	JOB PERFORMANCE MEASURE (JPM)			
SITE:	Kewaunee Power	Station		
JPM TITLE:	Locally Isolate Dil	Locally Isolate Dilution Flow Paths		
JPM NUMBER:	AO-036-JP09A		REV. C	
RELATED PRA INFORMATION:	None			
TASK NUMBER(S) / TASK TITLE(S):	0360090404 – Re shutdown	0360090404 – Respond to inadvertent Boron Dilution while at hot or cold shutdown		
K/A NUMBERS:	004 2.1.30 - CVC controls IMP 4.4		and operate components, including	local
APPLICABLE METH	OD OF TESTING:			
	Discussion:	Simulate	e/walkthrough: X Perform:	
EVALUATION LOCA	ATION: In-Plant:	X	Control Room:	
	Simulator:		Other: Classroom	
	Lab:		Glacoroom	
Time for Comp	oletion: 10	Minutes	Time Critical: No	
Alternate Path	/ Faulted: No			
TASK APPLICABIL	ITY: RO/SRO			<u> </u>
Additional signatures	may be added as nee	ded.		_
Developed by:	Andrew Fahrenkrug	/s Instructor	01/21/2011 Date	_
		mon doto!	54.0	
Validated by:	Andrew Fahrenkrug	/s	01/21/2011	
		lation Instructor ion Checklist, Attac	Date hment 1)	
Approved by:		/s ning Supervisor	01/24/2011 Date	_
	Hall	iiig oupei visoi	Dale	
Approved by:	Mark Goolsbey	/s	01/25/2011	
		y Representative	Date	

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMI-L-RO/SRO-S-01242011-109

JPM Number:	AO-036-JP09A
JPM Title:	Locally Isolate Dilution Flow Paths
Examinee:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE I	RESULTS: SAT: UNSAT:
COMMENTS/FEE	DBACK: (Comments shall be made for any steps graded unsatisfactory).
EVALUATOR'S SI	GNATURE:

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMI-L-RO/SRO-S-01242011-109

JPM BRIEFING/TURNOVER

Read to Examinee:

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

AOP and EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

- 1. Human Performance attributes should be visible. The student may use STAR and or request Peer Checks.
- 2. If peer checks are requested, the Instructor should reply "Peer Check Acknowledged". The instructor will acknowledge use of the human performance tool and not validate the proper component manipulation.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

Evaluator Note: This JPM can begin from any location in the plant.

Evaluator Note: The valves operated during this JPM are as follows

- MU-1025 Makeup water to Blender in the RCA next to SI pump A
- MU-1024 Makeup Water to Mixing Tank Isol in the RCA East Wall by SI Pump A
- CVC-423 Mixing Tank to Charging Pump Suction Line Isol RCA East Wall SI Pump A
- MU-1031A/B RMW to 1A/B Boric Acid Transfer Pump Manifold above BATP-A/B

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMI-L-RO/SRO-S-01242011-109

Date: April 2010

INITIAL CONDITIONS:

- You are an extra operator on shift.
- The plant is in Hot Shutdown.
- The crew is responding to inadvertent boron dilution.
- OP-KW-AOP-RC-006, Inadvertent Boron Dilution is in progress.
- A boration of the RCS has been initiated per OP-KW-NOP-CVC-001.

The Steps in this JPM SHALL BE SIMULATED

INITIATING CUES (IF APPLICABLE): The Unit supervisor directs you to LOCALLY verify dilution flow path isolation valves closed per Step 2.b of OP-KW-AOP-RC-006, Inadvertent Boron Dilution.

EVALUATOR CUE— When the performer has demonstrated how to locate the procedure then hand the performer a copy of the procedure..

INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK

Do you have any questions before we begin? - Answer applicable questions.

Let's Begin

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMI-L-RO/SRO-S-01242011-109

JPM PERFORMANCE INFORMATION

Required Materials:	quired Materials: OP-KW-AOP-RC-006, Inadvertent Boron Dilution			
General References: OP-KW-AOP-RC-006, Inadvertent Boron Dilution Rev 0				
Task Standards:	All dilution path valves verified closed.			
Start Time:	<u>—</u>			
the examinee.	g "Evaluator Cues" to the examinee, care must be exercised to avoid prompting Typically cues are only provided when the examinee's actions warrant information (i.e. the examinee looks or asks for the indication).			
addresses one	.16.06, ATTACHMENT A for Time Dependent Operator Actions. If the JPM of these tasks and the JPM is determined to be time critical or contain time ance steps, then GNP-05.16.06 will be included in the General References 765]			
	<u> </u>			
NOTE: Critical steps are marked with a "Yes" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.				
Performance Step: 1 Critical: <u>No</u>	Refer to AOP-RC-006 Step 2.b			
Standard:	Refer to AOP-RC-006 step2.b.			
Evaluator Cue:	When the performer demonstrates how to locate the procedure then hand them a copy of AOP-RC-006.			

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMI-L-RO/SRO-S-01242011-109

Date: April 2010

SATISFACTORY UNSATISFACTORY [

Performance:

Comments:

AOP-RC-006, Step 2.b:
ISOLATE Dilution Paths:
Locally VERIFY the following dilution flow path isolation valves CLOSED:MU-1025, Makeup Water to Blender
VERIFY MU-1025 CLOSED by checking valve hand wheel is rotated fully clockwise and valve stem is down.
The valve is located at the CVCS blender north side, just south of the SI Pump A motor.
The stem is fully down and the hand wheel is tight when rotated clockwise.
SATISFACTORY UNSATISFACTORY

Performance Step: 3 Critical: <u>Yes</u>	AOP-RC-006, Step 2.b: ISOLATE Dilution Paths: Locally VERIFY the following dilution flow path isolation valves CLOSED: • MU-1024, Makeup Water to Mixing Tank Isol
Standard:	CLOSE MU-1024 by rotating the valve hand wheel fully clockwise.
Evaluator Note:	The valve is located at the inlet of the Chem Mixing Tank just south of the SI Pump A motor and along the EAST wall. Normal position is CLOSED, this valve is out of position for this JPM.
Evaluator Cue:	Valve stem is out (up). As clockwise hand wheel operation is indicated, the hand wheel rotates until NO further motion occurs. The stem is fully down.
Performance: Comments:	SATISFACTORY UNSATISFACTORY

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMI-L-RO/SRO-S-01242011-109

Performance Step: 4 Critical: <u>Yes</u>	AOP-RC-006, Step 2.b: ISOLATE Dilution Paths: Locally VERIFY the following dilution flow path isolation valves CLOSED: CVC-423, Mixing Tank to Charging Pump Suct Line Isol
Standard:	CLOSE CVC-423 by rotating the valve hand wheel fully clockwise.
Evaluator Note:	The valve is located at the inlet of the Chem Mixing Tank just south of the SI Pump A motor and along the EAST wall. Normal position is CLOSED, this valve is out of position for this JPM.
Evaluator Cue:	Valve stem is out (up).
Evaluator Guo.	valvo stom to out (up).
	As clockwise hand wheel operation is indicated, the hand wheel rotates until NO further motion occurs. The stem is fully down.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: 5 Critical: <u>No</u>	AOP-RC-006, Step 2.b: ISOLATE Dilution Paths: Locally VERIFY the following dilution flow path isolation valves CLOSED: MU-1031A, RMW to 1A Boric Acid Transfer Pump
Standard:	VERIFY MU-1031A CLOSED by checking valve hand wheel is rotated fully clockwise.
Evaluator Note:	The valve is located in the "manifold" above BATP A.
Evaluator Cue:	As clockwise handwheel operation is indicated, the handwheel is tight when rotated clockwise.
	tight when rotated clockwise.
Performance:	SATISFACTORY UNSATISFACTORY
Performance: Comments:	<u> </u>

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMI-L-RO/SRO-S-01242011-109

	o coo or continuous bliation riow ratio, riev o
Performance Step: 6 Critical: <u>No</u>	AOP-RC-006, Step 2.b: ISOLATE Dilution Paths: Locally VERIFY the following dilution flow path isolation valves CLOSED • MU-1031B, RMW to 1B Boric Acid Transfer Pump
Standard:	VERIFY MU-1031B CLOSED by checking valve hand wheel is rotated fully clockwise.
Evaluator Note:	The valve is located in the "manifold" above BATP B.
Evaluator Cue:	As clockwise handwheel operation is indicated, the handwheel is tight when rotated clockwise.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: 7 Critical: <u>No</u>	AOP-RC-006, Step 2.b: Report Step 2.b of OP-KW-AOP-RC-006 complete to the control room.
Standard:	Report Step 2.b of OP-KW-AOP-RC-006 complete to the control room.
Evaluator Cue:	Acknowledge completion of step 2.b of OP-KW-AOP-RC-006.
Performance: Comments:	SATISFACTORY UNSATISFACTORY
Terminating Cues: Cor	mpletion of Step 2.b of OP-KW-AOP-RC-006
Stop Time:	

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMI-L-RO/SRO-S-01242011-109

uring the	evaluation, the trainee:		
•	Performed the task correctly and in accordance with procedure usage and adherence requirements.	☐ Yes	☐ No
•	Never put anyone's safety at risk.	☐ Yes	☐ No
•	Never put equipment reliability at risk.	☐ Yes	☐ No
•	Never violated radiological work practices.	☐ Yes	☐ No
•	Demonstrated effective use of event-free human performance tools.	☐ Yes	☐ No

Note: The above information may be used in conjunction with the trainees' performance to determine JPM failure if the trainees' actions would have endangered the health and safety of the public, plant workers, themselves or damage plant equipment even if all critical tasks are met.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMI-L-RO/SRO-S-01242011-109

Date: April 2010

TURNOVER SHEET

INITIAL CONDITIONS:

- You are an extra operator on shift.
- The plant is in Hot Shutdown.
- The crew is responding to inadvertent boron dilution.
- OP-KW-AOP-RC-006, Inadvertent Boron Dilution is in progress.
- A boration of the RCS has been initiated per OP-KW-NOP-CVC-001.

The Steps in this JPM SHALL BE SIMULATED

INITIATING CUES (IF APPLICABLE): The Unit supervisor directs you to LOCALLY verify dilution flow path isolation valves closed per Step 2.b of OP-KW-AOP-RC-006, Inadvertent Boron Dilution.

INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMI-L-RO/SRO-S-01242011-109

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REV	/IEW STATEMENTS	YES	NO	N/A		
1.						
2.	Has the JPM been reviewed and validated by SMEs?					
3.	Can the required conditions for the JPM be appropriately					
	established in the simulator if required?					
4.	Does the performance steps accurately reflect trainee's ac	tions in	\boxtimes			
	accordance with plant procedures?					
5.	Is the standard for each performance item specific as to w		\boxtimes			
	controls, indications and ranges are required to evaluate if	the				
	trainee properly performed the step?					
6.	Has the completion time been established based on valida	tion data	\square			
	or incumbent experience?			_		
7.	If the task is time critical, is the time critical portion based u	nogu				
	actual task performance requirements?					
8.	Is the Licensee level appropriate for the task being evaluate	ed if		П	П	
	required?			_		
9.	Is the K/A appropriate to the task and to the licensee level	if	\boxtimes			
	required?				_	
10.						
	10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?					
11. Have all special tools and equipment needed to perform the task					\boxtimes	
	been identified and made available to the trainee?					
12.						
	trainee?					
13.	13. Have all required cues (as anticipated) been identified for the					
evaluator to assist task completion?						
ΔII α	All quantions/statements must be answered "VES" or "NI/A" or the IDM is not valid for use. If all					
All questions/statements must be answered "YES" or "N/A" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as						
written. The individual(s) performing the validation shall sign and date this form.						
whiten. The marriadal(3) penorming the validation shall sign and date this form.						
Chris Brandt 01/21/2011						
Validation Personnel /Date Validation Personnel/Date						
Validation Personnel /Date Validation Personnel/Date						
validation reisonnei/Date validation reisonnei/Date						
Valid	dation Personnel /Date Validation Personnel/Date	;				
Validation Personnel /Date Validation Personnel/Date						

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMI-L-RO/SRO-S-01242011-109

Date: April 2010

Historical Record:

Rev. A:

- Updated Task number. Replaces JPM AO-FRS-JP01B.
- Updated Task Number.
- Changed procedure to reflect task number.

Rev B

Update to Job Aid 03-007 form.

Rev C

- Added note that JPM can begin from anywhere in the plant.
- Added cue for obtaining the procedure at the beginning of the JPM
- Added evaluator note to beginning to describe all the valves to be operated
- Removed JPM not time critical from the initial conditions

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMI-L-RO/SRO-S-01242011-109

Date: April 2010

•	JOB PERF	ORMANCE ME	EASURE (JPM	1)	
SITE:	Kewaunee Power S	Station			
JPM TITLE:	Remove Pressurize	Remove Pressurizer PORV Fuses			
JPM NUMBER:	RO-E07-JP01H		REV . C		
RELATED PRA INFORMATION:	None				
TASK NUMBER(S) / TASK TITLE(S):	E070010501 Resp	ond to a Fire in a De	edicated Zone		
K/A NUMBERS:	2.4.25 Knowledge	of Fire Protection F	Procedures IMP 3.	3 / 3.7	
APPLICABLE METH	OD OF TESTING:				
	Discussion:	Simulate	/walkthrough:	X Perform:	
EVALUATION LOCA	ATION: In-Plant:	X	Control Room:		
	Simulator:		Other:		
	Lab:		Classroom		
Time for Comp	oletion: 6	Minutes	Time Critical:	Yes	
Alternate Path	/ Faulted: No				
TASK APPLICABIL	ITY: RO/SRO				_
Additional signatures	may be added as need	ed.			
Developed by:	Andrew Fahrenkrug	/s Instructor		01/20/2011 Date	_
		mstructor		Date	
Validated by:	Andrew Fahrenkrug	/s		01/20/2011	
		ation Instructor on Checklist, Attach	mont 1)	Date	
	(See JFIVI Validation	on Checkiist, Attach	ment i)		
Approved by:	Randy Hasting	/s		01/24/2011	
		ing Supervisor		Date	
Approved by:	Mark Goolsbey	/s		01/25/2011	
	Facility	Representative		Date	

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

JPM Number:	RO-E07-JP01H
JPM Title:	Remove Pressurizer PORV Fuses
Examinee:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE I	RESULTS: SAT: UNSAT:
COMMENTS/FEE	DBACK: (Comments shall be made for any steps graded unsatisfactory).
EVALUATOR'S SI	GNATURE:

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

JPM BRIEFING/TURNOVER

Read to Examinee:

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

AOP and EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

- 1. Human Performance attributes should be visible. The student may use STAR and or request Peer Checks.
- 2. If peer checks are requested, the Instructor should reply "Peer Check Acknowledged". The instructor will acknowledge use of the human performance tool and not validate the proper component manipulation.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

IMPORTANT

CONTACT THE SHIFT MANAGER PRIOR TO STARTING THE JPM AND GET PERMISSION TO ENTER THE RELAY ROOM AND OPEN RELAY RACK DOORS 171, 174 AND 176. THERE ARE ONLY FUSES IN THESE PANELS AND YOU WILL NOT BREAK THE PLANE DURING PERFORMANCE OF THE JPM.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Date: April 2010

INITIAL CONDITIONS:

- There is a fire in a Dedicated Zone.
- The crew is performing OP-KW-AOP-FP-003, Fire In Dedicated Fire Zone.
- The following items have been distributed to control Operator B per AOP-FP-003
 - Emergency keyring from CAS
 - > Two Way Radio
 - Appendix R bag
- The crew entered OP-KW-AOP-FP-003 one minute ago.
- The SRO/US has provided you with a field copy of AOP-FP-003

The Steps in this JPM SHALL BE SIMULATED unless directed otherwise. THIS TASK IS TIME CRITICAL.

INITIATING CUES (IF APPLICABLE): You are Control Operator B and have been dispatched to Perform Attachment B of OP-KW-AOP-FP-003.

EVALUATOR – Hand the performer OP-KW-AOP-FP-003.

INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK

Do you have any questions before we begin? - Answer applicable questions.

Lets Begin

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

JPM PERFORMANCE INFORMATION

Required Materials: OP-KW-AOP-FP-003, Fire in Dedicated Fire Zone

Fuses pullers, located in the Relay Room by the RR Doors. The operator should

get these during the performance of the JPM.

General References: OP-KW-AOP-FP-003, Fire in Dedicated Fire Zone, Rev. 6

Task Standards: Fuses removed per Attachment B Step B1 of OP-KW-AOP-FP-003.

Start Time:	

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant

receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Review GNP-05.16.06, ATTACHMENT A for Time Dependent Operator Actions. If the JPM addresses one of these tasks and the JPM is determined to be time critical or contain time critical performance steps, then GNP-05.16.06 will be included in the General References below. [OTH 12765]

NOTE: Critical steps are marked with a "Yes" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Performance Step: 1 Critical: Yes Time Critical		AOP-FP-003, Attachment B, Step B1.a. REMOVE the following Fuses: In RR-171, REMOVE PRZR PORV B normal control fuses • Ckt 13 for PR-2B
Step 1 and 3 Must be completed within 6 minutes		
Standard:	(C)	 Locate RR-171. Identify fuses for Ckt 13 for PR-2B. Remove fuses for Ckt 13 for PR-2B in RR-171.
Evaluator Cue:		WHEN the performer locates RR-171 and indicates that they would open the door for RR-171, THEN INFORM the performer to OPEN the relay rack door AND NOT to break the electrical plane. WHEN the performer locates the fuses and indicates removal, THEN state "The fuses are removed."
		<u>AFTER</u> the performer has removed the FUSES, <u>IF</u> they look at the outside of the RR door then indicate that the associated Red indicating light for the circuit is <u>NOT</u> LIT.
Performance:		SATISFACTORY UNSATISFACTORY
Comments:		

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Performance Step: 2 Critical: <u>Yes</u>	AOP-FP-003, Attachment B, Step B1.b. REMOVE the following Fuses: In RR-174, REMOVE SI Pump Makeup To Accumulator Fuses • Ckt 27 for SI-101A/B
Standard: (C)	 Locate RR-174. Identify fuses for Ckt 27 for SI-101A/B. Remove fuses for Ckt 27 for SI-101A/B in RR-174.
Evaluator Cue:	WHEN the performer locates RR-174 and indicates that they would open the door for RR-174, THEN INFORM the performer to OPEN the relay rack door AND NOT to break the electrical plane. WHEN the performer locates the fuses and indicates removal, THEN state "The fuses are removed." AFTER the performer has removed the FUSES, IF they look at the outside of the RR door then indicate that the associated Red indicating light for the circuit is NOT LIT.
Performance: Comments:	SATISFACTORY UNSATISFACTORY

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Performance Step: 3 Critical: Yes Time Critical Step 1 and 3 Must be completed within 6 minutes	AOP-FP-003, Attachment B, Step B1.c. REMOVE the following Fuses: In RR-176, REMOVE PRZR PORV A Fuses • Ckt 12 for PR-2A
Standard:	 Locate RR-176. Identify fuses for Ckt 12 for PR-2A. Remove fuses for Ckt 12 for PR-2A in RR-176.
Evaluator Cue:	WHEN the performer locates RR-176 and indicates that they would open the door for RR-176, THEN INFORM the performer to OPEN the relay rack door AND NOT to break the electrical plane. WHEN the performer locates the fuses and indicates removal, THEN state "The fuses are removed." AFTER the performer has removed the FUSES, IF they look at the outside of the RR door then indicate that the associated Red indicating light for the circuit is NOT LIT.
Evaluator Note:	Rubber electrical safety gloves are not required for performance of fuse removal with the fuse pullers. The performer may still indicate that they would wear electrical safety class 0 gloves
Performance: Comments:	SATISFACTORY UNSATISFACTORY

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Performance Step: 4 Critical: <u>Yes</u>		AOP-FP-003, Attachment B, Step B1.d. REMOVE the following Fuses: In RR-176, REMOVE RX/PRZR Head Vent to Containment Fuses • Ckt 39 for RC-49
Standard:	(C)	 Locate RR-176. Identify fuses for Ckt 39 for RC-49. Remove fuses for Ckt 39 for RC-49 in RR-176.
Evaluator Cue:		WHEN the performer locates RR-176 and indicates that they would open the door for RR-176, THEN DO NOT let the performer open the door for RR-176. WHEN the performer locates the fuses and indicates removal, THEN state "The fuses are removed." AFTER the performer has removed the FUSES, IF they look at the outside of the RR door then indicate that the associated Red indicating light for the circuit is NOT LIT.
Performance: Comments:		SATISFACTORY UNSATISFACTORY
Terminating Cues:		en the performer has removed all the Fuses in step B1 of Attachment B in KW-AOP-FP-003.
Stop Time:		

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

During the	evaluation, the trainee:		
•	Performed the task correctly and in accordance with procedure usage and adherence requirements.	☐ Yes	□No
•	Never put anyone's safety at risk.	☐ Yes	☐ No
•	Never put equipment reliability at risk.	☐ Yes	☐ No
•	Never violated radiological work practices.	☐ Yes	☐ No
•	Demonstrated effective use of event-free human performance tools.	☐ Yes	☐ No

Note: The above information may be used in conjunction with the trainees' performance to determine JPM failure if the trainees' actions would have endangered the health and safety of the public, plant workers, themselves or damage plant equipment even if all critical tasks are met.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Date: April 2010

TURNOVER SHEET

INITIAL CONDITIONS:

- There is a fire in a Dedicated Zone.
- The crew is performing OP-KW-AOP-FP-003, Fire In Dedicated Fire Zone.
- The crew entered and completed OP-KW-AOP-FP-003 up to and including Step 4.
- The crew entered OP-KW-AOP-FP-003 one minute ago.
- The SRO/US has provided you with a field copy of AOP-FP-003

The Steps in this JPM SHALL BE SIMULATED unless directed otherwise. THIS TASK IS TIME CRITICAL.

INITIATING CUES (IF APPLICABLE): You are Control Operator B and have been dispatched to Perform Attachment B of OP-KW-AOP-FP-003.

INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the signature page filled in correctly?			
2. Has the JPM been reviewed and validated by SMEs?			
3. Can the required conditions for the JPM be appropriately established in the simulator if required?			
4. Does the performance steps accurately reflect trainee's actions in			
accordance with plant procedures?			
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?			
6. Has the completion time been established based on validation dat or incumbent experience?	a 🛚		
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?			
8. Is the Licensee level appropriate for the task being evaluated if required?			
9. Is the K/A appropriate to the task and to the licensee level if required?			
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?			
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?			
12. Are all references identified, current, accurate, and available to the trainee?	e 🗵		
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?			
All questions/statements must be answered "YES" or "N/A" or the JPM is not valid for use. If all questions/statements are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation shall sign and date this form. Chris Brandt 01/20/2011			
Validation Personnel/Date Validation Personnel/Date			
Validation Personnel /Date Validation Personnel/Date			
Validation Personnel/Date Validation Personnel/Date			
Validation Personnel /Date Validation Personnel /Date			

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Historical Record:

Rev A

New.

Rev B

Updated to Job Aid Form 03-007

Rev C

- Updated initial conditions to state items in step 4 of AOP-FP-003 have been distributed rather than the step has been completed
- Updated the initial conditions to add "The SRO/US has provided you with a field copy of AOP-FP-003
- Added evaluator note to step 2 that electrical safety gloves class 0 are not required for the performance of removing fuses.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMJ-L-RO/SRO-S-01242011-110

Date: April 2010

	JOB PERFORMANCE MEASURE (JPM)			
SITE:	Kewaunee Power S	Station		
JPM TITLE:	Emergency Shutdo	own of Diesel Gene	rator B	
JPM NUMBER:	AO-010-JP021		REV . C	
RELATED PRA INFORMATION:			power CDF = 3.6E-5/ power LERF = 1.6E-6	
TASK NUMBER(S) / TASK TITLE(S):	0100020504 / Perf	orm a Diesel Gener	rator Emergency Shu	down
K/A NUMBERS:	ED/G System and the f	ollowing systems: Diesel	ns and/or cause-effect rela fuel oil supply system. IN , including local controls. I	IP 3.6 / 4.0
APPLICABLE METH	OD OF TESTING:			
	Discussion:	Simulate	/walkthrough: X	Perform:
EVALUATION LOCA	TION: In-Plant:	X	Control Room:	
	Simulator:		Other:	
	Lab:			
Time for Com	pletion: 10	Minutes	Time Critical:	No
Alternate Path	ı / Faulted: Yes			
TASK APPLICABIL	ITY: AO/RO/SF	RO		
Additional signatures	may be added as need	ed.		
Developed by:	Andrew Fahrenkrug	/s Instructor	0	1/20/2011 Date
Validated by:	Andrew Fahrenkrug	/s ation Instructor	0	1/20/2011 Date
		on Checklist, Attach	ment 1)	Date
Approved by:	Randy Hastings	/s	0	1/24/2011
		ing Supervisor		Date
Approved by:	Mark Goolsbey	/s	0	1/25/2011
	Facility	Representative		Date

Retention: Life of plant insurance policy + 10 years Retain in: Training Program File KPS-SystemJPMK-L-RO/SRO-S-01242011-111

JPM Number:	AO-010-JP021
JPM Title:	Emergency Shutdown of Diesel Generator B
Examinee:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE I	RESULTS: SAT: UNSAT:
COMMENTS/FEE	DBACK: (Comments shall be made for any steps graded unsatisfactory).
EVALUATOR'S SI	IGNATURE:

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

Date: April 2010

JPM BRIEFING/TURNOVER

Read to Examinee:

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

AOP and EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

- 1. Human Performance attributes should be visible. The student may use STAR and or request Peer Checks.
- 2. If peer checks are requested, the Instructor should reply "Peer Check Acknowledged". The instructor will acknowledge use of the human performance tool and not validate the proper component manipulation.

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

INITIAL CONDITIONS:

- You are an Extra Operator on shift.
- The Plant is in MODE 3 [CTS HOT SHUTDOWN].
- Surveillance OP-KW-OSP-DGE-001B, Diesel Generator B Monthly Availability Test, was in progress.
- When the operator attempted to shutdown Diesel Generator B, it did NOT respond to the Control Room control Diesel Engine B being taken to STOP and then to PULLOUT.
- KW-OP-AOP-DGM-002B, Abnormal Diesel Generator B Operation, was entered.
- An Emergency Shutdown of DG B per AOP-DGM-002B is in progress, Step 29 is complete.

THE STEPS IN THIS JPM SHOULD BE: SIMULATED

INITIATING CUES (IF APPLICABLE):

The US has directed you to continue the Emergency Shutdown of DG B per AOP-DGM-002B starting at step 30.

INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK Do you have any questions before we begin? - Answer applicable questions **Let's Begin**

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

JPM PERFORMANCE INFORMATION

Required Materials: AOP-DGM-002B with Step 1 placekeeping (circle/slash) and Perform Emergency

Shutdown block in table circled; Step 29 placekeeping (29.a and 29.b circle/slash);

step 30 number circled.

General References: OP-KW-OSP-DGE-001B, Diesel Generator B Monthly Availability Test, Rev. 12

OP-KW-AOP-DGM-002B, Abnormal Diesel Generator B Operation, Rev. 4

Task Standards: Diesel Generator B stopped by local action.

NOTE: When providing "Evaluator Cues" to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee's actions warrant receiving the information (i.e. the examinee looks or asks for the indication).

NOTE: Review GNP-05.16.06, ATTACHMENT A for Time Dependent Operator Actions. If the JPM addresses one of these tasks and the JPM is determined to be time critical or contain time critical performance steps, then GNP-05.16.06 will be included in the General References below. [OTH 12765]

NOTE: Critical steps are marked with a "Yes" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM.

NOTE: Normally double hearing protection is required in the DG Rooms during operation of the DG. The operator should identify the need for the double hearing protection.

CUE: For performance of this JPM hearing protection is NOT required since the DG is NOT actually running. This use of this PPE is only suspended only in this case to allow for better communications during the performance of this JPM.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

Performance Step: 1	AOP-DGM-002B, Step 30:
Critical: No	Check Diesel Generator Speed – LESS THAN 980 RPM.
	The state of the s
Ctorodonal.	Determine Discal Conserts Depart is less than 000 DDM
Standard:	Determine Diesel Generator B speed is less than 980 RPM.
Evaluator Note:	The Operator may either check the engine speed locally or may contact the
	control room for the engine rpm value.
	control room for the engine rpm value.
	DG 1B tachometer is located at bottom right side of panel On Diesel Engine
	Control Panel D-1B.
	Control ranel b-1b.
Evaluator Cue:	Locally if DG 1B Tachometer checked, indicate the value is 880 RPM.
	If contacted as control room operator: DG B speed is about 880 RPM.
Doufousson on	
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
_	
Performance Step: 2	AOP-DGM-002B, Step 31:
Critical: No	CHECK Diesel Generator B SHUTDOWN
Critical. <u>No</u>	Check Diesel Generator B Shot DOWN
Standard:	Determine DG B is NOT shutdown.
Evaluator Cuo:	
Evaluator Cue:	Provide response that indicates DG B is still running: sound,
Evaluator Cue:	
Evaluator Cue:	Provide response that indicates DG B is still running: sound,
Evaluator Cue:	Provide response that indicates DG B is still running: sound,
	Provide response that indicates DG B is still running: sound, mechanical movement of components, "running" indicators.
Evaluator Cue: Performance:	Provide response that indicates DG B is still running: sound,
Performance:	Provide response that indicates DG B is still running: sound, mechanical movement of components, "running" indicators.
	Provide response that indicates DG B is still running: sound, mechanical movement of components, "running" indicators.
Performance:	Provide response that indicates DG B is still running: sound, mechanical movement of components, "running" indicators.
Performance:	Provide response that indicates DG B is still running: sound, mechanical movement of components, "running" indicators.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

Performance Step: 3	AOP-DGM-002B, Step 31.a RNO:
Critical: <u>No</u>	Locally PERFORM the following in sequence until Diesel Generator B is SHUTDOWN:
	At Engine Control Panel, POSITION 1B Diesel Engine Control Switch to STOP.
Standard:	1B Diesel Selector Switch is taken to STOP.
	Determine DG B is NOT shutdown.
Evaluator Note:	On Diesel Engine Control Panel D-1B. Switch spring returns to RUN (MANUAL) position when released
Evaluator Cue:	After operation of switch to STOP: No change in sound or condition of DG.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Retention: Life of plant insurance policy + 10 years

Performance Step: 4 Critical: <u>Yes</u>	AOP-DGM-002B, Step 31.b RNO: Locally PERFORM the following in sequence until Diesel Generator B is SHUTDOWN: In Diesel Day Tank Room, CLOSE Fuel Oil Tank 1B1 and 1B2 to Diesel Gen B valves • FO-100B1 • FO-100B2
Standard:	Both valves CLOSED: • FO-100B1 • FO-100B2
Evaluator Note:	Valve is normally open. It will not turn in counter-clockwise direction.
Evaluator Cue:	 For each valve operated: The hand-wheel turns (clockwise direction) until no further movement occurs. 20 seconds after last valve is closed: Begin to hear "sputtering" from
	the engine.
	30 seconds after last valve is closed: Room becomes quiet as engine quits.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Date: April 2010

Retention: Life of plant insurance policy + 10 years

Performance Step: 5 Critical: <u>No</u>	AOP-DGM-002B, Step 31.c RNO: Locally PERFORM the following in sequence until Diesel Generator B is SHUTDOWN: POSITION non-porous material (plastic) over DG B air filters to restrict combustion air.
Standard:	Look for plastic material to place over DG B air filter.
	[If Fuel Oil valves NOT closed in Performance Step 4, then this step becomes CRITICAL:]
	Sufficient material placed over DG B air filter inlet to block all air intake.
Evaluator Note:	It is expected that this step and Steps 31.d & 31.e RNO actions will NOT be completed since the DG will stop 30 seconds after the fuel oil is isolated. These actions will be provided in the event the operator fails to close the fuel oil valves.
Evaluator Cue:	If required, when it is indicated that material is placed over turbo fresh air filters inlet:
	After 10 seconds: Begin to hear "sputtering" from engine.
	After 20 seconds: Room becomes quiet as engine quits.
Performance: Comments:	SATISFACTORY UNSATISFACTORY

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

Date: April 2010

Performance Step: 6 Critical: <u>No</u>	AOP-DGM-002B, Step 31.d RNO: Locally PERFORM the following in sequence until Diesel Generator B is SHUTDOWN: Evacuate Personnel from 1B Diesel Room.
Standard:	Leaves 1B Diesel Room.
Evaluator Note:	It is expected that this step and Step 31.e RNO actions will NOT be completed since the DG will stop 30 seconds after the fuel oil is isolated. These actions will be provided in the event the operator fails to close the fuel oil valves and block air intake.
	This is for safety reasons prior to flooding room the CO ₂ .
Evaluator Cue:	Various the only never a comment in the vecus
Evaluator Cue:	You are the only person currently in the room.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Date: April 2010

Retention: Life of plant insurance policy + 10 years

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Performance Step: 7 Critical: <u>No</u>	AOP-DGM-002B, Step 31.e RNO: Locally PERFORM the following in sequence until Diesel Generator B is SHUTDOWN: Locally ACTUATE CO ₂ to Diesel Generator Room B:
	OPEN red Cardox To Operate pushbutton cover.
	2. PRESS pushbutton and VERIFY neon light goes out.
Standard:	[If Fuel Oil valves NOT closed in Performance Step 4 and DG B air intake NOT blocked in Performance Step 5 , then this step becomes CRITICAL:]
	CO ₂ actuated to Diesel Room B.
Evaluator Note:	It is expected that this step RNO actions will NOT be completed since the DG will stop 30 seconds after the fuel oil is isolated. These actions will be provided in the event the operator fails to close the fuel oil valves and block air intake.
Evaluator Cue:	When cover lift indicated: pushbutton is exposed. When pushbutton pressed: Neon light extinguishes. A "whooshing" sound is heard from the CO ₂ piping. After 10 seconds: Noise in Diesel B room decreases as engine quits.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: 8 Critical: <u>No</u>	AOP-DGM-002B, Step 31.f RNO: CHECK Diesel Generator B SHUTDOWN Observe control board meters for shutdown indication.
Standard:	Contact Control Room to confirm Diesel Generator B shutdown indications.
Evaluator Cue:	As Control Operator: Acknowledge report related to DG B shutdown and confirm indications show DG B shutdown.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Terminating Cues: Wh	nen control room notified of DG B status: "This JPM is complete."
O	
Stop Time:	-

Retention: Life of plant insurance policy + 10 years

Retain in: Training Program File KPS-SystemJPMK-L-RO/SRO-S-01242011-111

During	the	evaluati	on the	trainee
Duillig	uic	evaluati	OII, LIIC	uanice

•	Performed the task correctly and in accordance with procedure usage and adherence requirements.	☐ Yes	□No
•	Never put anyone's safety at risk.	☐ Yes	☐ No
•	Never put equipment reliability at risk.	☐ Yes	☐ No
•	Never violated radiological work practices.	☐ Yes	☐ No
•	Demonstrated effective use of event-free human performance	☐ Yes	☐ No

Note: The above information may be used in conjunction with the trainees' performance to determine JPM failure if the trainees' actions would have endangered the health and safety of the public, plant workers, themselves or damage plant equipment even if all critical tasks are met.



Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

Date: April 2010

AO-010-JP021, Rev. C

TURNOVER SHEET

INITIAL CONDITIONS:

- You are an Extra Operator on shift.
- Surveillance OP-KW-OSP-DGE-001B, Diesel Generator B Monthly Availability Test, was in progress.
- The Plant is in MODE 3 [CTS HOT SHUTDOWN].
- When the operator attempted to shutdown Diesel Generator B, it did NOT respond to the Control Room control Diesel Engine B being taken to STOP and then to PULLOUT.
- KW-OP-AOP-DGM-002B, Abnormal Diesel Generator B Operation, was entered.
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THE STEPS IN THIS JPM SHOULD BE: SIMULATED

INITIATING CUES (IF APPLICABLE):

The US has directed you to continue the Emergency Shutdown of DG B per AOP-DGM-002B starting at step 30.

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REV	/IEW STATEMENTS	YES	NO	N/A
1.	Are all items on the signature page filled in correctly?			
2.	Has the JPM been reviewed and validated by SMEs?	\boxtimes		
3.	Can the required conditions for the JPM be appropriately			
	established in the simulator if required?			
4.	Does the performance steps accurately reflect trainee's actions i accordance with plant procedures?	n 🛮		
5.	Is the standard for each performance item specific as to what			
	controls, indications and ranges are required to evaluate if the			
	trainee properly performed the step?			
6.	Has the completion time been established based on validation da	ata 🗵		
	or incumbent experience?			
7.	If the task is time critical, is the time critical portion based upon			
	actual task performance requirements?			
8.	Is the Licensee level appropriate for the task being evaluated if			
	required?			
9.	Is the K/A appropriate to the task and to the licensee level if			
	required?			
10.	Have the performance steps been identified and typed (Critical /			
	Sequence / Time Critical) appropriately?			
11.	Have all special tools and equipment needed to perform the task			
	been identified and made available to the trainee?			
12.	Are all references identified, current, accurate, and available to the	ne 🖂		
	trainee?			
13.	Have all required cues (as anticipated) been identified for the			
	evaluator to assist task completion?			
are a	questions/statements must be answered "YES" or the JPM is not values answered "YES" then the JPM is considered valid and can be performing the validation shall sign and date this form.		•	
Chris	s Brandt 01/20/2011			
	dation Personnel /Date Validation Personnel/Date	-		
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		_		
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Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111

Historical Record:

Rev. A:

Original

Rev. B:

- Updated to JPM Template Job Aid 03-007
- Changed revision number for AOP-DGM-002B
- Minor layout changes and typo corrections

Rev C

- PRA information updated on cover sheet
- Corrected Typo on Step 4 evaluator cue

Retention: Life of plant insurance policy + 10 years KPS-SystemJPMK-L-RO/SRO-S-01242011-111