergencies.	Duration 10 Minutes	Page COVER SHEET

Examinee: _____ **SRO** / RO / NLO / SROC / STA

Evaluator: _____

Evaluation Method: Perform / Plant / Simulator

Start Time _____

Stop Time _____

Total Time _____

PERFORMANCE EVALUATION							
Element	S	U	Comments	Element	S	U	Comments
1.							
2.							
3.							
* 4.							

_____ SATISFACTORY _____ UNSATISFACTORY

ORAL EVALUATION (Not Required for LOR Annual Exams)							
Question #	S	U	Comments	Question #	S	U	Comments

_____ SATISFACTORY _____ UNSATISFACTORY

JOB PERFORMANCE MEASURE

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Evaluator Signature / Date: _____ /

JOB PERFORMANCE MEASURE

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References: Required (R) / Available (A) EP-101 Classification of Emergencies (R)
Tools and Equipment Required: None

Preferred Evaluation Method:

Perform	X	Walkthrough		Discuss	
Plant	X	Simulator	X	Classroom	

Evaluator Notes:

ENSURE ALL INDUSTRIAL AND PERSONNEL SAFETY PRACTICES ARE USED AND ENFORCED.

K/A Reference: 2.4.40, Knowledge of the SRO Responsiblities in emergency plan implementation 4.0

Task Standard:

Classify the emergency as a Site Area Emergency based on a failure to scram and communicates this to the Emergency Director.

Initial Conditions:

You are the SM assigned to the shift.

Initiating Cue(s):

The plant is operating at rated power.

While removing RHR from Torus Cooling, the crew discovers that RHR Pump 'C' will not shutdown. During an attempt to trip the RHR Pump breaker locally, the breaker fails and causes a loss of bus 64C.

The crew enters 20.300.04 and 20.413.01 in response to the loss of power.

A high temperature alarm occurs on the 'B' Recirc MG Set, followed by a trip of the MG Set and Pump. Prior to a high temperature alarm on the 'A' MG Set, the crew places the Mode Switch in Shutdown. All control rods fail to insert.

The crew enters the EOPs and takes action to shutdown the reactor and stabilize the plant.

After completion of FSQ1 through 8, reactor power is 22% and steady.

Classify the event in accordance with EP-101, Classification of Emergencies.

Report your classification to the Emergency Director and the basis for that classification.

JOB PERFORMANCE MEASURE

JPM Title Event Classification in accordance with EP-101, Classification of Emergencies.	No.: NRC Exam 2003-301-A4 Revision: Rev. 1 Page 5

PERFORMANCE EVALUATION

Time Start _____

Elements	**Standards**
1. Candidate locates and obtains a copy of EP-101 procedure.	1. Candidate locates and obtains a copy of EP-101 procedure from SRO Desk in control room.
2. Reviews conditions from Cue Sheet	2. Reviews events from Cue Sheet.
3. Compares events from the scenario to the requirements of EP-101.	3. Refers to Enclosure A or B, Tab S of EP-101.
* 4. Declares Site Area Emergency to the Emergency Director, based on A valid initiating scram signal received, but no automatic scram occurred and Manual actions taken at COP H11-P603 were not successful in scram of control rods to achieve reactor power < 3%	* 4. Declares an ALERT based on a failure to scram and manual scram was successful System Malfunction SS2, page S-7, and communicates this to the Emergency Director.

Time Stop _____

* Critical Steps

Terminating Cue(s):

Declares an SITE AREA EMERGENCY based on failure of reactor protection system instrumentation to complete or initiate an automatic reactor scram once a reactor protection system setpoint has been exceeded and manual scram was not successful, System Malfunction SS2, page S-7, and communicates this to the Emergency Director.

JOB PERFORMANCE MEASURE

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FOLLOW-UP DOCUMENTATION QUESTIONS

Reason for Followup question(s):

Question:

Reference:

Response:

Question:

Reference

Response:

JPM A4 Cue Sheet

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