

PSEG Nuclear LLC

Job Performance Measure

SELECT A VOLUNTEER FOR EMERGENCY RADIATION EXPOSURE

JPM Number: 21-01 NRC SRO-A3

Revision Number: 0

Date: 08/18/2022

Developed By: R. Chan **Date:** 8/18/22
Instructor

Validated By: T. Shetrone / **Date:** 8/18/22
SME or Instructor

Reviewed By: M. Winkelspecht **Date:** 11/29/22
Operations Representative

Approved By: M. Wadusky **Date:** 11/29/22
Training Department (Print/Sign)

REVISION RECORD (Summary)

Revision Number	Date	Reason
00	8/18/22	New JPM for Salem. Used bank JPM from Commanche Peak 2019 NRC SA4. Converted to new JPM template.

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 and 11 below.

- | | | | |
|-----|--------------|---|-----------------------|
| RC | | 1. Task description and number, JPM description and number are identified. | |
| RC | | 2. Knowledge and Abilities (K/A) references are included. | |
| RC | | 3. Performance location specified. (in-plant, control room, or simulator) | |
| RC | | 4. Initial setup conditions are identified. | |
| RC | | 5. Initiating and terminating cues are properly identified. | |
| RC | | 6. Task standards identified and verified by SME review. | |
| RC | | 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*) | |
| RC | | 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure: | |
| RC | Procedure(s) | NC.EP-EP.ZZ-0304 Rev. 17 | Date Checked: 8/18/22 |
| RC | | NC.EP-EP.ZZ-0102 Rev. 27 | |
| RC | | 9. Pilot test the JPM: | |
| | | a. Verify cues both verbal and visual are free of conflict, and | |
| | | b. Ensure performance time is accurate. | |
| N/A | | 10. If the JPM cannot be performed as written with proper responses, then revise the JPM. | |
| N/A | | 11. When JPM is revalidated, SME or instructor sign and date JPM cover page | |

R. Chan	8/18/22
SME/Instructor	Date

SME/Instructor	Date
----------------	------

SME/Instructor	Date
----------------	------

SIMULATOR SETUP INSTUCTIONS

1. None, this is an Admin JPM.

SPECIAL INSTRUCTIONS

1. Copies of NC.EP-EP.ZZ-0304 for each applicant.

INITIAL CONDITIONS

- Salem Unit 1 is experiencing a LBLOCA
- Transfer to Cold Leg Recirculation has been established
- An operator venting 11 RHR Pump is injured and needs assistance to exit the RCA
- Emergency Coordinator (EC) authorized one volunteer to attempt lifesaving task
- Rad Pro predicts dose of 15-20 REM given general radiation levels in the area of the injured person

INITIATING CUE

The EC directs you to perform the following:

- Evaluate and select the most preferred volunteer from the list of available volunteers per NC.EP-EP.ZZ-0304, Operational Support Center (OSC) Radiation Protection Response.

List of Available Volunteers

Volunteer 1:	46 year old male, newly hired Custodian. No prior radiation protection training.
Volunteer 2:	27 year old female; informs you she is pregnant.
Volunteer 3:	24 year old male, recently qualified NEO.
Volunteer 4:	52 year old male, lifetime exposure 150 REM, including a Protecting Valuable Property dose of 15 REM at another facility.
Volunteer 5:	49 year old male, works in Maintenance; informs you that he is on prescription medication that may cause dizziness.
Volunteer 6:	42 year old female, not capable of becoming pregnant.
Volunteer 7:	50 year old male, SRO at Salem. Recently removed from License duties due to a failed periodic written exam.

TASK STANDARD:

The task is satisfactorily met when the applicant has; (1) determined that Volunteers 1-6 did NOT meet the requirements of NC.EP-EP.ZZ-0304, AND (2) determines that Volunteer 7 does MEET the requirements of NC.EP-EP.ZZ-0304 to perform lifesaving tasks. All documentation recorded to the reason why or why NOT is in accordance with the attached answer key.

Information for Evaluators Use:

UNSAT requires written comments on the respective step.

(*) Denotes critical steps

If Time Critical, estimated time is the Time Critical time.

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 time clock starts when the candidate acknowledges the initiating cue.

ANSWER KEY (optional):

<u>Volunteer</u>	<u>Selected (Circle one)</u>	<u>Why or Why NOT selected</u>
1	NO	Determined individual NOT familiar with consequences of exposure to radiation.
2	NO	Determined female volunteer has declared pregnancy.
3	NO	Determined individual has NOT reached age of 45 years or older.
4	NO	Determined individual already received emergency exposure for Protecting Valuable Property.
5	NO	Determined individual is NOT physically qualified based on prescription medication that causes dizziness.
6	NO	Determined individual has NOT reached age of 45 years of older.
7	YES	Selected Volunteer 7 as most preferred candidate for Emergency exposure because he is over the age of 45, has not received a previous emergency exposure in his lifetime, he is familiar with the task and consequences of radiation exposure as a licensed operator, and he is not a female capable of reproduction

Additional References:

NC.EP-EP.ZZ-0102:

<p>SM</p>	<p>Station has adequate resources.</p> <p>Until relieved by the EDO, as needed/requested for accident mitigation (25R) or life saving (75R), AUTHORIZE Emergency Dose. <i>(per OSC RP Response, NC.EP-EP.ZZ-0304)</i></p> <ul style="list-style-type: none"> • ENSURE RAC works with the OSC and considers dose savings to the public to expedite OSC team dispatch. • ENSURE backup actions are being planned; (OSC or TSC engineering staff). • ENSURE OSC Coordinator considers pre-staging teams at the control point while plans are being finalized. 	<p>Init: ____</p> <p>Time: ____</p>	<p>Init: ____</p> <p>Time: ____</p>	<p>Init: ____</p> <p>Time: ____</p>	<p>Init: ____</p> <p>Time: ____</p>

RECORD JPM Start Time: _____

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
N/A		RECORD the JPM Start Time when the operator acknowledges READY TO START JPM.		N/A

Cue: Provide candidate copy of NC.EP-EP.ZZ-0304

Examiners Note: N/A

Comments: N/A

1.0	*	Determine if Volunteer 1 can be selected.	Documented Volunteer 1 is NOT familiar with the consequences of exposure to radiation and/or have attended and passed Rad Worker Training. Volunteer 1 is ELIMINATED.	
-----	---	--	---	--

Cue: N/A

Examiners Note: N/A

Comments:

2.0	*	Determine if Volunteer 2 can be selected.	Documented Volunteer 2 is a declared pregnant women and SHALL NOT be allowed to volunteer. Volunteer 2 is ELIMINATED.	
-----	---	--	---	--

Cue: N/A

Examiners Note: N/A

Comments:

3.0	*	Determine if Volunteer 3 can be selected.	Documented Volunteer 3 is NOT above the age of 45 years, although qualified for the task as an NEO. Volunteer 3 is ELIMINATED.	
-----	---	--	--	--

Cue: N/A

Examiners Note: N/A

Comments:

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
4.0	*	Determine if Volunteer 4 can be selected.	Documented Volunteer 4 already received emergency exposure for Protecting Valuable Property. Volunteer 4 is ELIMINATED.	
<p>Cue: N/A</p> <p>Examiners Note: N/A</p> <p><u>Comments:</u></p>				
5.0	*	Determine if Volunteer 5 can be selected.	Documented Volunteer 5 is NOT physically qualified due to taking prescription medication. Volunteer 5 is ELIMINATED.	
<p>Cue: N/A</p> <p>Examiners Note: N/A</p> <p><u>Comments:</u></p>				
6.0	*	Determine if Volunteer 6 can be selected.	Documented Volunteer 6 is NOT above the age of 45 years. Volunteer 6 is ELIMINATED.	
<p>Cue: N/A</p> <p>Examiners Note: N/A</p> <p><u>Comments:</u></p>				
7.0	*	Determine if Volunteer 7 can be selected.	SELECTED Volunteer 7 for emergency exposure and DOCUMENTED as the most preferred candidate because he is over the age of 45, has not received a previous emergency exposure in his lifetime, he is familiar with the task and consequences of radiation exposure as a	

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
			licensed operator, and he is not a female capable of reproduction.	
<p>Cue: N/A</p> <p>Examiners Note: N/A</p> <p><u>Comments:</u></p>				
Terminating Cue	JPM COMPLETE when the applicant submits the worksheet.		N/A	

RECORD JPM Stop Time: _____

Operator's Name: _____ **Job Title:** RO _____ SRO X

Facility: Salem **JPM No.:** 21-01 NRC SRO-A3 **Revision No.:** 0

Task Title: Select a Volunteer for Emergency Radiation Exposure

Task No.: _____ **Source:**
Bank X New _____ Mod _____

System: Radiation Control (Generic)

K/A Number / Description: G2.3.14 Knowledge of radiation or contamination hazards that may arise during normal, abnormal, or emergency conditions or activities, such as analysis and interpretation of radiation and activity readings as they pertain to administrative, normal, abnormal, and emergency procedures or to analysis and interpretation of coolant activity, including comparison to emergency plan or regulatory limits (SRO Only).

K/A Rating RO N/A SRO 3.8

Task Applicability: SRO Only X RO/SRO _____ AO/RO/SRO _____ Other _____

Time-Critical: Yes _____ No X **Alternate Path:** Yes _____ No X

Estimated Time to Complete: 20 Minutes

Actual Time Used: _____ Minutes

Method of Testing: Simulated Performance _____ Actual Performance X

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

Required Materials: NC.EP-EP.ZZ-0304

Reference(s): NC.EP-EP.ZZ-0102 NC.EP-EP.ZZ-0304

EVALUATION SUMMARY:

Were all the Critical Elements (steps) 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: _____

Evaluator's Signature: _____ **Date:** _____

STUDENT HANDOUT

INITIAL CONDITIONS

- Salem Unit 1 is experiencing a LBLOCA
- Transfer to Cold Leg Recirculation has been established
- An operator venting 11 RHR Pump is injured and needs assistance to exit the RCA
- Emergency Coordinator (EC) authorized one volunteer to attempt lifesaving task
- Rad Pro predicts dose of 15-20 REM given general radiation levels in the area of the injured person

INITIATING CUE

The EC directs you to perform the following:

- Evaluate and select the most preferred volunteer from the list of available volunteers per NC.EP-EP.ZZ-0304, Operational Support Center (OSC) Radiation Protection Response.

List of Available Volunteers

Volunteer 1:	46 year old male, newly hired Custodian. No prior radiation protection training.
Volunteer 2:	27 year old female; informs you she is pregnant.
Volunteer 3:	24 year old male, recently qualified NEO.
Volunteer 4:	52 year old male, lifetime exposure 150 REM, including a Protecting Valuable Property dose of 15 REM at another facility.
Volunteer 5:	49 year old male, works in Maintenance; informs you that he is on prescription medication that may cause dizziness.
Volunteer 6:	42 year old female, not capable of becoming pregnant.
Volunteer 7:	50 year old male, SRO at Salem. Recently removed from License duties due to a failed periodic written exam.

STUDENT WORKSHEET

Operator's Name: _____

<u>Volunteer</u>	<u>Selected (Circle one)</u>	<u>Why or Why NOT selected</u>
1	YES /NO	
2	YES /NO	
3	YES /NO	
4	YES /NO	
5	YES /NO	
6	YES /NO	
7	YES /NO	