CLINTON POWER STATION

Job Performance Measure

Evaluation of Work Hours IAW 10CFR26

JPM Number: JPM483

Revision Number: 00

Date: 8/24/16

Developed By:	**T. Jennings**	**8/24/16**
	Instructor	**Date**
Validated By:	**Mat Baker**	**4/30/19**
	SME or Instructor	**Date**
Reviewed By:	**Pat Bulpitt**	**6/3/19**
	Operations Representative	**Date**
Approved By:	**Tony Jennings**	**6/3/19**
	Training Department	**Date**

Clinton Power Station
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 and 12 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, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) 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(s) referenced by this JPM reflects the current revision:
Procedure LS-AA-119 Rev: 12
Procedure _____ Rev: _____
Procedure _____ Rev: _____

_____ 9. Verify cues both verbal and visual are free of conflict.

_____ 10. Verify performance time is accurate

_____ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____ _____
SME / Instructor Date

_____ _____
SME / Instructor Date

_____ _____
SME / Instructor Date

Clinton Power Station
Job Performance Measure (JPM)

Revision Record (Summary)

Revision	Date	Description
00	8/24/16	New JPM.

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

> I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARD:

- Examinee determines that LS-AA-119 work hour limits will be exceeded and reports findings to the Shift Manager.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- LS-AA-119 Rev. 12 Fatigue Management and Work Hour Limits

EVALUATOR INSTRUCTIONS:

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with:
  - a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue, and
  - LS-AA-119 Fatigue Management and Work Hour Limits

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

The plant is in Mode 1.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

You are a Shift Supervisor on an operating crew.

Review the proposed work schedule for the upcoming six weeks and determine if the requirements of LS-AA-119 Fatigue Management and Work Hour Limits will be met if implemented as written and report results to the Shift Manager.

	SUN	MON	TUE	WED	THU	FRI	SAT
Week 1	X	D	D	D	X	X	X
Week 2	X	X	X	D	D	D	D
Week 3	D	R	D	X	X	N	N
Week 4	N	N	X	R	R	R	X
Week 5	X	X	N	N	N	X	X
Week 6	X	T	T	T	T	T	N

X = Day Off
D = 12 Hour Day
N = 12 Hour Night (Starts at 1900 on previous day)
R = 8 Hour Relief Shift
T = 8 Hour Training Day

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

LS-AA-119 Fatigue Management and Work Hour Limits

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
1	Determines 10 CFR 26 Work Hour Limits.	Reviews LS-AA-119 section 5.1.1 10CFR26 Work Hour Limits.	___	___	___
2	Reviews Week 1 of the proposed schedule.	5.1.1 Determines that the scheduled hours will not violate 10CFR26 work hour limits.	___	___	___
3	Reviews Week 2 of the proposed schedule.	5.1.1 Determines that the scheduled hours will not violate 10CFR26 work hour limits.	___	___	___
4	Reviews Week 3 of the proposed schedule.	***5.1.1** **Determines that the scheduled 80 hours from Week 2 Wednesday to Week 3 on Tuesday will violate 10CFR26 work hour limit of 72 hours in a 7-day period.** *Evaluator Cue – When reported, acknowledge the report and cue the examinee to complete the schedule review.*	___	___	___
5	Reviews Week 4 of the proposed schedule.	5.1.1 Determines that the scheduled hours will not violate 10CFR26 work hour limits.	___	___	___

Clinton Power Station
Job Performance Measure (JPM)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
6	Reviews Week 5 of the proposed schedule.	5.1.1 Determines that the scheduled hours will not violate 10CFR26 work hour limits.	___	___	___
7	Reviews Week 6 of the proposed schedule.	***5.1.1** **Determines that the scheduled hours will violate the following 10CFR26 work hour limits:** • **16 in 24 (0700 on Friday until 0700 on Saturday = 20 hours in a 24 hour period), or** • **26 in 48 (0700 on Thursday until 0700 on Saturday = 28 hours in a 48 hour period), or** • **10 hour break between successive work periods (the transition from training on Friday to night shift on Saturday is 4 hours)** *Evaluator Note – the 10 hour break requirement drives the violation of the 16 in 24 and 26 in 48 hour requirements, so stating a violation of any one of the three limits above constitutes satisfactory performance of the step.* *Evaluator Cue – When reported, acknowledge the report and cue the examinee that the JPM is complete.*	___	___	___

Clinton Power Station
Job Performance Measure (JPM)

TERMINATING CUES:

Candidate completes review of the proposed work schedule and reports identified issues to the Shift Manager.

STOP TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

Operator's Name: _____

Job Title: ☐ EO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Evaluation of Work Hours IAW 10CFR26

JPM Number: JPM483 Revision Number: 00

Task Number and Title: 999999.25 Prepare a Minimum Shift Complement Form

K/A System	K/A Number	Importance (RO/SRO)	
Generic	2.1.5		3.9
Ability to use procedures related to shift staffing, such as minimum crew complement, overtime limitations, etc.			

Suggested Testing Environment: Classroom

Actual Testing Environment: ☐ Simulator ☐ Control Room ☐ In-Plant ☒ Other

Testing Method: ☐ Simulate ■ Perform **Alternate Path:** ☐ Yes ■ No **SRO Only:** ■ Yes ☐ No

Time Critical: ☐ Yes ■ No

Estimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References: LS-AA-119, Rev. 12, Fatigue Management and Work Hour Limits

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:

The plant is in Mode 1.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

You are a Shift Supervisor on an operating crew.

Review the proposed work schedule for the upcoming six weeks and determine if the requirements of LS-AA-119 Fatigue Management and Work Hour Limits will be met if implemented as written and report results to the Shift Manager.

	SUN	MON	TUE	WED	THU	FRI	SAT
Week 1	X	D	D	D	X	X	X
Week 2	X	X	X	D	D	D	D
Week 3	D	R	D	X	X	N	N
Week 4	N	N	X	R	R	R	X
Week 5	X	X	N	N	N	X	X
Week 6	X	T	T	T	T	T	N

X = Day Off
D = 12 Hour Day
N = 12 Hour Night (Starts at 1900 on previous day)
R = 8 Hour Relief Shift
T = 8 Hour Training Day

Job Performance Measure

Verify Conditions are met to Enter Mode 2

JPM Number: JPM113

Revision Number: 01

Date: 10/01/18

Developed By:	Tony Jennings Instructor	10/01/18 Date
Validated By:	Aaron Marr SME or Instructor	4/30/19 Date
Reviewed By:	Pat Bulpitt Operations Representative	6/3/19 Date
Approved By:	Tony Jennings Training Department	6/3/19 Date

SRRS: 3D.105 (when utilized for operator initial or continuing training)

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 9 and 13 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, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) 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. If an alternate path is used, the task standard contains criteria for successful completion.

_____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure 3001.01 Rev: 28e
Procedure 3001.01C001 Rev: 19a
Procedure 3001.01C002 Rev: 17c

_____ 10. Verify cues both verbal and visual are free of conflict.

_____ 11. Verify performance time is accurate

_____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

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

Revision Record (Summary)

Revision	Date	Description
00	2/25/09	Converted from old JPM.
01	10/01/18	Update JPM format and procedure revisions.

SIMULATOR SETUP INSTRUCTIONS

1. This is an SRO admin JPM, no simulator setup is required.

INITIAL CONDITIONS

You have taken the shift as the CRS in Mode 4.

INITIATING CUE

Review the attached, partially completed procedures (CPS 3001.01 Preparation For Startup & Approach to Critical, CPS 3001.01C001 Preparation for Startup Checklist and CPS 3001.01C002 Mode 2 Checklist) and identify all remaining actions required prior to entering Mode 2.

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

Information For Evaluator's Use:

Task Standard: The examinee will review CPS 3001.01 Preparation For Startup & Approach To Critical, CPS 3001.01C001 Preparation For Startup Checklist, and CPS 3001.01C002 Mode 2 Checklist and determine that two restraints (RHR subsystems not in standby, and RHR B Test Prep Switch not in NORMAL) exist for entering Mode 2.

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. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

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.

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
Cue	Provide the examinee with the **Cue Sheet** and marked up copies of the following: • CPS 3001.01 Preparation For Startup & Approach to Critical • CPS 3001.01C001 Preparation for Startup Checklist • CPS 3001.01C002 Mode 2 Checklist				
Note	The examinee may perform the following review steps in any order.				
1	Evaluates RCIC operability.	3001.01C001 9.9 / 3001.01 C002 3.5.3 Operator identifies steps have not been completed. Operator reports that RCIC Inoperability does not impact plant startup (entering Mode 2). *Evaluator Cue – If asked, the RPV pressure is 0 psig.* *Evaluator Note – Per ITS 3.5.3 RCIC System, RCIC is not required to be operable until reactor steam dome pressure is > 150 psig.* *Evaluator Note – The candidate may N/A step 9.9 of CPS 3001.01C001.*	___	___	___

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
***2**	Evaluates all divisions of RHR.	**3001.01 8.1.6 / 3001.01 C002 3.5.1, 3.6.1.7 & 3.6.2.3** **Operator identifies and reports that all divisions of RHR must be placed in Standby to enter Mode 2.** *Evaluator Note – RHR systems NOT in standby does not satisfy LCOs for ECCS and Containment Spray per:* *ITS 3.5.1 ECCS – Operating* *ITS 3.6.1.7 RHR Containment Spray System* *ITS 3.6.2.3 RHR Suppression Pool Cooling* *Evaluator Note – Examinee may state that RHR needs to be secured from Shutdown Cooling.*	___	___	___
***3**	Evaluates RHR B MOV Test Prep switch.	**3001.01 Appendix B / 3001.01C002 2.5.2** **Operator identifies and reports that RHR B Test Prep Switch must be in NORMAL to enter Mode 2.** *Evaluator Note – RHR B MOV Test Prep switch NOT in Normal does not satisfy ORM 2.5.2 Motor Operated Valves Thermal Overload Protection.*	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☐ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: Verify Conditions are met to Enter Mode 2

JPM Number: JPM113 Revision Number: 01

Task Number and Title: 300101.01 Complete Control Room actions to perform preparation for startup and approach to critical.

K/A Number and Importance:

K/A System	K/A Number	Importance (RO/SRO)	
Generic	2.1.23	4.3	4.4

Suggested Testing Environment: Classroom

Alternate Path: ☐ Yes ☒ No SRO Only: ☒ Yes ☐ No Time Critical: ☐ Yes ☒ No

Reference(s):

- CPS 3001.01 Preparation for Startup & Approach to Critical, Rev. 28e
- CPS 3001.01C001 Preparation for Startup Checklist, Rev. 19a
- CPS 3001.01C002 Mode 2 Checklist, Rev. 17c

Actual Testing Environment: ☐ Simulator ☐ Control Room ☐ In-Plant ☒ Other

Testing Method: ☐ Simulate ☒ Perform

Estimated Time to Complete: 20 minutes **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

_____

_____

_____

_____

Evaluator's Name (Print): _____

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

INITIAL CONDITIONS

You have taken the shift as the CRS in Mode 4.

INITIATING CUE

Review the attached, partially completed procedures (CPS 3001.01 Preparation For Startup & Approach to Critical, CPS 3001.01C001 Preparation for Startup Checklist and CPS 3001.01C002 Mode 2 Checklist) and identify all remaining actions required prior to entering Mode 2.

Job Performance Measure

Review a Completed Control Rod / Position Indication Operability Surveillance and Identify Discrepancies

JPM Number: JPM114

Revision Number: 01

Date: 10/01/18

Developed By:	Tony Jennings Instructor	10/01/18 Date
Validated By:	Aaron Marr SME or Instructor	4/30/19 Date
Reviewed By:	Pat Bulpitt Operations Representative	6/3/19 Date
Approved By:	Tony Jennings Training Department	6/3/19 Date

SRRS: 3D.105 (when utilized for operator initial or continuing training)

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 9 and 13 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, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) 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. If an alternate path is used, the task standard contains criteria for successful completion.

_____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure 9011.01 Rev: 31
Procedure 4007.02 Rev: 13c
Procedure 2203.01 Rev: 7b

_____ 10. Verify cues both verbal and visual are free of conflict.

_____ 11. Verify performance time is accurate

_____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

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

Revision Record (Summary)

Revision	Date	Description
00	2/25/09	Converted from old JPM.
01	10/01/18	Update JPM format and procedure revisions.

SIMULATOR SETUP INSTRUCTIONS

1. This is an SRO admin JPM, no simulator setup is required.

INITIAL CONDITIONS

You are the CRS.

The plant is operating at 90% power.

The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability surveillance for all fully and partially withdrawn control rods.

INITIATING CUE

Review the completed surveillance for approval. Report when task is complete.

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

Information For Evaluator's Use:

Task Standard: The examinee will review CPS 9011.01 Control Rod Position Indication and attached 3D Cases and determine that control rod 36-29 is out of position. The examinee will enter and execute CPS 4007.02 Inadvertent Rod Movement and will perform the following actions:

- Reviews Attachment 2 – FINAL 3D Case and determines control rod 36-29 is at a different position (position 04) than adjacent rods (position 48).
- Reviews Attachment 2 – FINAL 3D Case and determines MFLCPR, MFLPD, and MAPRAT values are < 1.0.
- Evaluates MSL & OG radiation monitor readings and determines that fuel failure is not indicated.
- Contacts the RE for recommendations concerning recovery of rod 36-29.
- Directs the RO to return control rod 36-29 to position 04.

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. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

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.

SRRS: 3D.100; There are no retention requirements for this section

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
Cue	Provide the examinee with the **Cue Sheet** and the following: • Marked up copy of CPS 9011.01 Control Rod/Position Indication Operability • Attachment 1 – 3D Case, Initial • Attachment 2 – 3D Case, Final				
***1**	Reviews completed CPS 9011.01.	**9011.01 8.5.2** **Reviews the initial and final Control Rod Position printouts to verify proper rod positions. Examinee identifies that rod 36-29 is at position 6 instead of position 4.** *Evaluator Note – An unexpected or unscheduled change in rod position is a symptom/entry to CPS 4007.02 Inadvertent Rod Movement.*	___	___	___
Cue	When requested, provide the examinee a copy of CPS 4007.02 Inadvertent Rod Movement.				

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
***2**	Enters and executes CPS 4007.02 Inadvertent Rod Movement.	**4007.02 2.0 Subsequent Actions** **Examinee performs the following:** • **Reviews Attachment 2 – FINAL 3D Case and determines control rod 36-29 is at a different position (position 04) than adjacent rods (position 48).** • **Reviews Attachment 2 – FINAL 3D Case and determines MFLCPR, MFLPD, and MAPRAT values are < 1.0.** • **Evaluates MSL & OG radiation monitor readings and determines that fuel failure is <u>not</u> indicated.** • **Contacts the RE for recommendations concerning recovery of rod 36-29.** *Evaluator Cue – If examinee requests an additional 3D case, inform him/her that the "Final" 3D case is current.* *Evaluator Cue – If asked, report all radiation levels as "normal".* *Evaluator Cue – If asked, the Shift Manager is reviewing the CPS Emergency Plan Annex.* *Evaluator Cue – If asked, the "Rod Drift" annunciator is not lit.* *Evaluator Cue – If examinee asks the Reactor Engineer (RE) for a recommendation, ask him/her for a recommendation.*	___	___	___
Cue	When requested, provide the examinee a copy of CPS 2203.01 Return Of Out Of Sequence Rods.				

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
3	Takes recovery actions per CPS 2203.01.	Directs and verifies the RO returns Control Rod 36-29 to position 04. *Evaluator Cue – RO reports Rod 36-29 has been repositioned from position 06 to position 04.*	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☐ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: Review a Completed Control Rod / Position Indication Operability Surveillance and Identify Discrepancies

JPM Number: JPM114 Revision Number: 01

Task Number and Title: 999999.19 Review the results of surveillance tests.

K/A Number and Importance:

K/A System	K/A Number	Importance (RO/SRO)	
Generic	2.2.12	3.7	4.1

Suggested Testing Environment: Classroom

Alternate Path: ☐ Yes ☒ No SRO Only: ☒ Yes ☐ No Time Critical: ☐ Yes ☒ No

Reference(s):

- CPS 9011.01 Control Rod/Position Indication Operability, Rev. 31
- CPS 4007.02 Inadvertent Rod Movement, Rev. 13c
- CPS 2203.01 Return Of Out Of Sequence Rods, Rev. 7b

Actual Testing Environment: ☐ Simulator ☐ Control Room ☐ In-Plant ☒ Other

Testing Method: ☐ Simulate ☒ Perform

Estimated Time to Complete: 15 minutes **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

_____

_____

_____

_____

Evaluator's Name (Print): _____

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

Attachment 1 – INITIAL 3D Case (Page 1)

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FOR TRAINING USE ONLY                                                PAGE   1
                            CLINTON CYCLE 18     SEQUENCE NO 23
CORE PARAMETERS             3D MONICORE          today-2xxx xx:xx CALCULATED
POWER  MWT         3125     PERIODIC LOG         today-2xxx xx:xx PRINTED
POWER  MWE         1062                          CASE ID FMLD1950708205855
FLOW   MLB/HR     75.844    CALC RESULTS         RESTART FMLD1950708195845
FPAPDR             0.824                         LPRM SHAPE - FULL CORE
SUBC   BTU/LB     23.49     Keff         1.0000
PR     PSIa      1027.9     XE WORTH %  -2.52    LOAD LINE SUMMARY
CORE   MWD/sT   20850.8     XE/RATED     1.00    CORE POWER          89.9%
CYCLE  MWD/sT    8741.6                          CORE FLOW           89.8%
MCPR               1.268                         LOAD LINE           96.0%

CORRECTION FACTOR:  MFLCPR= 1.000  MFLPD= 1.000  MAPRAT= 0.999
OPTION:  ARTS       2 LOOPS ON     MANUAL FLOW   MCPRLIM= 1.240
                 MOST LIMITING LOCATIONS (NON-SYMMETRIC)
MFLCPR   LOC    MFLPD     LOC       MAPRAT    LOC       PCRAT     LOC
0.978   37-28   0.912   17-22-18    0.821    7-28- 5    0.798   41-28-16
0.976   39-26   0.912    7-28- 5    0.817   15-30-16    0.798   19-28-16
0.975   41-28   0.912   41-28-16    0.817   11-22-13    0.797    7-28- 5
0.973   11-28   0.902   19-28-16    0.816   19-26-16    0.791   39-22-20
0.940   13-32   0.896   15-38-18    0.813   19-30-15    0.782    9-22-13
0.939    9-26   0.895   21-26-16    0.803    7-26-12    0.779   11-20-13
0.937   11-20   0.893   17-26-16    0.802    9-36-13    0.779   17-26-16
0.930   39-22   0.889    9-22-13    0.798   11-30-11    0.777   11-28-15
0.927    7-28   0.889   11-20-13    0.796    9-26- 5    0.776   13-32-16
0.923    9-22   0.888   13-32-16    0.795   39-22-20    0.774   47-26-12

SEQ. A-2     C=MFLCPR D=MFLPD M=MAPRAT P=PCRAT *=MULTIPLE    CORE AVE AXIAL
53                                                          NOTCH REL PW  LOC
                                                             00   0.238   25
49                                                           02   0.446   24
  L                                                          04   0.804   23
45                                                           06   0.963   22
                                                             08   1.056   21
41                          P                                10   1.158   20
  L                                                          12   1.191   19
37                  18     C4       18                      14   1.163   18
                                                             16   1.182   17
33                                                           18   1.220   16
  L                                                          20   1.215   15
29                   4               4                       22   1.187   14
                                                             24   1.212   13
25                                                           26   1.207   12
  L                                                          28   1.181   11
21                  18      4       18                      30   1.170   10
                                                             32   1.166   09
17                    D                                      34   1.131   08
  L                                                          36   1.085   07
13                                                           38   1.072   06
                                                             40   1.050   05
09                                                           42   0.998   04
  L                         M                                44   0.920   03
05    L       L       L       L       L       L              46   0.749   02
   04  08  12  16  20  24  28  32  36  40  44  48  52        48   0.237   01

CORE AVERAGE RADIAL POWER DISTRIBUTION
RING #    1      2      3      4      5      6      7
REL PW  0.890  1.084  1.113  1.102  1.155  1.145  0.727
```

SRRS: 3D.100; There are no retention requirements for this section

Attachment 1 – INITIAL 3D Case (Page 2)

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FOR TRAINING USE ONLY                                                PAGE   2
CLINTON CYCLE 18      INSTRUMENT READINGS/STATUS    SEQUENCE NO 23
                      CALIBRATED LPRM READINGS      today-2xxx xx:xx CALCULATED
                                                    today-2xxx xx:xx PRINTED
    47D         40.1  49.8  55.7  45.9  30.2        CASE ID FMLD1950708205855
      C         57.0  59.8  60.3  64.5  43.0        LPRM SHAPE - FULL CORE
      B         61.2  63.6  60.9  69.2  41.9
      A         51.1  54.9  49.5  63.0  27.7         # OF TIPS REJECTED:  1

    39D  35.4   51.3  58.4  61.1  57.5  46.0         FAILED SENSORS:
      C  55.8   62.7  60.3  59.6  66.5  67.9         LPRM (  2 SIGNAL FAILED)
      B  60.0   65.2  60.7  57.0  66.7  70.2            615A 3815D
      A  52.7   61.1  50.4  44.4  54.7  63.8         LPRM (  0 PANACEA REJECTED)
                                                    OTHER SENSORS (  0 TOTAL)
    31D  39.9   51.6  55.8  56.0C 55.7  48.5         SUB RODS
      C  63.7   71.1  68.3  63.1  72.6P 70.4           NONE
      B  69.6   71.2  66.7  59.2  72.9  73.4
      A  67.6M  69.0  61.1  45.4  71.1  71.8         T = TIP RUN RECOMMENDED
                                                    C = MFLCPR LOCATION
    23D  40.0   54.3  58.1  57.9  59.5  48.0         M = MAPRAT LOCATION
      C  62.2   67.3D 63.7  59.2  66.8  69.0         D = MFLPD LOCATION
      B  67.1   67.1  61.4  56.9  66.6  71.1         P = PCRAT LOCATION
      A  66.5   58.6  48.7  44.2  55.6  66.1         * = MULTIPLE LIMIT

    15D  28.5   46.2  55.5  57.2   0.0  39.4
      C  42.4   63.6  62.8  59.1  65.4  59.1
      B  43.2   68.6  61.9  57.4  67.6  62.2
      A   0.0   61.7  49.9  44.3  64.3  50.4

    07D         29.1  39.3  40.7  36.6
      C         41.4  58.6  56.6  54.5
      B         42.3  64.8  61.8  58.3
      A         31.2  57.2  55.6  48.4

          06    14    22    30    38    46

    CORE SUMMARY
CORE POWER    89.9%   CALC SUB FLOW     91.3%   DP MEAS PSI              15.52
CORE FLOW     89.8%   OPER SUB FLOW     -1.2%   DP CALC PSI              20.52
LOAD LINE    100.0%   FLOW BASIS        MEAS    FEEDWTR FLOW MLB/HR      13.5

    APRM CALIBRATION
          A       B       C       D
READING  100.4   100.6   100.2   100.2
AGAF     0.994   0.992   0.997   0.997

    TIP RUNS RECOMMENDED
STRINGS:         NONE
DRIVE FLOW       MLB/HR
FEEDWTR TEMP     DEG.F
```

Attachment 2 – FINAL 3D Case (Page 1)

```
FOR TRAINING USE ONLY                                                PAGE   1
                            CLINTON CYCLE 18     SEQUENCE NO 23
CORE PARAMETERS             3D MONICORE          today-2xxx xx:xx CALCULATED
POWER  MWT         3125     PERIODIC LOG         today-2xxx xx:xx PRINTED
POWER  MWE         1062                          CASE ID FMLD1950708205855
FLOW   MLB/HR     75.844    CALC RESULTS         RESTART FMLD1950708195845
FPAPDR             0.824                         LPRM SHAPE - FULL CORE
SUBC   BTU/LB      23.49   Keff         1.0000
PR     PSIa       1027.9   XE WORTH %  -2.52    LOAD LINE SUMMARY
CORE   MWD/sT    20850.8   XE/RATED     1.00    CORE POWER         89.9%
CYCLE  MWD/sT     8741.6                        CORE FLOW          89.8%
MCPR               1.268                        LOAD LINE          96.0%

CORRECTION FACTOR:  MFLCPR= 1.000  MFLPD= 1.000  MAPRAT= 0.999
OPTION:  ARTS       DUAL LOOP      MANUAL FLOW   MCPRLIM= 1.240
                 MOST LIMITING LOCATIONS (NON-SYMMETRIC)
MFLCPR   LOC    MFLPD     LOC       MAPRAT    LOC       PCRAT     LOC
0.978   37-28   0.912   17-22-18    0.821    7-28- 5    0.798   41-28-16
0.976   39-26   0.912    7-28- 5    0.817   15-30-16    0.798   19-28-16
0.975   41-28   0.912   41-28-16    0.817   11-22-13    0.797    7-28- 5
0.973   11-28   0.902   19-28-16    0.816   19-26-16    0.791   39-22-20
0.940   13-32   0.896   15-38-18    0.813   19-30-15    0.782    9-22-13
0.939    9-26   0.895   21-26-16    0.803    7-26-12    0.779   11-20-13
0.937   11-20   0.893   17-26-16    0.802    9-36-13    0.779   17-26-16
0.930   39-22   0.889    9-22-13    0.798   11-30-11    0.777   11-28-15
0.927    7-28   0.889   11-20-13    0.796    9-26- 5    0.776   13-32-16
0.923    9-22   0.888   13-32-16    0.795   39-22-20    0.774   47-26-12

SEQ. A-2     C=MFLCPR D=MFLPD M=MAPRAT P=PCRAT *=MULTIPLE    CORE AVE AXIAL
53                                                          NOTCH REL PW  LOC
                                                             00   0.238   25
49                                                           02   0.446   24
  L                                                          04   0.804   23
45                                                           06   0.963   22
                                                             08   1.056   21
41                          P                                10   1.158   20
  L                                                          12   1.191   19
37                  18      C4        18                     14   1.163   18
                                                             16   1.182   17
33                                                           18   1.220   16
  L                                                          20   1.215   15
29                   4                6                     22   1.187   14
                                                             24   1.212   13
25                                                           26   1.207   12
  L                                                          28   1.181   11
21                  18       4        18                     30   1.170   10
                                                             32   1.166   09
17                    D                                      34   1.131   08
  L                                                          36   1.085   07
13                                                           38   1.072   06
                                                             40   1.050   05
09                                                           42   0.998   04
  L                         M                                44   0.920   03
05    L       L       L       L       L       L              46   0.749   02
   04  08  12  16  20  24  28  32  36  40  44  48  52        48   0.237   01

CORE AVERAGE RADIAL POWER DISTRIBUTION
RING #    1      2      3      4      5      6      7
REL PW  0.890  1.084  1.113  1.102  1.155  1.145  0.727
```

SRRS: 3D.100; There are no retention requirements for this section

Attachment 2 – FINAL 3D Case (Page 2)

```
FOR TRAINING USE ONLY                                              PAGE   2
CLINTON CYCLE 18    INSTRUMENT READINGS/STATUS   SEQUENCE NO 23
                    CALIBRATED LPRM READINGS     today-2xxx xx:xx CALCULATED
                                                 today-2xxx xx:xx PRINTED
    47D         40.1  49.8  55.7  45.9  30.2     CASE ID FMLD1950708205855
      C         57.0  59.8  60.3  64.5  43.0     LPRM SHAPE - FULL CORE
      B         61.2  63.6  60.9  69.2  41.9
      A         51.1  54.9  49.5  63.0  27.7       # OF TIPS REJECTED:  1

    39D  35.4  51.3  58.4  61.1  57.5  46.0       FAILED SENSORS:
      C  55.8  62.7  60.3  59.6  66.5  67.9       LPRM (  2 SIGNAL FAILED)
      B  60.0  65.2  60.7  57.0  66.7  70.2          615A 3815D
      A  52.7  61.1  50.4  44.4  54.7  63.8       LPRM (  0 PANACEA REJECTED)
                                                 OTHER SENSORS (  0 TOTAL)
    31D  39.9  51.6  55.8  56.0C 55.7  48.5       SUB RODS
      C  63.7  71.1  68.3  63.1  72.6P 70.4         NONE
      B  69.6  71.2  66.7  59.2  72.9  73.4
      A  67.6M 69.0  61.1  45.4  71.1  71.8       T = TIP RUN RECOMMENDED
                                                 C = MFLCPR LOCATION
    23D  40.0  54.3  58.1  57.9  59.5  48.0       M = MAPRAT LOCATION
      C  62.2  67.3D 63.7  59.2  66.8  69.0       D = MFLPD LOCATION
      B  67.1  67.1  61.4  56.9  66.6  71.1       P = PCRAT LOCATION
      A  66.5  58.6  48.7  44.2  55.6  66.1       * = MULTIPLE LIMIT

    15D  28.5  46.2  55.5  57.2   0.0  39.4
      C  42.4  63.6  62.8  59.1  65.4  59.1
      B  43.2  68.6  61.9  57.4  67.6  62.2
      A   0.0  61.7  49.9  44.3  64.3  50.4

    07D         29.1  39.3  40.7  36.6
      C         41.4  58.6  56.6  54.5
      B         42.3  64.8  61.8  58.3
      A         31.2  57.2  55.6  48.4

          06    14    22    30    38    46

    CORE SUMMARY
CORE POWER    89.9%   CALC SUB FLOW     91.3%   DP MEAS PSI              15.52
CORE FLOW     89.8%   OPER SUB FLOW     -1.2%   DP CALC PSI              20.52
LOAD LINE    100.0%   FLOW BASIS        MEAS    FEEDWTR FLOW MLB/HR      13.5

    APRM CALIBRATION
           A       B       C       D
READING  100.4   100.6   100.2   100.2
AGAF     0.994   0.992   0.997   0.997

    TIP RUNS RECOMMENDED
STRINGS:         NONE
DRIVE FLOW       MLB/HR
FEEDWTR TEMP     DEG.F
```

INITIAL CONDITIONS

You are the CRS.

The plant is operating at 90% power.

The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability surveillance for all fully and partially withdrawn control rods.

INITIATING CUE

Review the completed surveillance for approval. Report when task is complete.

Job Performance Measure

Authorize an Emergency Dose for a Life Saving Operation

JPM Number: JPM450

Revision Number: 03

Date: 10/01/18

Developed By:	Tony Jennings Instructor	10/01/18 Date
Validated By:	Matt Baker SME or Instructor	4/30/19 Date
Reviewed By:	Patt Bulpitt Operations Representative	6/3/19 Date
Approved By:	Tony Jennings Training Department	6/3/19 Date

SRRS: 3D.105 (when utilized for operator initial or continuing training)

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 9 and 13 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, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) 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. If an alternate path is used, the task standard contains criteria for successful completion.

_____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure EP-AA-113 Rev: 13
Procedure EP-AA-113-F-02 Rev: B
Procedure _____ Rev: _____

_____ 10. Verify cues both verbal and visual are free of conflict.

_____ 11. Verify performance time is accurate

_____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

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

Revision Record (Summary)

Revision	Date	Description
00	8/8/14	New JPM.
01	7/16/15	Updated procedure references.
02	6/22/16	Updated procedure references
03	10/01/18	Update JPM format and procedure revisions.

SIMULATOR SETUP INSTRUCTIONS

1. This is an SRO admin JPM, no simulator setup is required.

INITIAL CONDITIONS

An emergency lifesaving operation must be performed. The operation will take approximately 15 minutes in a 200 Rem/hr field. A volunteer, age 45, comes for your approval to perform the lifesaving operation.

The TSC has NOT been activated.

INITIATING CUE

As the Shift Emergency Director, take the actions needed to authorize the lifesaving operation.

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

Information For Evaluator's Use:

Task Standard: The examinee will:

- Determine that the volunteer may receive ≥ 25 Rem TEDE exposure, and
- Perform a brief with the volunteer discussing the potential consequences of the exposure, and
- Obtain a signature from the volunteer acknowledging briefing, and
- Sign EP-AA-113-F-02 Attachment 1 as the Station Emergency Director (SED)

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. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

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.

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
Cue	Provide the examinee with the **Cue Sheet** and copies of the following: • EP-AA-113 Personnel Protective Actions • Partially filled out EP-AA-113-F-02 Authorization for Emergency Exposure				
***1**	Determines which TEDE limit may be exceeded.	**EP-AA-113 Attachment 1** **Reviews EP-AA-113 Attachment 1 Emergency Worker Exposure Limits and Associated Risks. Determines that the volunteer may receive > 25 REM TEDE to perform a life saving operation.** *Evaluator Note – The candidate should check the block for "25 Rem TEDE (Authorized to receive greater than 25 Rem TEDE)" on EP-AA-113-F-02.* *Evaluator Cue – If the examinee asks if you have ever received an emergency exposure in excess of 25 Rem TEDE, reply, "No".*	___	___	___
2	Recognizes volunteer has not signed form for briefing.	Determines volunteer has not been briefed. *Evaluator Cue – I was told that you would perform the brief.*	___	___	___

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
***3**	Briefs volunteer IAW 4.3.2. Obtain volunteer acknowledgement IAW 4.3.3.	**EP-AA-113 Attachment 1** **Examinee briefs the following with the volunteer:** • **50 rad will result in 2% of population affected by prodromal effects.** • **Risk of premature death (deaths per 1000 persons exposed) 5.3%** • **Average years of life lost if premature death occurs: 15 (years)** **Examinee obtains signature of volunteer acknowledging briefing.** *Evaluator Cue – When requested by candidate; sign, date and put current time as the Emergency Worker.*	___ ___	___ ___	___ ___
4	Obtains Radiation Protection (RP) Management Review Signature.	EP-AA-113-F-02 Form is signed by a Radiation Protection Manager. *Evaluator Note – Since the cue states that the TSC has not been activated, the RPM position is not yet filled.* *Evaluator Cue – If/when requested by candidate; sign, date and put current time as RP Manager.*	___	___	___
***5**	Authorizes exposure.	**EP-AA-113-F-02** **Candidate signs as the Station Emergency Director for approval.**	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☐ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: Authorize Emergency Dose for a Life Saving Operation
JPM Number: JPM450 Revision Number: 03
Task Number and Title: 997777.03 Emergency Plan Activities performed by an SRO.
K/A Number and Importance:

K/A System	K/A Number	Importance (RO/SRO)	
Generic	2.3.4	3.2	3.7

Suggested Testing Environment: Classroom
Alternate Path: ☐ Yes ☒ No SRO Only: ☒ Yes ☐ No Time Critical: ☐ Yes ☒ No
Reference(s):

- EP-AA-113 Personnel Protective Actions, Rev. 13
- EP-AA-113-F-02 Authorization for Emergency Exposure, Rev. B

Actual Testing Environment: ☐ Simulator ☐ Control Room ☐ In-Plant ☒ Other

Testing Method: ☐ Simulate ☒ Perform

Estimated Time to Complete: 10 minutes **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

_____

_____

_____

_____

Evaluator's Name (Print): _____

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

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EP-AA-113-F-02
Revision B
Page 1 of 1

AUTHORIZATION FOR EMERGENCY EXPOSURE

Name: Joe Nuke Date / Time: Today Now

Employee ID Number: 123456 Current Annual Exposure: 20 mRem

Reason For Request:

Life saving operation

REQUESTING AUTHORIZATION TO EXCEED:

- ☐ 5 Rem TEDE (Authorized to receive greater than 5 Rem TEDE but less than 10 Rem TEDE)
- ☐ 10 Rem TEDE (Authorized to receive greater than 10 Rem TEDE but less than 25 Rem TEDE)
- ☐ 25 Rem TEDE (Authorized to receive greater than 25 Rem TEDE)

* Emergency Worker Signature Date / Time

* Emergency Worker Exposure Limits and Associated Risks (EP-AA-113 Attachment 1) have been reviewed and the potential health affects are understood.

Rad. Protection Management (Review) Date / Time

Station Emergency Director (Authorization) Date / Time

The Shift Manager (Shift Emergency Director) may approve prior to transferring Command and Control to the Station Emergency Director.

Document Retention SRRS ID – 5B.100

INITIAL CONDITIONS

An emergency lifesaving operation must be performed. The operation will take approximately 15 minutes in a 200 Rem/hr field. A volunteer, age 45, comes for your approval to perform the lifesaving operation.

The TSC has NOT been activated.

INITIATING CUE

As the Shift Emergency Director, take the actions needed to authorize the lifesaving operation.

Job Performance Measure

EAL Determination with NARS

JPM Number: JPM018

Revision Number: 06

Date: 10/01/18

Developed By:	Tony Jennings Instructor	10/01/18 Date
Validated By:	Matt Baker SME or Instructor	4/30/19 Date
Reviewed By:	Pat Bulpitt Operations Representative	6/3/19 Date
Approved By:	Tony Jennings Training Department	6/3/19 Date

SRRS: 3D.105 (when utilized for operator initial or continuing training)

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 9 and 13 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, simulator, or other)

_____ 4. Initial setup conditions are identified.

_____ 5. Initiating cue (and terminating cue if required) 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. If an alternate path is used, the task standard contains criteria for successful completion.

_____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
Procedure OP-CL-108-101-1003-F-05 Rev: 7
Procedure EP-AA-1003 Addendum 3 Rev: 2
Procedure EP-AA-112-100-F-01 Rev: Z
Procedure EP-AA-112-F-09 Rev: F
Procedure EP-MW-114-100 Rev: 18
Procedure EP-MW-114-100-F-01 Rev: J
Procedure CPS 5067.03 Rev: 32c

_____ 10. Verify cues both verbal and visual are free of conflict.

_____ 11. Verify performance time is accurate

_____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.

_____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

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

SRRS: 3D.100; There are no retention requirements for this section

Revision Record (Summary)

Revision	Date	Description
00	07/23/09	New JPM.
01	6/4/12	Updated format and EAL changes.
02	8/5/14	Updated format and procedure references
03	6/22/15	Updated format and procedure references
04	6/21/16	Minor changes and EAL change.
05	09/21/17	Minor editorial change
06	10/01/18	Update JPM format and procedure revisions.

SIMULATOR SETUP INSTRUCTIONS

1. This is an SRO admin JPM, no simulator setup is required.

INITIAL CONDITIONS

Refueling operations are in progress.

- Division 1 AC and DC Bus outages are in progress.
- The Division 2 Battery Charger Feed Breaker tripped on high current and the voltage on the Division 2 DC bus has lowered to 105 VDC.
- There are reports of soot marks around the Div 2 Battery Charger output breaker but no fire.

A RO reports – Hi-Hi Level Drywell Sump Equip/Floor Drain Annunciator (5067-3L).

INITIATING CUE

This JPM is time critical.

You are to determine the appropriate Emergency Classification for these plant conditions and complete the NARS form. Activation of the ERO will be performed by the ERO Communicator.

Submit NARS Form to ERO Communicator when completed.

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

Information For Evaluator's Use:

Task Standard: The examinee will:

- declare the correct EAL (CU3) within 15 minutes of acknowledgement of the initiating cue, and
- correctly fill out blocks 2, 3, 4, 5, 7, 8, and 9 on EP-MW-114-100-F-01, Nuclear Accident Reporting System (NARS) Form within 13 minutes of the CU3 declaration.

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. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

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.

JPM Start Time: _____

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
Cue	Provide the examinee with the **Cue Sheet** and copies of the following: • Shift Emergency Director binder • EP-AA-1003 Addendum 3 EALs/Bases • EP-MW-114-100-F-01 Nuclear Accident Reporting System (NARS) Form • CPS 5067-3L Hi-Hi Level Drywell Sump Equip/Flr Drn ARP				
***1**	Examinee evaluates EP-AA-1003 Addendum 3 to determine if EALs have been exceeded.	**Examinee reviews EP-AA-1003 Addendum 3 Cold Matrix EALs and determines that the CU3 (Loss of vital DC power for 15 minutes or longer) EAL has been exceeded.** *Evaluator Cue: If asked, provide the following indications:* • *No change in RPV level* • *DW Equipment Drain Sump Pump – red light OFF, green light ON* • *DW Floor Drain Sump Pump – red light ON, green light OFF* • *Computer Point RE-BC402 (DW EQUIP DRN SUMP LVL) = 0.0 NOT HI-HI* • *Computer Point RF-BC402 (DW FLOOR DRN SUMP LVL) = 1.0 HI-HI*	___	___	___

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
***1** (cont.)		*Evaluator Note: A 15-minute clock to declare the EAL starts as soon as the initiating cue is read and acknowledged via 3-part communication by the examinee. Record the time of the declaration below. The time declared must be no more than 15 minutes from the JPM Start Time.* *Record JPM Start Time* _____ *Record Time EAL declared* _____ *NOT longer than 15 minutes between the time EAL declared and JPM start time:* *YES / NO*			

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*2	Examinee initiates required State/ Local notifications within 15 minutes of the event classification.	EP-AA-112-100-F-01 Step 1.1.G **Examinee fills out EP-MW-114-100-F-01, Nuclear Accident Reporting System (NARS) Form.** *Evaluator Note: Refer to Attachment 1 for NARS form key.* *Evaluator Note: Only the information in Blocks 2, 3, 4, 5, 7, 8, and 9 is critical (boxed items on the key). The remaining blocks, if not filled out correctly are considered competency hits and not failures of critical tasks.* *Evaluator Cue: If asked, provide the following indications:* • Block 5: No upward trend on PPDS Total Noble Gas Release Rate. • Block 7: 89 degrees • Block 8: 12 mph • A verifier is NOT available. *Evaluator Note: A 13 minute clock to provide the NARS form for transmittal starts as soon as the EAL declaration has been made. Record the time of the declaration below.* *Record Time EAL Declared _____ (from page 7)* *Record Time NARS form provided to the State Communicator for transmittal (step 4.2.14 signed by candidate) _____* *Verify NOT longer than 13 minutes has elapsed between the time EAL Declared and NARS form provided to the State Communicator for transmittal:* *YES / NO*	___	___	___
CUE	Cue the examinee that the JPM is complete.				

JPM Stop Time: _____

Attachment 1 – EP-MW-114-100-F-01 (KEY)

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EP-MW-114-100-F-01
Revision H
Page 1 of 2

NUCLEAR ACCIDENT REPORTING SYSTEM (NARS) FORM

OR ELECTRONIC FACSIMILE

UTILITY MESSAGE NO. 1 STATE MESSAGE NO. N/A

1. **STATUS**
   - [A] ACTUAL
   - [X] DRILL/EXERCISE

2. **STATION**
   - [A] BRAIDWOOD
   - [X] CLINTON
   - [B] BYRON
   - [D] DRESDEN
   - [E] LASALLE
   - [F] QUAD CITIES
   - [G] ZION

3. **ONSITE CONDITION**
   - [X] UNUSUAL EVENT
   - [B] ALERT
   - [C] SITE AREA EMERGENCY
   - [D] GENERAL EMERGENCY
   - [E] RECOVERY
   - [F] TERMINATED

4. **ACCIDENT CLASSIFIED**
   - TIME (3[A-E]): Classification time
   - DATE (3[A-E]): Today's date
   - EAL#: CU3

ACCIDENT TERMINATED
- TIME (3[F]): N/A
- DATE (3[F]): N/A

5. **RELEASE STATUS**
   - [X] NONE
   - [B] OCCURRING
   - [C] TERMINATED

6. **TYPE OF RELEASE**
   - [X] NOT APPLICABLE
   - [B] GASEOUS
   - [C] LIQUID

7. **WIND DIR**
   89
   (DEGREES FROM)

8. **WIND SPEED**
   - [A] METERS/SEC.:
   - [X] MILES/HR.: 12

9. **RECOMMENDED ACTIONS**
   UTILITY RECOMMENDATION
   - [X] NONE (UE, Alert and SAE Only)

---------- (GE Only) ----------

- [B] SHELTER ILLINOIS SUB-AREAS: _____
  AND ADVISE REMAINDER OF THE EPZ TO MONITOR AND PREPARE
- [C] SHELTER IOWA SUB-AREAS: _____
  AND ADVISE REMAINDER OF THE EPZ TO MONITOR AND PREPARE
- [D] EVACUATE ILLINOIS SUB-AREAS: _____
  AND ADVISE REMAINDER OF THE EPZ TO MONITOR AND PREPARE
- [E] EVACUATE IOWA SUB-AREAS: _____
  AND ADVISE REMAINDER OF THE EPZ TO MONITOR AND PREPARE

STATE RECOMMENDATION
- [F] NONE
- [G] SHELTER SUB-AREAS: _____
- [H] EVACUATE SUB-AREAS: _____
- [I] RECOMMEND POTASSIUM IODIDE (KI) PER PROCEDURES
- [J] COMMENCE RETURN OF PUBLIC
- [K] OTHER _____

10. **ADDITIONAL INFORMATION** None

Verified With: N/A Approved By: Candidate Signature

11. **TRANSMITTED BY:** NAME / PHONE NUMBER / TIME/DATE
    - [A] EXELON:
    - [B] STATE:
    - [C] COUNTY:

12. **RECEIVED BY:** NAME / ORGANIZATION / TIME/DATE

Document Retention SRRS-ID – 5B.100

JPM SUMMARY

Operator's Name: _____ **Emp. ID#**: _____

Job Title: ☐ EO ☐ RO ☐ SRO ☐ FS ☐ STA/IA ☐ SRO Cert

JPM Title: EAL Determination with NARS
JPM Number: JPM018 Revision Number: 06
Task Number and Title: 999999.24 Preparation of notification form.
K/A Number and Importance:

K/A System	K/A Number	Importance (RO/SRO)	
Generic	2.4.30	2.7	4.1

Suggested Testing Environment: Classroom
Alternate Path: ☐ Yes ☒ No SRO Only: ☒ Yes ☐ No Time Critical: ☒ Yes ☐ No
Reference(s):

- OP-CL-108-101-1003-F-05 Shift Manager (SED) – EAL Guide, Rev 7
- EP-AA-1003 Addendum 3 Radiological Emergency Action Levels for Clinton Station, Rev. 2
- EP-AA-112-100-F-01 Shift Emergency Director Checklist, Rev. Y
- EP-AA-112-F-09 Emergency Public Address Announcements, Rev. F
- EP-MW-114-100 Midwest Region Offsite Notifications, Rev. 16
- EP-MW-114-100-F-01 Nuclear Accident Reporting System (NARS) Form, Rev. H
- CPS 5067.03 Alarm Panel Annunciators – Row 3, Rev 32c (Page 11 of 11 ONLY)

Actual Testing Environment: ☐ Simulator ☐ Control Room ☐ In-Plant ☒ Other

Testing Method: ☐ Simulate ☒ Perform

Estimated Time to Complete: 20 minutes **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

_____

_____

_____

_____

Evaluator's Name (Print): _____

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

SRRS: 3D.105 (when utilized for operator initial or continuing training)

INITIAL CONDITIONS

Refueling operations are in progress.

- Division 1 AC and DC Bus outages are in progress.
- The Division 2 Battery Charger Feed Breaker tripped on high current and the voltage on the Division 2 DC bus has lowered to 105 VDC.
- There are reports of soot marks around the Div 2 Battery Charger output breaker but no fire.

A RO reports – Hi-Hi Level Drywell Sump Equip/Floor Drain Annunciator (5067-3L).

INITIATING CUE

This JPM is time critical.

You are to determine the appropriate Emergency Classification for these plant conditions and complete the NARS form. Activation of the ERO will be performed by the ERO Communicator.

Submit NARS Form to ERO Communicator when completed.