O Xcel Energy ^{**}	JOB PERFORMANCE MEASURE (JPM)			
SITE:	PRAIRIE ISLAND			
JPM TITLE:	STOP 11 TDAFWP WITH ACCUMULATOR FAILURE			
JPM NUMBER:	AF-21SF REV. 1			
RELATED PRA INFORMATION:	IMPORTANT COMPONENT – 11 TD AFWP			
TASK NUMBERS / TASK TITLE(S):	CRO 061 009 01 01 000 / SHUTDOWN THE AFW SYSTEM			
K/A NUMBERS:	061 K4.01 (4.1/4.2)			
APPLICABLE METHOD O	F TESTING:			
EVALUATION LOCATION	Discussion:	Simulate/wa	lkthrough:	Perform:
	Simulator: Lab:	X (Other:	
Time for Completion	: <u>7</u> Minutes		Time Critical:	NO
Alternate Path:	YES			
TASK APPLICABILITY: Additional site-specific sign	SRO: X RO: atures may be added as o	X NLO	0	
Developed by: Fredr	ick Collins			Data
Validated by Justi	Develope	ſ		Date
	Validator See JPM Validation Check	list, Attachmer	nt 1)	Date
Approved by: Shaw	n Sarrasin Training Super	visor		Date

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

- Unit 1 is at the Point Of Adding Heat.
- The Main Generator is being prepared to synchronize to the grid.
- Main Feedwater is supplying both Steam Generators using the Main Feedwater Regulating Bypass Valves.
- 11 TDAFW Pump is running and supplying both Steam Generators.
- The crew is on step 5.6.10.A of 1C1.2-BOP, Unit 1 Balance of Plant Systems Startup, to shutdown any running AFW pumps.

INITIATING CUES:

• The Shift Supervisor directs you to STOP the 11 TDAFW Pump and align for safeguards operations per step 5.3 of 1C28.1, AUXILIARY FEEDWATER SYSTEM – UNIT 1.

JPM PERFORMANCE INFORMATION

Required Materials:	NONE
General References:	1C28.1, Auxiliary Feedwater System – Unit 1 1C1.2-BOP Unit 1 Balance of Plant Systems Startup C47010
Task Standards:	Examinee stops 11 TDAFW and closes MV-32016 and MV-32017.
Start Time:	_
NOTE: When providing "E the examinee. Typ the information (i.e	Evaluator Cues" to the examinee, care must be exercised to avoid prompting pically cues are only provided when the examinee's actions warrant receiving e., the examinee looks or asks for the indication).
MPORTANT: Critical steps the standard Licensed Op	s are marked with a "Y" below the performance step number. Failure to mee I for any critical step shall result in failure of this JPM, per FP-T-SAT-73, perator Requalification Program Examinations.
Performance Step:	1C28.1, Step 5.3.1:
	Refer to Precaution 3.12 prior to throttling total AFW flow.
Standard:	Examinee refers to precaution 3.12.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	1C28.1, Step 5.3.2: CLOSE MV-32238, 12 TD AFWP TO 11 STM GEN, using CS-46314.
Standard:	Examinee verifies MV-32238 is CLOSED.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Performance Step:	1C28.1, Step 5.3.3:
Critical <u>N</u>	CLOSE MV-32239, 11 ID AFWP TO 12 STM GEN, using CS-46315.
Standard:	Examinee verifies MV-32239 is CLOSED.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>Y</u>	1C28.1, Step 5.3.4: Stop 11 TD AFW Pump using CS-46424.
Standard:	Examinee stops 11 TD AFW Pump using CS-46424.
Evaluator Cue	Once the examinee takes CS-46424 to CLOSE, BOOTH OPERATOR, verify TRIGGER1 is inserted.
Performance:	SATISFACTORY UNSATISFACTORY
Commenter	
comments.	
Performance Step: Critical <u>N</u>	1C28.1, Step 5.3.5: Verify locally: A. 11 TD AFW Pump has stopped.
Performance Step: Critical <u>N</u>	1C28.1, Step 5.3.5: Verify locally: A. 11 TD AFW Pump has stopped. B. CV-31153, 11 TD AFW PMP RECIRC/LUBE OIL COOLING VALVE, has CLOSED. C. Auxiliary lube oil pump is running.
Performance Step: Critical <u>N</u> Standard:	1C28.1, Step 5.3.5: Verify locally: A. 11 TD AFW Pump has stopped. B. CV-31153, 11 TD AFW PMP RECIRC/LUBE OIL COOLING VALVE, has CLOSED. C. Auxiliary lube oil pump is running. Examinee directs an out-plant operator to locally verify local actions.
Performance Step: Critical <u>N</u> Standard: Evaluator Cue:	 1C28.1, Step 5.3.5: Verify locally: A. 11 TD AFW Pump has stopped. B. CV-31153, 11 TD AFW PMP RECIRC/LUBE OIL COOLING VALVE, has CLOSED. C. Auxiliary lube oil pump is running. Examinee directs an out-plant operator to locally verify local actions. When the examinee directs the out-plant operator to locally verify actions, then inform examinee that the 11 TDAFWP is stopped, CV-31153 is closed, and aux lube oil pump is running.
Performance Step: Critical <u>N</u> Standard: Evaluator Cue:	 1C28.1, Step 5.3.5: Verify locally: A. 11 TD AFW Pump has stopped. B. CV-31153, 11 TD AFW PMP RECIRC/LUBE OIL COOLING VALVE, has CLOSED. C. Auxiliary lube oil pump is running. Examinee directs an out-plant operator to locally verify local actions. When the examinee directs the out-plant operator to locally verify actions, then inform examinee that the 11 TDAFWP is stopped, CV-31153 is closed, and aux lube oil pump is running. Based on the timing of the trigger and alarm response, this step may by NA.
Performance Step: Critical <u>N</u> Standard: Evaluator Cue:	 1C28.1, Step 5.3.5: Verify locally: A. 11 TD AFW Pump has stopped. B. CV-31153, 11 TD AFW PMP RECIRC/LUBE OIL COOLING VALVE, has CLOSED. C. Auxiliary lube oil pump is running. Examinee directs an out-plant operator to locally verify local actions. When the examinee directs the out-plant operator to locally verify actions, then inform examinee that the 11 TDAFWP is stopped, CV-31153 is closed, and aux lube oil pump is running. Based on the timing of the trigger and alarm response, this step may by NA.

Comments:

ALTERNATE PATH STARTS HERE

Performance Step: Critical <u>N</u>	C47010-0105, 11 TD AFWP Accumulator LO Air Press, Step 1: Check for low air pressure on 18702, 11 TD AFW PMP STM BLK VLV AIR ACCUM.		
Standard:	Examinee ascertains air pressure is low.		
EVALUATOR CUE:	If the examinee requests the pressure on gage 18702 from the NLO, inform the examinee that pressure is 71 psig and slowly lowering.		
Performance:	SATISFACTORY UNSATISFACTORY		
Comments:			
Performance Step: Critical <u>N</u>	C47010-0105, 11 TD AFWP Accumulator LO Air Press, Step 2: If a low air pressure condition exists, then notify the shift supervisor that 11 TDAFW Pump is inoperable and enter T.S.3.7.5 Condition B.		
Standard:	Examinee makes notification to SS.		
Performance:	SATISFACTORY UNSATISFACTORY		
Comments:			

Performance Step: Critical <u>Y</u>	C47010-0105, 11 TD AFWP Accumulator LO Air Press, Step 3: IF 11 AFW pump is NOT running, THEN perform one of the following to prevent an undesired start of the pump due to CV-31998 failing OPEN:		
	 CLOSE both steam supply valves to 11 TDAFW Pump; MV-32016 AND MV-32017 		
	OR		
	• Locally CLOSE CV-31059, 11 TD AFW PMP TRIP THROTTLE CV		
Standard:	Examinee CLOSES both MV-32016 and MV-32017		
EVALUATOR NOTE:	If the examinee directs the NLO to locally close CV-31059, inform the examinee that the valve is STUCK and will NOT close.		
Performance:	SATISFACTORY UNSATISFACTORY		
Comments:			
Terminating Cues: N	When the examinee stops 11 TDAFWP and closes MV-32016 and MV-32017, then the JPM is complete.		

Stop Time:

Simulator Setup:

- 1. If an IC is already created for this JPM, then go to step 3.
- 2. If an IC is NOT created for this scenario, then create as follows:
 - a. Reset to IC-103.
 - b. Place the simulator in RUN.
 - c. Start 11 TDAFWP per 1C28.1.
 - d. If running this JPM in conjuction with **EG-20S**, then:
 - 1) D5 Diesel Generator is NOT running.
 - 2) CS-46946, D5 DSL GEN START SPEED SEL SW, is in FAST
 - 3) D5 OUTPUT BKR (25-2) AUTO/MAN SEL SW is in MANUAL.
 - e. If available, run schedule file AF-21SF.sch as follows:
 - 1) Select open file in the Schedule application.
 - 2) Locate schedule file.
 - 3) Open schedule file by double clicking it.
 - 4) Run the schedule file by pressing the "Stopped" button on the toolbar.
 - 5) Verify the schedule file is running.
 - f. If schedule file is NOT available, then insert malfunctions, remotes, and overrides, as specified by the Simulator Input Summary.
 - g. If available, open event file AF-21SF.evt as follows:
 - 1) Select open file in the EVENT application.
 - 2) Locate event file.
 - 3) Open by double clicking file.
 - h. If event file is NOT available, then enter event codes as specified by the Simulator Event Summary below.
 - i. Place simulator in FREEZE.
 - j. If desired, save to an available IC.
 - k. Place simulator in RUN.
 - I. Go to step 4.
- 3. Reset the simulator to the IC created from step 2 and place in RUN.
- 4. If running this JPM in conjunction with EG-20S, then:
 - a. Place a "D5 DSL GEN OOS" magnetic sign on the G Panel (U1).
 - b. Mark steps 6.1.1.K of **2C20.7**, D5/D6 DIESEL GENERATORS, as complete.
- 5. Clear recorder memory after each reset.
- 6. Verify Director or Schedule File matches the input summary below.

SIMULATOR INPUT SUMMARY

@Time	Event	Action	Description
	1	Insert malfunction M47010:0105W after 5 to Cry_Wolf on event 1	11 TD AFWP Accumulator Lo Air Press

SIMULATOR EVENT SUMMARY			
Event ID Event CODE Event DESCRIPTION			
1	HWZFWP6424(1)==1	11 TD AFWP PUMP STOPPED	

ATTACHMENT 1

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 cover page filled in correctly?	\square		
2.	Has the JPM been reviewed and validated by SMEs?	\square		
3.	Can the required conditions for the JPM be appropriately established in the simulator if required?	\boxtimes		
4.	Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	\square		
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.	If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	\square		
7.	If the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8.	Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	\square		
9.	Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	\square		
10.	Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	\square		
11.	Have all special tools and equipment needed to perform the task been identified?	\square		
12.	Are all references identified, current, and accurate?	\square		
13.	Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	\square		

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 2

PERFORMANCE	RESULTS: SAT: UNSAT:
Start Time	Finish Time
Job Title:	Date:
Examinee & ID:	Evaluator:
JPM Title:	STOP 11 TDAFWP WITH ACCUMULATOR FAILURE
JPM Number:	AF-21SF

OMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 is at the Point Of Adding Heat.
- The Main Generator is being prepared to synchronize to the grid.
- Main Feedwater is supplying both Steam Generators using the Main Feedwater Regulating Bypass Valves.
- 11 TDAFW Pump is running and supplying both Steam Generators.
- The crew is on step 5.6.10.A of 1C1.2-BOP, Unit 1 Balance of Plant Systems Startup, to shutdown any running AFW pumps.

INITIATING CUES:

• The Shift Supervisor directs you to STOP the 11 TDAFW Pump and align for safeguards operations per step 5.3 of 1C28.1, AUXILIARY FEEDWATER SYSTEM – UNIT 1.

Xcel Energy ^{**}	JOB PERFORMANCE MEASURE (JPM)			
SITE:	PRAIRIE ISLAND			
JPM TITLE:	MANUAL START OF D5 EMERGENCY DIESEL GENERATOR FROM THE CONTROL ROOM			
JPM NUMBER:	EG-20S	REV. 0		
RELATED PRA INFORMATION:	IMPORTANT COMPONENT – D5 DSL GEN			
TASK NUMBERS / TASK TITLE(S):	CRO 064 ATI 00 00 002 / MANUALLY START DG FROM CONTROL ROOM			
K/A NUMBERS:	064 A3.06 (3.3/3.4)			
APPLICABLE METHOD C	OF TESTING:			
	Discussion:	Simulate/walkthrough:	Perform: X	
EVALUATION LOCATION	I: In-Plant:	Control Roc	om:	
	Simulator:	X Other:		
	Lab:			
Time for Completio	n: <u>10</u> Minutes	Time Criti	cal: <u>NO</u>	
Alternate Path: NO				
TASK APPLICABILITY: SRO: X RO: X NLO				
Additional site-specific sig	natures may be added as o	desired.		
Developed by: Fred	rick Collins	-	Data	
	Developer		Date	
Validated by: Zach	Elbert			
(Validator See JPM Validation Check	list, Attachment 1)	Date	
Approved by: Shave	vn Sarrasin			
	Training Super	visor	Date	

EG-20S, NUMBER, MANUAL START OF D5 DIESEL GENERATOR FROM THE CONTROL ROOM, REV. 0

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

• Steps 6.1.1.A through 6.1.1.K of 2C20.7, D5/D6 DIESEL GENERATORS, have been completed.

INITIATING CUES:

• The Shift Supervisor directs you to manually perform a SLOW START of D5 Emergency Diesel Generator per steps 6.1.1.L through 5.1.1.Q of 2C20.7, D5/D6 Diesel Generators.

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EG-20S, NUMBER, MANUAL START OF D5 DIESEL GENERATOR FROM THE CONTROL ROOM,

REV. 0

JPM PERFORMANCE INFORMATION

Required Materials:	Consumable copy of 2C20.7.
General References:	2C20.7, D5/D6 DIESEL GENERATORS
Task Standards:	Examinee starts D5 in SLOW speed and raises voltage to between 4200 and 4400 V.

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).

IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical Y	2C20.7, step 6.1.1.L:	
	If desired, THEN place CS-46946, D5 DSL GEN START SPEED SEL SW, in "SLOW".	
Standard:	Examinee places CS-46946 in SLOW.	
Performance:	SATISFACTORY UNSATISFACTORY	
Comments:		
Performance Step: Critical N	2C20.7, step 6.1.1.M:	
Performance Step: Critical <u>N</u>	2C20.7, step 6.1.1.M: Place CS-46947, D5 DSL GEN GOVERNOR CONTROL, in "LOWER" for approximately 10 seconds.	
Performance Step: Critical <u>N</u> Standard:	2C20.7, step 6.1.1.M: Place CS-46947, D5 DSL GEN GOVERNOR CONTROL, in "LOWER" for approximately 10 seconds. Examinee places CS-46947 in LOWER for approximately 10 seconds.	
Performance Step: Critical <u>N</u> Standard: Performance:	2C20.7, step 6.1.1.M: Place CS-46947, D5 DSL GEN GOVERNOR CONTROL, in "LOWER" for approximately 10 seconds. Examinee places CS-46947 in LOWER for approximately 10 seconds. SATISFACTORY UNSATISFACTORY	

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EG-20S, NUMBER, MANUAL START OF D5 DIESEL GENERATOR FROM THE CONTROL ROOM, REV. 0

Performance Step: Critical <u>Y</u>	2C20.7, step 6.1.1.N
	Start D5 using control switch, CS-46945, D5 DIESEL GENERATOR
Standard:	Examinee places D5 to start.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Performance Step: Critical <u>N</u>	2C20.7, step 6.1.1.O:	
_	Verify Bus 25 Status Panel white indicating light 4432-0201, D5 UP TO SPEED & VOLTAGE, is LIT.	
Standard:	Examinee verifies that 4432-0201 is lit.	
Evaluator Note:	This light will illuminate after the diesel is up to speed, which takes several seconds.	
Performance:	SATISFACTORY UNSATISFACTORY	
Comments:		

Performance Step: Critical N	2C20.7, step 5.1.1.P	
—	On Main Control Room Panel B-2 verify Status Panel indicating light 44514- A2, D5 RUNNING, is LIT.	
Standard:	Examinee asks the Unit 2 personnel what the status of 44514-A2.	
Evaluator Cue:	When the examinee inquires as to the status of 44514-A2, inform the examinee that the light it LIT.	
Evaluator Note:	44514-A2 is not modeled in the simulator.	
Performance:	SATISFACTORY UNSATISFACTORY	
Comments:		

EG-20S, NUMBER, MANUAL START OF D5 DIESEL GENERATOR FROM THE CONTROL ROOM,

	REV. 0
Performance Step: Critical Y	2C20.7, step 5.1.1.Q:
	Maintain 4200-4400 volts on 41903, D5 DSL GEN METER GROUP, using CS- 46949, D5 DSL GEN EXCITER CONTROL.
Standard:	Examinee takes CS-46949 to "RAISE" until voltage on 4190303 is between 4200 and 4400.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Terminating Cues:	When the examinee has started D5 in slow speed and raised voltage to above
	4200 V, then the JPM is complete.

Stop Time:

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EG-20S, NUMBER, MANUAL START OF D5 DIESEL GENERATOR FROM THE CONTROL ROOM,

REV. 0

Simulator Setup:

- 1. If this JPM is being run in conjunction with **AF-21SF**, then set up the simulator per the simulator set up in **AF-21SF**.
- 2. If an IC is Not created for this scenario, then create one as follows:
 - a. Reset the Simulator to **IC-6**.
 - b. Place the simulator in RUN.
 - c. Verify the following:
 - 1) D5 Diesel Generator is NOT running.
 - 2) CS-46946, D5 DSL GEN START SPEED SEL SW, is in FAST
 - 3) D5 OUTPUT BKR (25-2) AUTO/MAN SEL SW is in MANUAL.
 - d. Place simulator in FREEZE.
 - e. If desired, save to an available IC.
 - f. Place the simulator in RUN.
 - g. Go to Step 4.
- 3. Reset the simulator to the IC created form step 2 and place in RUN.
- 4. Place a "D5 DSL GEN OOS" magnetic sign on the G Panel (U1).
- 5. Mark steps 6.1.1.K of **2C20.7**, D5/D6 DIESEL GENERATORS, as complete.
- 6. Clear recorder memory after each reset.

SIMULATOR INPUT SUMMARY

NONE

EG-20S, NUMBER, MANUAL START OF D5 DIESEL GENERATOR FROM THE CONTROL ROOM, REV. 0

ATTACHMENT 1

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 cover page filled in correctly?	\boxtimes		
2.	Has the JPM been reviewed and validated by SMEs?	\boxtimes		
3.	Can the required conditions for the JPM be appropriately	\boxtimes		
4	De the performance stone accurately reflect trainee's actions in			
4.	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?	\square		
6.	If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	\boxtimes		
7.	If the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8.	Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	\boxtimes		
9.	Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	\boxtimes		
10.	Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	\boxtimes		
11.	Have all special tools and equipment needed to perform the task	\boxtimes		
40	Are all references identified, surrant, and accurate?	57		
12.	Are all references identified, current, and accurate?			
13.	Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	X		

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01. EG-20S, NUMBER, MANUAL START OF D5 DIESEL GENERATOR FROM THE CONTROL ROOM, REV. 0

ATTACHMENT 2

JPM Number:	EG-20S
JPM Title:	MANUAL START OF D5 DIESEL GENERATOR FROM CONTROL ROOM.
Examinee & ID:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE	RESULTS: SAT: UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).	

EVALUATOR'S SIGNATURE:

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.

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

• Steps 6.1.1.A through 6.1.1.K of 2C20.7, D5/D6 DIESEL GENERATORS, have been completed.

INITIATING CUES:

• The Shift Supervisor directs you to manually perform a SLOW START of D5 Emergency Diesel Generator per steps 6.1.1.L through 5.1.1.Q of 2C20.7, D5/D6 Diesel Generators.

SITE: PRAIRIE ISLAND	
JPM TITLE: FIRE ALARM MONTHLY TEST	
JPM NUMBER: FP-8S REV. 1	
RELATED PRA NONE INFORMATION:	
TASK NUMBERS / TASK TITLE(S):CRO 086 001 02 01 000 / PERFORM FIRE ALARM & EMERGENCY EVACUATION ALARM TEST	
K/A NUMBERS: 2.2.12 (3.7/4.1)	
APPLICABLE METHOD OF TESTING:	
Discussion: Simulate/walkthrough: Perform:	X
EVALUATION LOCATION: In-Plant: Control Room:	
Simulator: X Other:	
Lab:	
Time for Completion: <u>5</u> Minutes Time Critical: <u>NO</u>	
Alternate Path: NO	
TASK APPLICABILITY: SRO: X RO: X NLO	
Additional site-specific signatures may be added as desired.	
Developed by: Justin Hasner	
Developer Date	
Validated by: Fredrick Collins	
Validator Date (See JPM Validation Checklist, Attachment 1)	
Approved by: Shawn Sarrasin Training Supervisor Date	

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

- Unit 1 is at 100% power and steady state.
- Unit 2 is at 100% power and steady state.
- It is 1530 on Wednesday.
- There are no abnormal activities or emergencies in progress on either unit.

INITIATING CUES:

• The SS directs you to perform a monthly test of the FIRE ALARM per SP 1601, Fire, Emergency Evacuation and Security Monthly Alarm Test, starting at step 7.1.1.

FP-8S, FIRE ALARM MONTHLY TEST, REV. 1

JPM PERFORMANCE INFORMATION

Required Materials:	Consumable copy of SP 1601 pg 5.
General References:	NONE
Task Standards:	Examinee makes announcement to disregard following alarm, performs the monthly test, and makes announcement to regard further alarms.
Start Time:	_
NOTE: When providing "E the examinee. Typ the information (i.e	Evaluator Cues" to the examinee, care must be exercised to avoid prompting bically cues are only provided when the examinee's actions warrant receiving e., the examinee looks or asks for the indication).
IMPORTANT: Critical step the standard Licensed Op	s are marked with a "Y" below the performance step number. Failure to meet I for any critical step shall result in failure of this JPM, per FP-T-SAT-73, perator Requalification Program Examinations.
De eferme en el Otrese	
Critical <u>Y</u>	SP 1601, Step 7.1.1: Control Room Operator or Shift Supervisor notify plant personnel of the test using the plant loudspeaker paging system as follows:
	"Attention all plant personnel, the following is a test of the Fire Alarm."
	"Attention all plant personnel, the following is a test of the Fire Alarm."
	"Disregard the following Fire alarm."
Standard:	Examinee makes the announcement using the plant page in the simulator.
EVALUATOR CUE:	If the examinee asks the SS to make the plant page, inform the examinee that the SS is not available to make the page.
EVALUATOR NOTE:	This step is considered satisfactory if the examinee communicates that the fire alarm can be disregarded.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Performance Step: Critical <u>Y</u>	SP 1601, Step 7.1.2: Place CS-7046820, FIRE ALARM MAN/OFF/AUTO SEL SW, (located on the Transformer Deluge Control Panel) in "Manual" for approximately ten (10) seconds.
Standard:	Examinee places CS in the manual position.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>Y</u>	SP 1601, Step 7.1.3: Upon completion of the ten (10) second Fire Alarm test, return CS-7046820
	to "OFF."
Standard:	to "OFF." Examinee places the CS in off after approximately 10 seconds.
Standard: EVALUATOR NOTE:	to "OFF." Examinee places the CS in off after approximately 10 seconds. The time component of this step is considered completed satisfactorily once 5 seconds have elapsed with the alarm audible.
Standard: EVALUATOR NOTE:	to "OFF." Examinee places the CS in off after approximately 10 seconds. The time component of this step is considered completed satisfactorily once 5 seconds have elapsed with the alarm audible.
Standard: EVALUATOR NOTE: Performance:	to "OFF." Examinee places the CS in off after approximately 10 seconds. The time component of this step is considered completed satisfactorily once 5 seconds have elapsed with the alarm audible. SATISFACTORY

Performance Step: Critical <u>Y</u>	SP 1601, Step 7.1.4: Control Room Operator or Shift Supervisor notify plant personnel of the test completion using the plant loudspeaker paging system as follows:
	"Attention all plant personnel, the Fire Alarm test is complete."
	"Attention all plant personnel, the Fire Alarm test is complete."
	"Regard all further Fire Alarms."
Standard:	Examinee makes the announcement.
EVALUATOR CUE:	If the examinee asks the SS to make the plant page, inform the examinee that the SS is not available to make the page.
EVALUATOR NOTE:	This step is considered satisfactory if the examinee communicates that the fire alarm must be regarded.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Terminating Cues:	When the examinee has made the announcement to disregard following alarm, performs the monthly test, and makes announcement to regard further alarms, then this JPM is complete.

Stop Time:

Simulator Setup:

- 1. If this JPM is being run in conjunction with **ZC-1SF**, then set up the simulator per the simulator set up in **ZC-1SF**.
- 2. If an IC is already created for this JPM, then go to step 4.
- 3. If an IC is NOT created for this scenario, then create as follows:
 - a. Reset to IC-10.
 - b. Place the simulator in RUN.
 - c. Place simulator in FREEZE.
 - d. If desired, save to an available IC.
 - e. Place simulator in RUN.
 - f. Go to step 5.
- 4. Reset the simulator to the IC created from step 3 and place in RUN.
- 5. Clear recorder memory after each reset.

SIMULATOR INPUT SUMMARY

NONE

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVI	EW STATEMENTS	YES	NO	N/A
1.	Are all items on the cover page filled in correctly?	\boxtimes		
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?	\boxtimes		
4.	Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	\boxtimes		
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?	\boxtimes		
6.	If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	\boxtimes		
7.	If the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8.	Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	\boxtimes		
9.	Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	\boxtimes		
10.	Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	\boxtimes		
11.	Have all special tools and equipment needed to perform the task been identified?	\boxtimes		
12.	Are all references identified, current, and accurate?	\boxtimes		
13.	Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	\square		

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 2

JPM Number:	FP-8S		
JPM Title:	FIRE ALARM MONTHLY TEST		
Examinee & ID:		Evaluator:	
Job Title:		Date:	
Start Time		Finish Time	
PERFORMANCE	RESULTS: SA	AT:	UNSAT:

OMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).	

EVALUATOR'S SIGNATURE:

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.

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 is at 100% power and steady state.
- Unit 2 is at 100% power and steady state.
- It is 1530 on Wednesday.
- There are no abnormal activities or emergencies in progress on either unit.

INITIATING CUES:

• The SS directs you to perform a monthly test of the FIRE ALARM per SP 1601, Fire, Emergency Evacuation and Security Monthly Alarm Test, starting at step 7.1.1.

Xcel Energy*	JOB PERFORMAN	ICE MEASURE	E (JPM)	
SITE:	PRAIRIE ISLAND			
JPM TITLE:	12 RCP THERMAL BAR	RIER HEAT EXCH	ANGER LEAK	
JPM NUMBER:	RC-24SF	REV. 0		
RELATED PRA INFORMATION:	ISLOCA (4.4%)			
TASK NUMBERS / TASK TITLE(S):	CRO 008 ATI 00 00 011 /	RESPONSE TO L	EAKAGE INTO THE CC	SYSTEM
K/A NUMBERS:	003 A4.08 (3.2/2.9)			
APPLICABLE METHOD C	OF TESTING:			
	Discussion:	Simulate/walkthro	ugh: Perform	: X
EVALUATION LOCATION	l: In-Plant:	Contr	ol Room:	
	Simulator:	X Other		
	Lab:			
Time for Completion	n: <u>14</u> Minutes	Tim	e Critical: NO	
Alternate Path:	YES			
TASK APPLICABILITY:	SRO: X RO:	X NLO		
Additional site-specific sign	natures may be added as o	lesired.		
Developed by: Fred	rick Collins			
	Developer		Date	
Validated by: Justi	in Hasner			
	Validator See JPM Validation Check	ist. Attachment 1)	Date	
Approved by: Shav	vn Sarrasin Training Super	visor	Date	_
			Duto	

(Modify text in Briefing/Turnover Box as necessary)

Retention: Life of Plant Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

- Unit 1 is at 100% power.
- Two 40 gpm letdown orifices are in service.

INITIATING CUE:

 The SS directs you to remove CV-31325 letdown orifice from service per Section 6.11 of 1C12.1, LETDOWN, CHARGING & SEAL WATER INJECTION – UNIT 1.

JPM PERFORMANCE INFORMATION

Required Materials:	NONE
General References:	1C12.1, LETDOWN, CHARGING & SEAL WATER INJECTION-UNIT 1 1C14 AOP2, LEAKAGE INTO THE COMPONENT COOLING SYSTEM C47015-0109, 12 RCP THERMAL BARRIER CC WATER HI FLOW C7, REACTOR CONTROL SYSTEM
Task Standards:	Examinee removes one letdown orifice from service and isolates Component Cooling to 12 RCP Thermal Barrier Heat Exchanger.
Start Time:	_
NOTE: When providing "E the examinee. Typ the information (i.e	Evaluator Cues" to the examinee, care must be exercised to avoid prompting bically cues are only provided when the examinee's actions warrant receiving e., the examinee looks or asks for the indication).
MPORTANT: Critical step the standard Licensed Op	s are marked with a "Y" below the performance step number. Failure to meet I for any critical step shall result in failure of this JPM, per FP-T-SAT-73, perator Requalification Program Examinations.
Performance Step: Critical <u>N</u>	1C12.1, step 6.11.1 IF desired, THEN place 1HC-135A, LTDN PRESS CONT CV-31203, to MANUAL.
Standard:	Examinee places 1HC-135A in MANUAL or leaves 1HC-135A in AUTO.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	1C12.1, step 6.11.2 Maintain letdown pressure less than 445 psig to prevent lifting the low pressure letdown relief valve.
Standard:	Examinee maintains letdown pressure less than 445 psig.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

RC-24SF, 12 RCP THERMAI	BARRIER HEAT	EXCHANGER LEAK ,	REV 0
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Performance Step:	1C12.1, step 6.11.3
Critical <u>Y</u>	CLOSE the desired letdown orifice isolation valve:
	 CV-31325, LTDN ORIFICE ISOL 40 GPM, using CS-46170
	OR
	 CV-31326, LTDN ORIFICE ISOL 40 GPM, using CS-46171
	OR
	 CV-31327, LTDN ORIFICE ISOL 80 GPM, using CS-46174
Standard:	Examinee closes CV-31325 using CS-46170.
Evaluator Note:	If examinee closes CV-31326 instead of CV-31327, then the task will still be
	met and it will NOT constitute a JPM failure.
Derfermense	
Performance:	
Comments:	
oonments.	
Performance Stop	1C121 ston 6 11 /
Critical N	Transfer the inservice charging number from AUTOMATIC to MANUAL speed
	control per C7 Reactor Control System
	control per or, Reactor control System.
Standard:	Examinee transfers 11 Charging Pump to manual.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step:	1C12.1, step 6.11.5
Critical <u>N</u>	Lower charging pump speed while adjusting 1HC-142, CHG LINE FLOW
	CONT, to maintain seal injection flow at 8 gpm, until charging flow is about
	30 gpm.
Standard:	Examinee reduces charging flow to approximately 30 gpm.
Evaluator Note:	When examinee has established approximately 30 gpm charging flow OR
	at evaluator discretion, enter Trigger 1, 12 RCP Thermal Barrier Failure.
Porformanaa	
Performance:	
Commonts:	
Comments.	

Performance Step: Critical <u>N</u>	1C12.1, step 6.11.6 Transfer one of the inservice charging pumps from MANUAL to AUTOMATIC speed control per C7, Reactor Control System.	
Standard:	Examinee transfers 11 or 12 Charging Pump to automatic.	
Evaluator Note:	If examinee transitions to 1C14 AOP2 or C47015-0109, then this step is NOT applicable.	
Performance:	SATISFACTORY UNSATISFACTORY	
Comments:		

ALTERNATE PATH STARTS HERE

Performance Step:	1C14 AOP2, Step 2.4.1.A OR C47015-0109, Step 1	
Critical <u>Y</u>	Verify CV-31246, 12 RC PUMP THERMAL BARRIER CLNT OUTL, using CS-	
	46026, is CLOSED.	
Standard:	Examinee closes CV-31246 using CS-46026.	
Evaluator Note:	If the examinee places CS-46026 in the closed position, then AUTO Trigger	
	2 will be entered to allow CV-31246 to close.	
Performance:	SATISFACTORY UNSATISFACTORY	
Comments:		

Terminating Cues: When examinee has removed one letdown orifice from service and isolated Component Cooling to 12 RCP Thermal Barrier Heat Exchanger, then this JPM is complete.

Stop Time:

Simulator Setup:

- 1. If an IC is already created for this JPM, then go to step 3.
- 2. If an IC is NOT created for this scenario, then create as follows:
 - a. Reset the simulator to IC-10.
 - b. Place the simulator in RUN.
 - c. Place a second 40 GPM letdown orifice in service per 1C12.1.
 - d. Place simulator in FREEZE.
 - e. If desired, save to an available IC.
 - f. Place simulator in RUN.
 - g. Go to step 4.
- 3. Reset the simulator to the IC created from step 2 and place in RUN.
- 4. If available, run schedule file **RC-24SF.sch** as follows:
 - a. Select open file in the Schedule application.
 - b. Locate schedule file.
 - c. Open schedule file by double clicking it.
 - d. Run the schedule file by pressing the "Stopped" button on the toolbar.
 - e. Verify the schedule file is running.
- 5. If schedule file is NOT available, then insert malfunctions, remotes, and overrides, as specified by the Simulator Input Summary below.
- 6. If available, run event file **RC-24SF.evt** as follows:
 - a. Select open file in the EVENT application.
 - b. Locate event file.
 - c. Open by double clicking file.
- 7. If event file is NOT available, then enter event codes as specified by the Simulator Event Summary below.
- 8. Verify CONG1 ERCS terminal is set to Group QP CCDATA.
- 9. When examinee has closed one letdown orifice valve and established approximately 30 gpm charging flow, or at the discretion of the evaluator, enter **Trigger 1, 12 RCP Thermal Barrier Failure**.
- 10. When examinee places CS-46026 in the closed position, verify **AUTO Trigger 2** is entered.

SIMULATOR INPUT SUMMARY

@Time	Event	Action	Description
00:00:00		Insert override DI-46026O to True	CV-31246 FAILS TO CLOSE ON HIGH FLOW
	1	Insert malfunction VC21B after 5 to 10.00000 on event 1	REACTOR COOLANT PUMP #12 THERMAL BARRIER TUBE FAILURE
	2	Insert override DI-46026O to False on event 2	CV-31246 FAILURE REMOVED

SIMULATOR EVENT SUMMARY		
Event ID	Code	Description
2	HWZCCC026(1) == 1	CV-31246 MANUALLY CLOSED

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS		NO	N/A
1. Are all items on the cover page filled in correctly?	\boxtimes		
2. Has the JPM been reviewed and validated by SMEs?	\boxtimes		
 Can the required conditions for the JPM be appropriately established in the simulator if required? 	\boxtimes		
 Do 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. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?			
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators			
 Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators 			
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?			
12. Are all references identified, current, and accurate?	\square		
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?			

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 2

JPM Number:	RC-24SF	-		
JPM Title:	12 RCP THERMAL BARRIER HEA	T EXCHANGER L	EAK	
Examinee & ID:		Evaluator:		
Job Title:		Date:		
Start Time		Finish Time		
PERFORMANCE I	RESULTS: SA	Т:	UNSAT:	

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.
ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 is at 100% power.
- Two 40 gpm letdown orifices are in service.

INITIATING CUE:

• The SS directs you to remove CV-31325 letdown orifice from service per Section 6.11 of 1C12.1, LETDOWN, CHARGING & SEAL WATER INJECTION – UNIT 1.

Xcel Energy*	JOB PERFORMANCE MEASURE (JPM)		
SITE:	PRAIRIE ISLAND		
JPM TITLE:	SECURE R11/12 IN CONTROL ROOM		
JPM NUMBER:	RM-5S	REV. 0	
RELATED PRA INFORMATION:	NONE		
TASK NUMBERS / TASK TITLE(S):	CRO 073 ATI 00 00 008 / REMOVE REDUNDANT RAD MONITORS FROM SERVICE		
K/A NUMBERS:	073 A4.02 (3.7/3.7)		
APPLICABLE METHOD O	F TESTING:		
	Discussion:	Simulate/walkthrough:	Perform: X
EVALUATION LOCATION	: In-Plant:	Control Roor	n:
	Simulator:	X Other:	
	Lab:		
Time for Completion	n: <u>8</u> Minutes	Time Critic	al: <u>NO</u>
Alternate Path:NO			
TASK APPLICABILITY:	SRO: X RO:	X NLO	
Additional site-specific sign	natures may be added as o	desired.	
Developed bv: Fredr	rick Collins		
	Developer		Date
Validated by: Justi	n Hasner		
(Validator See JPM Validation Checkl	list, Attachment 1)	Date
Approved by: Shaw	/n Sarrasin Training Super	visor	Date

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

- Unit 1 and Unit 2 are at 100% power.
- R-11 and R-12 need to be removed from service for preventative maintenance.
- Steps 6.4.1 through 6.4.8.B of C11, Radiation Monitoring System, are complete.

INITIATING CUES:

 The Shift Supervisor directs you to remove 1R11/12 from service per section 6.4 of C11, Radiation Monitoring System.

JPM PERFORMANCE INFORMATION

Required Materials:	Steps 6.4.1 through 6.4.8.B of C11 marked complete. Key 167 for the Control Room RAM 606.		: Steps 6.4.1 through 6.4.8.B of C11 marked comple Key 167 for the Control Room RAM 606.	
General References:	C11, RADIATION MONITORING SYSTEM			
Task Standards:	Examinee changes R11/R12 pump status to OFF.			

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).

IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Regualification Program Examinations.

Performance Step: Critical <u>N</u>	C11 step 6.4.8.C.1 Place the Control Room RAM606 key switch in the "KEYPAD" position.
Standard:	Examinee places the RAM606 key switch in the "KEYPAD" position.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	C11 step 6.4.8.C.2 Depress the up arrow to select Channel 1R-11 [2R-11] on the RAM606
	display.
Standard:	display. Examinee selects 1R-11 on the RAM606 display.
Standard: Performance:	display. Examinee selects 1R-11 on the RAM606 display. SATISFACTORY UNSATISFACTORY

Performance Step: Critical <u>N</u>	C11 step 6.4.8.C.3 Check the Pump Status "ON" indicated on the lower line of the single channel rate display.
Standard:	Examinee identifies that the pump status is "on."
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	C11 step 6.4.8.C.4 Depress the up arrow twice to return to the dual rate display.
Standard:	Examinee returns to the dual rate display.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step:	C11 step 6.4.8.C.5
Critical <u>Y</u>	Depress MODE once. The Pump Status Display will be shown.
Standard:	Examinee navigates to Pump Status Display.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Sten	
r enformance otep.	C11 step 6.4.8.C.6
Critical <u>Y</u>	C11 step 6.4.8.C.6 Depress SET to enter the pump status change subroutine.
Critical <u>Y</u> Standard:	C11 step 6.4.8.C.6 Depress SET to enter the pump status change subroutine. Examinee enters the pumps statue change subroutine.
Critical <u>Y</u> Standard: Performance:	C11 step 6.4.8.C.6 Depress SET to enter the pump status change subroutine. Examinee enters the pumps statue change subroutine. SATISFACTORY UNSATISFACTORY

Performance Step:	C11 step 6.4.8.C.7
Critical <u>Y</u>	Depress the Up arrow to select pump status to OFF.
Standard:	Examinee selects pump status to OFF.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>Y</u>	C11 step 6.4.8.C.8 Depress SET to accept the pump status change.
Standard:	Examinee accepts pump status change.
Performance:	
Comments:	
Performance Step: Critical <u>N</u>	C11 step 6.4.8.C.9 Depress MODE once to return to the dual rate display.
Standard:	Examinee returns to the dual rate display.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	C11 step 6.4.8.C.10 Depress the up arrow to select Channel 1R-11 [2R-11] on the RAM606 display.
Standard:	Examinee selects 1R-11 on the RAM606 display.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Page 6 of	f 10
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Performance Step: Critical <u>N</u>	C11 step 6.4.8.C.11 Verify the Pump Status OFF in the lower line display.
Standard:	Examinee identifies that the pump status is "off."
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
_	
Performance Step: Critical <u>N</u>	C11 step 6.4.8.D Place the Control Room RAM606 key switch in the "OFF" position.
Standard:	Examinee places the RAM606 key in "OFF."
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Terminating Cues:	When the examinee has changed R11/R12 pump status to OFF, then this JPM is complete.

Stop Time:

Simulator Setup:

- 1. Reset the simulator to IC-10.
- 2. Place the simulator in RUN.
- 3. If R11/12 is NOT in service, then perform steps 6.6.5.G, 6.6.5.H, 6.6.5.R, and 6.6.5.S of C11.

ATTACHMENT 1

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
 Are all items on the cover 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?	\square		
4. Do 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?	\square		
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?			
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8. Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators			
9. Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators			
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?			
12. Are all references identified, current, and accurate?			
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?			

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 2

JPM Number:	RM-5S		
JPM Title:	SECURE R11/12 IN CONTROL RO	ОМ	
Examinee & ID:		Evaluator:	
Job Title:		Date:	
Start Time		Finish Time	
PERFORMANCE I	RESULTS: SA	Г:	UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 and Unit 2 are at 100% power.
- R-11 and R-12 need to be removed from service for preventative maintenance.
- Steps 6.4.1 through 6.4.8.B of C11, Radiation Monitoring System, are complete.

INITIATING CUES:

• The Shift Supervisor directs you to remove 1R11/12 from service per section 6.4 of C11, Radiation Monitoring System.

Xcel Energy [*]	JOB PERFORMANCE MEASURE (JPM)		
SITE:	PRAIRIE ISLAND		
JPM TITLE:	MALFUNCTION OF AUTOMATIC MAKEUP DURING BORATION		
JPM NUMBER:	VC-29SF REV. 1		
RELATED PRA INFORMATION:	NONE		
TASK NUMBERS / TASK TITLE(S):	CR 000 023 05 01 000, INADVERTANT REACTIVITY CHANGES		
K/A NUMBERS:	004 A4.12 (3.8/3.3)		
APPLICABLE METHOD O	OF TESTING:		
	Discussion: Simulate/walkthrou	gh: Perform: X	
EVALUATION LOCATION	l: In-Plant: Contro	I Room:	
	Simulator: X Other:		
	Lab:		
Time for Completion	n: <u>10</u> Minutes Time	Critical: NO	
Alternate Path: YES			
TASK APPLICABILITY:	SRO: X RO: X NLO		
Additional site-specific sig	natures may be added as desired.		
Developed by:	Fredrick Collins		
	Developer	Date	
Validated by:	Justin Hasner		
(Validator See JPM Validation Checklist, Attachment 1)	Date	
	· · · · · · · · · · · · · · · · · · ·		
Approved by:	Training Supervisor	Date	

VC-29SF, MALFUNCTION OF AUTOMATIC MAKEUP DURING BORATION, REV.0

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

• Unit 1 is at 100% Power.

INITIATING CUES:

• The Unit 1 Shift Supervisor directs you to perform a 10 gallon BORATION to the RCS using 1C12.5, Unit 1 Boron Concentration Control, section 5.9.

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VC-29SF, MALFUNCTION OF AUTOMATIC MAKEUP DURING BORATION, REV.0

JPM PERFORMANCE INFORMATION

Required Materials:	NONE
General References:	1C12.5, Unit 1 Boron Concentration Control 1C12.5 AOP 2, Malfunction of Automatic Make-up
Task Standards:	Examinee takes makeup mode selector switch to borate and secures the boration.

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).
- IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical <u>N</u>	1C12.5 Section 5.9 1. <u>IF</u> not yet reviewed this shift, <u>THEN</u> perform a review of the precautions in section 5.7.
Standard:	Examinee reviews precautions in section 5.7.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	1C12.5 Section 5.9 2. Verify the Boric Acid Integrator is reset.
Standard:	Examinee determines the Boric Acid Integrator is reset.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

VC-29SF, MALFUNCTION OF AUTOMATIC MAKEUP DURING BORATION, REV.0

Performance Step: Critical <u>N</u>	1C12.5 Section 5.9 3. Set 1YIC-110, BA TO BLENDER BATCH INTEGRATOR, to the quantity desired.
Standard:	Examinee sets 1YIC-110 to 10.0
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>Y</u>	1C12.5 Section 5.9 4. Place CS-46300, MAKE-UP MODE SELECTOR, to "BORATE"
Standard:	Examinee places CS-46300 to borate.
Evaluator Note	When the make-up mode selector switch is taken to borate, a boration will begin immediately.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

ALTERNATE PATH STARTS HERE

VC-29SF, MALFUNCTION OF AUTOMATIC MAKEUP DURING BORATION, REV.0

Performance Step: Critical <u>Y</u>	 1C12.5 AOP 2 Section 2.4.1 <u>IF</u> T_{avg}, control rods, or source range are changing in an unexpected direction or rate, <u>THEN</u> stop makeup flow using one or more of the following methods: A. Place CS-46300, MAKE-UP MODE SELECTOR TO OFF. B. Place CS-46457, BORIC ACID MAKE-UP CONTROL, to "STOP". C. 1HC110, BA TO BLENDER FLOW CONT CV-31199, to MANUAL and CLOSE D. STOP the reactor makeup pumps and boric acid transfer pumps CS-46116, 11 RX M-U PUMP CS-46161, 11 BORIC ACID TRANSFER PUMP CS-46162, 12 BORIC ACID TRANSFER PUMP
Standard:	Examinee secures the boration.
Evaluator Note	There are multiple ways to stop the boration; any of the above methods will work. The examinee may also secure the boration valve line up.
Performance: Comments:	SATISFACTORY UNSATISFACTORY

Terminating Cues: When the examinee takes makeup mode selector switch to borate and secures the boration, then this JPM is complete

Stop Time:

Simulator Setup:

- 1. If an IC is already created for this JPM, then go to step 3.
- 2. If an IC is NOT created for this scenario, then create as follows:
 - a. Reset to IC-10.
 - b. Place the simulator in RUN.
 - c. If available, run schedule file **VC-29SF.sch** as follows:
 - 1) Select open file in the Schedule application.
 - 2) Locate schedule file.
 - 3) Open schedule file by double clicking it.
 - 4) Run the schedule file by pressing the "Stopped" button on the toolbar.
 - 5) Verify the schedule file is running.
 - d. If schedule file is NOT available, then insert malfunctions, remotes, and overrides, as specified by the Simulator Input Summary.
 - e. If available, open event file VC-29SF.evt as follows:
 - 1) Select open file in the EVENT application.
 - 2) Locate event file.
 - 3) Open by double clicking file.
 - f. If event file is NOT available, then enter event codes as specified by the Simulator Event Summary below.
 - g. If running this JPM in conjunction with **VC-104S** & **ZC-1SF**, then refer to ZC-1SF for set up instructions. If not, then continue with next step.
 - h. Place simulator in FREEZE.
 - i. If desired, save to an available IC.
 - j. Place simulator in RUN.
 - k. Go to step 4.
- 3. Reset the simulator to the IC created from step 2 and place in RUN.
- 4. Clear recorder memory after each reset.
- 5. Verify Director or Schedule File matches the input summary below.

SIMULATOR INPUT SUMMARY

Insert	Pause	@Time	Event	Action	Description
			1	Insert override DI-46457NAST to False on event 1	NRML AF STRT
			1	Insert override DI-46457SP to False on event 1	STOP
			1	Insert override DI-46457ST to True on event 1	START
			1	Insert override DI-41111RS to False on event 1	RESET
			1		

SIMULATOR EVENT SUMMARY			
Event ID	Event CODE	Event DESCRIPTION	
1	ZVCR457(1)==1	BORIC ACID MU CONTROL TO START	

VC-29SF, MALFUNCTION OF AUTOMATIC MAKEUP DURING BORATION, REV.0

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIE	W STATEMENTS	YES	NO	N/A
1. A	are all items on the cover page filled in correctly?	\boxtimes		
2. ⊢	as the JPM been reviewed and validated by SMEs?	\boxtimes		
3. C e	Can the required conditions for the JPM be appropriately established in the simulator if required?	\boxtimes		
4. C a	Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	\boxtimes		
5. Is c tr	s the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the rainee properly performed the step?	\boxtimes		
6. If e	f the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	\boxtimes		
7. lf a	f the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8. ls re	s the Licensee level appropriate for the task being evaluated if equired? Not applicable to Non-Licensed Operators	\boxtimes		
9. ls re	s the K/A appropriate to the task and to the licensee level if equired? Not applicable to Non-Licensed Operators	\boxtimes		
10. H S	lave the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	\boxtimes		
11. F b	lave all special tools and equipment needed to perform the task een identified?	\boxtimes		
12. A	are all references identified, current, and accurate?	\boxtimes		
13. ⊢ e	lave all required cues (as anticipated) been identified for the evaluator to assist task completion?	\boxtimes		

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01. VC-29SF, MALFUNCTION OF AUTOMATIC MAKEUP DURING BORATION, REV.0

ATTACHMENT 2

JPM Number:	VC-29SF			
JPM Title:	Malfunction of Automatic Makeup	During Boration		
Examinee & ID:		Evaluator:		
Job Title:		Date:		
Start Time		Finish Time		
PERFORMANCE	RESULTS: SA	г:	UNSAT:	

OMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

• Unit 1 is at 100% Power.

INITIATING CUES:

• The Unit 1 Shift Supervisor directs you to perform a 10 gallon BORATION to the RCS using 1C12.5, Unit 1 Boron Concentration Control, section 5.9.

Xcel Energy [*]	JOB PERFORMAN	ICE MEA	SURE (JPM)		
SITE:	PRAIRIE ISLAND				
JPM TITLE:	RETURN 13 CHARGING	PUMP TO	STANDBY		
JPM NUMBER:	VC-104S	REV.	0		
RELATED PRA INFORMATION:	NONE				
TASK NUMBERS / TASK TITLE(S):	CRO 004 ATI 00 00 003 / SERVICE	SWAPPING	G CHARGING PU	IMPS WITH 2 PU	MPS IN
K/A NUMBERS:	A4.08 (3.4 / 3.8)				
APPLICABLE METHOD C	F TESTING:				
	Discussion:	Simulate/w	alkthrough:	Perform:	X
EVALUATION LOCATION	: In-Plant:		Control Room:		
	Simulator:	X	Other:		
	Lab:				
Time for Completion	n: <u>8</u> Minutes		Time Critical:	NO	
Alternate Path:	NO				
TASK APPLICABILITY:	SRO: X RO:	XN			
Additional site-specific sig	natures may be added as o	desired.			7
Developed by: Justi	in Hasner				
	Developer	r		Date	
Validated by: Zach	Elbert				
(Validator See JPM Validation Check	list, Attachm	ent 1)	Date	
Approved by: Shave	vn Sarrasin				4
	Training Super	visor		Date	

Page 2 of 9

VC-104S, RETURN 13 CHARGING PUMP TO STANDBY, REV. 0

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

- 11 and 12 Charging Pumps are RUNNING.
- The crew is preparing to swap charging pumps.
- 13 Charging Pump is in PULLOUT.
- Outplant Operators have completed the desurger pressure check for 13 Charging Pump.

INITIATING CUES:

• The Shift Supervisor directs you to return 13 Charging Pump to STANDBY per 1C12.1, Letdown, Charging, and Seal Water Injection – Unit 1, starting with step 6.14.4.V.

JPM PERFORMANCE INFORMATION

Required Materials:	NONE
General References:	1C12.1, Letdown, Charging, and Seal Water Injection – Unit 1
Task Standards:	The examinee places the 13 Charging Pump in standby status (Neutral position with green light lit and white light not lit).
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).

IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical Y	1C12.1 Letdown, Charging, and Seal Water Injection – Unit 1, Step 6.14.4.V:
	Return CS-46294, 13 CHG PUMP, to "NEUTRAL".
Standard:	The examinee returns CS-46294 to the neutral position.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Performance Step:	1C12.1 Letdown, Charging, and Seal Water Injection – Unit 1, Step 6 14 4 W 1
	Perform the following to energize the VFD and place charging pump in a standby status:
	Energize VFD by momentarily placing CS-46294, 13 CHG PUMP, to "START".
Standard:	The examinee places CS-46294 in "START" and releases it.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	1C12.1 Letdown, Charging, and Seal Water Injection – Unit 1, Step 6.14.4.W.2:
	Perform the following to energize the VFD and place charging pump in a standby status:
	Verify control switch green and white lights are LIT.
Standard:	The examinee verifies green and white lights on the 13 charging pump are LIT.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>Y</u>	1C12.1 Letdown, Charging, and Seal Water Injection – Unit 1, Step 6.14.4.W.3:
	Perform the following to energize the VFD and place charging pump in a standby status:
	Momentarily place CS-46294, 13 CHG PUMP, to "STOP".
Standard:	The examinee places CS-46294 in "STOP" and releases it.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Retention: Life of Plant Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01. Terminating Cues: When examinee has placed the 13 Charging Pump in standby status (Neutral position with green light lit and white light not lit), then this JPM is complete.

Stop Time:

Simulator Setup:

- 1. If this JPM is being run in conjunction with **ZC-1SF & VC-29SF**, then set up the simulator per the simulator set up in **ZC-1SF**, then continue with step 5.
- 2. If an IC is already created for this JPM, then go to step 4.
- 3. If an IC is NOT created for this JPM, then create as follows:
 - a. Reset to IC-10.
 - b. Place the simulator in RUN.
 - c. Take CS-46294, 13 CHG PUMP to PULLOUT.
 - d. Place simulator in FREEZE.
 - e. If desired, save to an available IC.
 - f. Place simulator in RUN.
 - g. Go to step 5.
- 4. Reset the simulator to the IC created from step 3 and place in RUN.
- 5. Mark steps R-U complete on page 55 of 1C12.1.
- 6. Clear recorder memory after each reset.

SIMULATOR INPUT SUMMARY

NONE

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS			NO	N/A
1.	Are all items on the cover page filled in correctly?	\square		
2.	Has the JPM been reviewed and validated by SMEs?	\square		
3.	Can the required conditions for the JPM be appropriately established in the simulator if required?			
4.	Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	\boxtimes		
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.	If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	\square		
7.	If the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8.	Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	\square		
9.	Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	\square		
10.	Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	\square		
11.	Have all special tools and equipment needed to perform the task been identified?	\square		
12.	Are all references identified, current, and accurate?	\square		
13.	Have all required cues (as anticipated) been identified for the evaluator to assist task completion?			

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01.

ATTACHMENT 2

JPM Number:	VC-104S
JPM Title:	RETURN 13 CHARGING PUMP TO STANDBY
Examinee & ID:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE	RESULTS: SAT: UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- 11 and 12 Charging Pumps are RUNNING.
- The crew is preparing to swap charging pumps.
- 13 Charging Pump is in PULLOUT.
- Outplant Operators have completed the desurger pressure check for 13 Charging Pump.

INITIATING CUES:

• The Shift Supervisor directs you to return 13 Charging Pump to STANDBY per 1C12.1, Letdown, Charging, and Seal Water Injection – Unit 1, starting with step 6.14.4.V.

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JOB PERFORMAN	ICE MEAS	URE (JPM)	
PRAIRIE ISLAND			
CFCU HIGH TEMP WHIL	E ALTERNA	TING FAN COIL	UNITS
ZC-1SF	REV.	1	
NONE			
CRO 022 ATI 00 00 007	CHANGE FA	N COIL UNIT F	AN SPEED
022 A4.01 (3.6/3.6)			
OF TESTING:			
Discussion:	Simulate/wa	lkthrough:	Perform:
l: In-Plant:		Control Room:	
Simulator:	X	Other:	
Lab:			
n: <u>7</u> Minutes		Time Critical:	NO
YES			
SRO: X RO:	X NL	о 🗌	
natures may be added as	desired.		
Fredrick Col	lins		
Develope	r		Date
Justin Hası	ner		
Validator See JPM Validation Check	list, Attachmer	nt 1)	Date
	,	,	
Shawn Sarra	asin rvisor		Date
	JOB PERFORMAN PRAIRIE ISLAND CFCU HIGH TEMP WHIL ZC-1SF NONE CRO 022 ATI 00 00 007 A 022 A4.01 (3.6/3.6) F TESTING: Discussion: I: In-Plant: Simulator: Lab: I: In-Plant: Simulator: Lab: I: 7 Minutes YES SRO: X RO: NE SRO: X RO: NE SRO: SRO: SRO: SRO: Justin Hasi Validator See JPM Validation Check	JOB PERFORMANCE MEAS PRAIRIE ISLAND CFCU HIGH TEMP WHILE ALTERNAT ZC-1SF REV. NONE CRO 022 ATI 00 00 007 / CHANGE FA 022 A4.01 (3.6/3.6) PF TESTING: Discussion: Simulate/wal I: In-Plant: X 0 Lab: X 0 Lab: X 0 Lab: X 0 Simulator: X 0 Lab:	JOB PERFORMANCE MEASURE (JPM) PRAIRIE ISLAND CFCU HIGH TEMP WHILE ALTERNATING FAN COIL ZC-1SF REV. 1 NONE CRO 022 ATI 00 00 007 / CHANGE FAN COIL UNIT F. 022 A4.01 (3.6/3.6) OF TESTING: Discussion: Simulate/walkthrough: I: In-Plant: Control Room: Simulator: X Other: Lab: n: Minutes Time Critical:

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

- Unit 1 is at 100% power.
- 11 FCU is in FAST to the SUP CLG.
- 12 FCU is in SLOW to the DOME.
- 13 FCU is in FAST to the GAP.
- 14 FCU is in SLOW to the DOME.

INITIATING CUES:

- The SS directs you to alternate FCUs per Section 6.6.4.A of 1C19.2, Containment System Ventilation Unit 1, as follows:
 - 11 FCU in SLOW to the DOME.
 - 12 FCU in FAST to the SUP CLG.
 - 13 FCU in SLOW to the DOME.
 - 14 FCU in FAST to the GAP.

JPM PERFORMANCE INFORMATION

Required Materials:	NONE
General References:	1C19.2, CONTAINMENT SYSTEM VENTILATION UNIT 1 C47019-0504, 12 CONTAINMENT FAN COIL UNIT MOTOR STATOR HI TEMP
Task Standards:	Examinee alternates FCUs, stops 12 FCU due to high temperature, and re- aligns 11 FCU to SUPPORT in fast speed.

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).

IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Regualification Program Examinations.

Performance Step: Critical <u>Y</u>	 1C19.2, step 6.6.4.A.1: Containment Fan Coil Fans and Discharge Dampers 1. Shift the desired fan coil units to SLOW by placing the control switch in "OFF" for 15 seconds, then placing the control switch in "SLOW:"
	 CS-46018, 11 CNTMT FAN COIL UNIT CS-46020, 12 CNTMT FAN COIL UNIT CS-46019, 13 CNTMT FAN COIL UNIT CS-46021, 14 CNTMT FAN COIL UNIT
Standard:	Examinee shifts 11 and 13 FCUs to slow speed using CS-46018 and CS- 46019.
Performance: Comments:	SATISFACTORY UNSATISFACTORY

Performance Step: Critical <u>Y</u>	1C19.2, step 6.6.4.A.2:
_	Align the fan coil unit discharge dampers as desired, observing Precaution 3.7:
	CS-46440, 11 FCU DISCH TO CNTMT DOME/SUPPORT DMPRS
	CS-46441, 12 FCU DISCH TO CNTMT DOME/SUPPORT DMPRS
	CS-46442, 13 FCU DISCH TO CNTMT DOME/GAP DAMPERS
	CS-46443, 14 FCU DISCH TO CNTMT DOME/GAP DAMPERS
Standard:	Examinee aligns FCU Discharge dampers as follows:
	 11 CFCU to DOME using CS-46440
	 12 CFCU to SUPPORT using CS-46441
	 13 CFCU to DOME using CS-46442
	• 14 CFCU to GAP using CS-46443
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step: Critical <u>N</u>	1C19.2, step 6.6.4.A.3:
_	Verify the associated white fan coil unit damper improper lights remain NOT LIT:
	ML-44002-0101, 11 CNTMT FCU DISCH DMPRS IMPROPER
	ML-44002-0102, 12 CNTMT FCU DISCH DMPRS IMPROPER
	ML-44002-0201, 13 CNTMT FCU DISCH DMPRS IMPROPER
	ML-44002-0202, 14 CNTMT FCU DISCH DMPRS IMPROPER
Standard:	Examinee determines the IMPROPER lights are NOT lit.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Performance Step: Critical <u>Y</u>	1C19.2, step 6.6.4.A.4: Shift the desired fan coil units to FAST by placing the control switch in "OFF" for at least one (1) second, then placing the control switch in "FAST:" • CS-46018, 11 CNTMT FAN COIL UNIT • CS-46020, 12 CNTMT FAN COIL UNIT • CS-46019, 13 CNTMT FAN COIL UNIT • CS-46021, 14 CNTMT FAN COIL UNIT
Standard:	 Examinee shifts 12 and 14 FCUs to fast speed using CS-46020 and CS- 46021.
Evaluator Note:	When examinee places CS-46020, 12 CFCU, in FAST, then verify AUTO Trigger 1, 12 CFCU High temp, is entered.
Performance: Comments:	SATISFACTORY UNSATISFACTORY

ALTERNATE PATH STARTS HERE

Performance Step: Critical N	C47019-0405, step 1:	
	Verify one of 12 FCU discharge dampers is OPEN. IF necessary, THEN open appropriate damper using CS-46441, 12 FCU DISCH TO DOME/SUPPORT CD-34074/34075 CS.	
Standard:	Examinee determines one of 12 FCU discharge dampers are already open.	
Performance:	SATISFACTORY UNSATISFACTORY	
Comments:		

Performance Step: Critical N	C47019-0405, step 2:
<u> </u>	Verify cooling water alignment to 12 FCU:
	 MV-32379 12 FCII CLG WTR INLT ISOL MV OPEN
	• MV-32136, 12 FOU CLG WIR OUTLISOL MV B, OPEN.
Standard:	Examinee determines cooling water is aligned to 12 FCU.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Performance Step:	C47019-0405, step 3.A:
Critical Y	
<u> </u>	IF Steps 1 & 2 did not cause stator temperature to decrease to below alarm
	setpoint, THEN perform the following:
	1) Stop 12 FCU (FCU is not considered inoperable at this time).
Standard:	Examinee aligns 11 FCU to SUPPORT using CS-46440.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	
Commenta.	
Parformanco Ston	C17010 0105 stop 2 D.
Critical <u>Y</u>	С47019-0403, Step 3.D.
	 Verify CD-34073, 11 FCU NORM DISCH TO RX VESSEL SUPPORT, OPEN.
Standard:	Examinee aligns 11 FCU to SUPPORT using CS-46440.
Performance:	SATISFACTORY UNSATISFACTORY
Comments:	

Performance Step: Critical <u>Y</u>	C47019-0405, step 3.C:
	3) Verify 11 CFCU running in fast.
Standard:	Examinee shifts 11 FCU to fast speed using CS-46018.
Performance: Comments:	SATISFACTORY UNSATISFACTORY

Terminating Cues:	When the examinee has alternated FCUs, stopped 12 FCU due to high
-	temperature, and has re-aligned 11 FCU to SUPPORT in fast speed, then this JPM
	is complete.

Stop Time:
ZC-1SF, CFCU HIGH TEMP WHILE ALTERNATING FAN COIL UNITS, REV. 1

Simulator Setup:

- 1. If an IC is already created for this JPM, then go to step 3.
- 2. If an IC is NOT created for this JPM, then create one as follows:
 - a. Reset simulator to IC-10 and place in RUN.
 - b. If running this JPM in conjunction with VC-104S, then:
 - 1) Take CS-46294, 13 CHG PUMP, to PULLOUT.
 - 2) If also running this JPM in conjunction with **VC-29SF**, then go to step 2.c, if not then continue with next step.
 - 3) Place simulator in FREEZE.
 - 4) If desired, save to an available IC.
 - 5) Place simulator in RUN.
 - 6) Go to step 3.
 - c. If also running this JPM in conjunction with VC-29SF, then:
 - 1) If available, run schedule files **ZC-1SF.sch & VC-29SF.sch** as follows:
 - (a) Select open file in the Schedule application.
 - (b) Locate schedule file.
 - (c) Open schedule file by double clicking it.
 - (d) Run the schedule file by pressing the "Stopped" button on the toolbar.
 - (e) Verify the schedule file is running.
 - 2) If schedule file is NOT available, then insert malfunctions, remotes, and overrides, as specified by the Simulator Input Summary.
 - 3) If available, open event files **ZC-1SF.evt & VC-29SF.evt** as follows:
 - (a) Select open file in the EVENT application.
 - (b) Locate event file.
 - (c) Open by double clicking file.
 - 4) If event file is NOT available, then enter event codes as specified by the Simulator Event Summary below.
 - 5) Place simulator in FREEZE.
 - 6) If desired, save to an available IC.
 - 7) Place simulator in RUN.
 - 8) Go to step 3.
- 3. Reset the simulator to the IC created from step 2 and place in RUN.
- 4. Clear recorder memory after each reset.
- 5. Verify Director or Schedule File matches the input summary below.

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ZC-1SF, CFCU HIGH TEMP WHILE ALTERNATING FAN COIL UNITS, REV. 1

SIMULATOR INPUT SUMMARY

VC-29SF:

Insert	Pause	@Time	Event	Action	Description
			1	Insert override DI-46457NAST to False on event 1	NRML AF STRT
			1	Insert override DI-46457SP to False on event 1	STOP
			1	Insert override DI-46457ST to True on event 1	START
			1	Insert override DI-41111RS to False on event 1	RESET

ZC-1SF:

@Time	Event	Action	Description
	2	Insert malfunction CP-1T1030A from 90.00000 to 150.00000 in 15 on event 2	12 CNTMT FCU MTR STR T
	2	Insert malfunction M47019:0405W after 5 to Cry_Wolf on event 2	Annunciator malfunction

SIMULATOR EVENT SUMMARY				
Event ID	Event CODE	Event DESCRIPTION		
1	ZVCR457(1)==1	BORIC ACID MU CONTROL TO START		
2	HWZCHFFCF(2)==1 & HWZCHFFCF(4)==1	12 & 14 CFCUs IN FAST		

ZC-1SF, CFCU HIGH TEMP WHILE ALTERNATING FAN COIL UNITS, REV. 1

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS			NO	N/A
1.	Are all items on the cover page filled in correctly?	\square		
2.	Has the JPM been reviewed and validated by SMEs?	\square		
3.	Can the required conditions for the JPM be appropriately	\square		
	established in the simulator if required?			
4.	Do 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.	If the task is NOT time critical, has the completion time been	\square		
	established based on validation data or incumbent experience?			
7.	If the task is time critical, is the time critical portion based upon			\boxtimes
	actual task performance requirements?			
8.	Is the Licensee level appropriate for the task being evaluated if	\square		
	required? Not applicable to Non-Licensed Operators			
9.	Is the K/A appropriate to the task and to the licensee level if	\square		
	required? Not applicable to Non-Licensed Operators			
10.	Have the performance steps been identified and typed (Critical /	\square		
	Sequence / Time Critical) appropriately?			
11.	Have all special tools and equipment needed to perform the task	\square		
	been identified?			
12.	Are all references identified, current, and accurate?			
13.	Have all required cues (as anticipated) been identified for the			
	evaluator to assist task completion?			

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

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 Retain in: Training Record Form retained in accordance with record retention schedule identified in FP-G-RM-01. ZC-1SF, CFCU HIGH TEMP WHILE ALTERNATING FAN COIL UNITS, REV. 1

ATTACHMENT 2

JPM Number:	ZC-1SF
JPM Title:	CFCU HIGH TEMP WHILE ALTERNATING FAN COIL UNITS, REV. 1
Examinee & ID:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE	RESULTS: SAT: UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.

ATTACHMENT 3

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 1 is at 100% power.
- 11 FCU is in FAST to the SUP CLG.
- 12 FCU is in SLOW to the DOME.
- 13 FCU is in FAST to the GAP.
- 14 FCU is in SLOW to the DOME.

- The SS directs you to alternate FCUs per Section 6.6.4.A of 1C19.2, Containment System Ventilation Unit 1, as follows:
 - 11 FCU in SLOW to the DOME.
 - 12 FCU in FAST to the SUP CLG.
 - 13 FCU in SLOW to the DOME.
 - 14 FCU in FAST to the GAP.

2 Xcel Energy [*]	JOB PERFORMA	NCE MEASU	IRE (JPM)		
SITE:	PRAIRIE ISLAND				
JPM TITLE:	LOCAL OPERATION OF	THE 22 TD	AFWP		
JPM NUMBER:	AF-16F-1	REV.	3		
RELATED PRA INFORMATION:	IMPORTANT COMPONE	ENT – 22 TD	AFW PMP		
TASK NUMBERS / TASK TITLE(S):	CRO 061 ATI 00 00 006 / NLO 061 014 01 04 000 /	LOCAL OP	ERATION OF TI START TD AFW	D AFW PUMP P USING 3-WAY	VALVE
K/A NUMBERS:	061 A2.04 (3.4/3.8)				
APPLICABLE METHOD C	OF TESTING:				
	Discussion:	Simulate/w	alkthrough:	X Perform:	
EVALUATION LOCATION	I: In-Plant:	X	Control Room:		
	Simulator:		Other:		
	Lab:				
Time for Completio	n: <u>12</u> Minutes		Time Critical:	NO	
Alternate Path:	YES				
TASK APPLICABILITY:	SRO: X RO:	XN	LOX		
Additional site-specific sig	natures may be added as	desired.			7
Developed by:	Fredrick Col	lins		6/27/14	
	Develope	r		Date	
Validated by:	Shawn Sarra	asin		8/21/14	
	Validator See JPM Validation Check)	list, Attachme	ent 1)	Date	
Approved by:	Chad Boece	man		8/26/2014	
	Training Supe	visor		Date	

AF-16F-1, LOCAL OPERATION OF THE 22 TD AFWP, REV. 3

JPM Number:	AF-16F-1		
JPM Title:	LOCAL OPERATION OF THE 22 TE) AFWP	
Examinee:		Evaluator:	
Job Title:		Date:	
Start Time		Finish Time	·
PERFORMANCE	RESULTS: SAT	:	UNSAT:

OMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.

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AF-16F-1, LOCAL OPERATION OF THE 22 TD AFWP, REV. 3

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

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.

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.

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.

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

INITIAL CONDITIONS:

- A Safety Injection has occurred in Unit 2.
- No AFW Pumps could be started from the Control Room.
- Pre-start checks on 22 TDAFWP per 2C28.1, section 5.8.1 and 5.8.2 are complete.
- Condensate Storage Tanks are near full level (19 feet).

- The SS directs you to start 22 TDAFWP per 2C28.1, beginning at step 5.8.3.
- ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS OTHERWISE DIRECTED.

AF-16F-1, LOCAL OPERATION OF THE 22 TD AFWP, REV. 3 JPM PERFORMANCE INFORMATION

Required Materials:	Consumable copy of 2C28.1, sections 5.8 through 5.13, with steps 5.8.1 and 5.8.2 signed off.
General References:	2C28.1, AUXILIARY FEEDWATER SYSTEM UNIT 2
Task Standards:	Examinee determines 22 TD AFW Pump local start pushbutton does not work and starts 22 TD AFW Pump using 3-Way Valve 2AF-292-1.

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).
- IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical N	2C28.1 Step 5.8.3
	Place CS-51617, 22 TDAFWP CV-31999, LOCAL/REMOTE switch in the LOCAL position.
Standard:	Examinee places CS-51617 in the LOCAL position.
Evaluator Cue:	When examinee simulates placing CS-51617 in the LOCAL position, then inform examinee CS-51617 is in the LOCAL position.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	

Evaluator Cues:

Performance:

Comments:

AF-16F-1, LOCAL OPERATION OF THE 22 TD AFWP, REV. 3

	Page 5	of 10
-		

AI -	III -1, LOCAL OF LIKETION OF THE 22 TO AT WF, NEV. 3			
Performance Step: Critical N	2C28.1 Step 5.8.4			
—	Depress LOCAL RESET pushbutton CS-5161801, 22 TD AFW PMP RESET PB.			
Standard:	Examinee depresses CS-5161801.			
Evaluator Cue:	When examinee simulates depressing CS-5161801, then inform examinee CS-5161801 has been depressed.			
Performance:				
Comments:				
Performance Step: Critical <u>Y</u>	2C28.1 Step 5.8.5			
_	Depress and hold LOCAL START pushbutton CS-5161802, 22 TD AFW PMP START PB for five (5) seconds.			
Standard:	Examinee determines CS-5101802 does not work and proceeds to: 2C28.1 Section 5.10, Use of 3-Way Valve 2AF-292-1			

2C28.1 Section 5.13, Manual Start of 22 TD AFW Pump Using the Trip Valve.

• After examinee has simulated depressing and holding CS-5161802, then inform examinee the 22 TDAFWP did NOT start and the 22 TDAFWP Aux

• If examinee informs the SS the 22 TDAFWP did not start and asks for direction, then inform the examinee to start 22 TDAFWP per 2C28.1.

• If the examinee proceeds to section 5.13, then direct examinee to

OR

section 5.10.

Lube Oil Pump did NOT start.

SATISFACTORY 🗌 UNSATISFACTORY 🗌

ALTERNATE PATH STARTS HERE

AF-16F-1, LOCAL OPERATION OF THE 22 TD AFWP, REV. 3

Performance Step: Critical N	2C28.1 Steps 5.10.1.A through 5.10.1.D
	Verify the following:
	Oil levels between sightglass marks:
	Turbine IBRG
	Turbine OBRG
	Oil level within 1/4" of mark on governor sightglass.
	Pump oil level is between the sightglass upper mark and the top of the sightglass.
	11081, 22 TD AFW PMP SUCT STRNR OUTL PI, is approx. eight (8) psig: • Open 11081-ISOL
	Record 11081
	Close 11081-ISOL
Standard:	Examinee determines steps A-D were previously completed in section 5.8.
Evaluator Cue:	If the examinee attempts to perform steps 5.10.1.A, B, C, and D, inform the examinee these steps were already accomplished in Section 5.8 and DO NOT perform them.
Performance:	
Comments:	

Performance Step: Critical <u>N</u>	2C28.1 Step 5.10.1.E
_	Condensate Storage Tank Level is greater than four (4) feet.
Standard:	Examinee determines CST levels are greater than 4 feet.
Evaluator Cue:	Inform the examinee that CST levels are all 19 feet.
Performance:	
Comments:	

AF-16F-1, LOCAL OPERATION OF THE 22 TD AFWP, REV. 3

	, , - , -
Performance Step: Critical <u>N</u>	2C28.1 Step 5.10.2
	Place CS-51617, 22 TD AFWP CV-31999, LOCAL/REMOTE switch in the LOCAL position.
Standard:	Examinee places CS-51617 in the LOCAL position.
Evaluator Note:	This step was already accomplished in section 5.8.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌

Comments:

Performance Step: Critical <u>N</u>	2C28.1 Step 5.10.3
	Depress LOCAL RESET pushbutton CS-5161801, 22 TD AFW PMP RESET PB.
Standard:	Examinee depresses CS-5161801.
Evaluator Note:	This step was already accomplished in section 5.8.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	

Performance Step: Critical N	2C28.1 Step 5.10.4
	IF the auxiliary lube oil pump is NOT running, THEN depress LOCAL START pushbutton CS-19335, 22 TD AFWP AUX LUBE OIL PUMP, to start the auxiliary lube oil pump.
Standard:	Examinee starts the 22 TD AFWP AUX LUBE OIL PUMP using CS-19335.
Evaluator Cues:	 If the examinee asks for the status of 22 TD AFWP AUX LUBE OIL PUMP prior to pressing CS-19335, then inform the examinee it is NOT running. When CS-19335 is depressed, inform the examinee that the 22 TD AFWP AUX LUBE OIL PUMP is running.
Performance:	
Comments:	

AF-16F-1, LOCAL OPERATION OF THE 22 TD AFWP, REV. 3

-				
Performance Step: Critical Y	2C28.1 Step 5.10.5			
—	Place 2AF-292-1 in the OPEN position. 22 TD AFW Pump should roll up to full speed within 30 seconds.			
Standard:	Examinee places 2AF-292-1 in the OPEN position.			
Evaluator Cue:	When examinee simulates opening 2AF-292-1, inform examinee the 22 TDAFWP is up to rated speed and has a discharge pressure of 1650 psig.			
Performance:				
Comments:				
Terminating Cues:	When the examinee has determined the 22 TD AFW Pump local start pushbutton did not work and has started 22 TD AFW Pump using 3-Way Valve 2AF-292-1,			

Stop Time:

then this JPM is complete.

TURNOVER SHEET

INITIAL CONDITIONS:

- A Safety Injection has occurred in Unit 2.
- No AFW Pumps could be started from the Control Room.
- Pre-start checks on 22 TDAFWP per 2C28.1, section 5.8.1 and 5.8.2 are complete.
- Condensate Storage Tanks are near full level (19 feet).

- The SS directs you to start 22 TDAFWP per 2C28.1, beginning at step 5.8.3.
- ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS OTHERWISE DIRECTED.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REV	REVIEW STATEMENTS			N/A
1.	Are all items on the cover page filled in correctly?	\boxtimes		
2.	Has the JPM been reviewed and validated by SMEs?	\boxtimes		
3.	Can the required conditions for the JPM be appropriately			\square
	established in the simulator if required?			
4.	Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	\boxtimes		
5.	Is the standard for each performance item specific as to what	\boxtimes		
	controls, indications and ranges are required to evaluate if the			
	trainee properly performed the step?			
6.	If the task is NOT time critical, has the completion time been	\boxtimes		
	established based on validation data or incumbent experience?			
7.	If the task is time critical, is the time critical portion based upon			\boxtimes
	actual task performance requirements?			
8.	Is the Licensee level appropriate for the task being evaluated if	\boxtimes		
	required? Not applicable to Non-Licensed Operators			
9.	Is the K/A appropriate to the task and to the licensee level if	\boxtimes		
	required? Not applicable to Non-Licensed Operators			
10.	Have the performance steps been identified and typed (Critical /	\boxtimes		
	Sequence / Time Critical) appropriately?			
11.	Have all special tools and equipment needed to perform the task	\boxtimes		
	been identified?			
12.	Are all references identified, current, and accurate?	\boxtimes		
13.	Have all required cues (as anticipated) been identified for the	\boxtimes		
	evaluator to assist task completion?			

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date

? Xcel Energy ^{**}	JOB PERFORMANCE MEASURE (JPM)						
SITE:	PRAIRIE ISLAND						
JPM TITLE:	STARTUP THE PORTAE	STARTUP THE PORTABLE BATTERY CHARGER					
JPM NUMBER:	DC-1	REV.	4				
RELATED PRA INFORMATION:	LODC (<1%)						
TASK NUMBERS / TASK TITLE(S):	NLO 063 010 01 04 000 /	INSTALL/R	EMOVE PORTA	BLE BATTERY C	HARGER		
K/A NUMBERS:	058 AA1.03 (3.1/3.3)						
APPLICABLE METHOD C	OF TESTING:						
	Discussion:	Simulate/w	alkthrough:	X Perform:			
EVALUATION LOCATION	I: In-Plant:	X	Control Room:				
	Simulator:		Other:				
	Lab:						
Time for Completio	n: <u>11</u> Minutes		Time Critical:	NO			
Alternate Path:	NO						
TASK APPLICABILITY:	SRO: X RO:	XN	ILO X				
Additional site-specific signatures may be added as desired.							
Developed by:	Shawn Sarra	isin		7/2/2015			
	Developer			Date			
Validated by:	Phil Krame	er		7/7/15			
	Validator See JPM Validation Check)	list, Attachm	ent 1)	Date			
Approved by:	Ross Lexvo	old		7/13/15			
	Training Super	visor		Date			

DC-1, STARTUP THE PORTABLE BATTERY CHARGER, REV 4

Page	2 of	10
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JPM Number:	DC-1
JPM Title:	STARTUP THE PORTABLE BATTERY CHARGER
Examinee:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE	E RESULTS: SAT: UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE:

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.

QF-1075-01 Rev. 4 (FP-T-SAT-75)

DC-1, STARTUP THE PORTABLE BATTERY CHARGER, REV 4

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

- Unit 2 is at 100% power.
- The 22 Battery Charger has failed and can NOT be returned to service.
- The Portable Battery Charger is installed and connected in the 22 Battery Room.
- Steps 1 3 of Attachment C of 2C20.9 AOP4, FAILURE OF 22 BATTERY CHARGER, are complete.

- The Unit 2 Shift Supervisor directs you to startup the Portable Battery Charger in 22 Battery Room per step 4.A 4.F of Attachment C of 2C20.9 AOP4, FAILURE OF 22 BATTERY CHARGER.
- ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS DIRECTED OTHERWISE.

DC-1, STARTUP THE PORTABLE BATTERY CHARGER, REV 4

JPM PERFORMANCE INFORMATION

Required Materials:	Consumable copy of 2C20.9 AOP4 Attachment C with steps 1 – 3 marked as complete.
General References:	2C20.9 AOP4, FAILURE OF 22 BATTERY CHARGER
Task Standards:	Examinee starts up the Portable Battery Charger.

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).

IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Regualification Program Examinations.

Performance Step: Critical <u>N</u>	 2C20.9 AOP4, Attachment C, Step 4.A.1 On the failed 22 Battery Charger: 1. Verify BKR 22 BTCHGAC, 22 BATTERY CHARGER AC INPUT BREAKER is "Tripped" or "OFF."
Standard:	Examinee determines BKR 22 BTCHGAC is OFF.
Evaluator Note:	If the actual Portable Battery Charger in the plant is NOT located in the 22 Battery Room, then simulate that the Portable Battery Charger is already installed and connected in the 22 Battery Room.
Evaluator Cue:	When the examinee locates and observes the position of BKR 22 BTCHGAC, then indicate the breaker is in the tripped position.
Performance: Comments:	

	DC-1, STARTUP THE PORTABLE BATTERY CHARGER, REV 4
Performance Step: Critical <u>N</u>	2C20.9 AOP4, Attachment C, Step 4.A.2 On the failed 22 Battery Charger:
	2. OPEN BKR 22 BTCHGDC, 22 BATTERY CHARGER DC OUTPUT BREAKER.
Standard:	Examinee opens BKR 22 BTCHGDC.
Evaluator Cue:	When the examinee simulates opening BKR 22 BTCHGDC, then inform examinee the breaker is open.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	

Performance Step: Critical <u>N</u>	2C20.9 AOP4, Attachment C, Step 4.B.1 Inside 22 Battery Charger DC Transfer Switch: 1. OPEN the "22 Battery Charger Isolation Breaker."
Standard:	Examinee opens the 22 Battery Charger Isolation Breaker.
Evaluator Cue:	When the examinee simulates opening the 22 Battery Charger Isolation Breaker, then inform examinee the breaker is open.
Performance:	
Comments:	

Performance Step: Critical <u>Y</u>	2C20.9 AOP4, Attachment C, Step 4.B.2 Inside 22 Battery Charger DC Transfer Switch: 2. CLOSE the "Portable Battery Charger Isolation Breaker."
Standard:	Examinee closes the Portable Battery Charger Isolation Breaker.
Evaluator Cue:	When the examinee simulates closing the Portable Battery Charger Isolation Breaker, then inform examinee the breaker is closed.
Performance: Comments:	

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D	C-1, STARTUP THE PORTABLE BATTERY CHAR	GER, REV 4
Performance Step: Critical <u>N</u>	2C20.9 AOP4, Attachment C, Step 4.C Verify MCC 2AC2 cell A6, "22 Battery Cha	arger" is "ON."
Standard:	Examinee determines MCC 2AC2 cell A6	is ON.
Evaluator Cue:	When the examinee locates and observe then indicate the breaker is ON.	es the position of MCC 2AC2 cell A6,
Performance:	SATISFACTORY 🗌 UNSATISFACTORY	

Performance Step: Critical <u>Y</u>	2C20.9 AOP4, Attachment C, Step 4.D Place 22 Battery Charger AC Transfer Switch to the "PORTABLE CHARGER" position.
Standard:	Examinee places the 22 Battery Charger AC Transfer Switch to the PORTABLE CHARGER position.
Evaluator Cue:	When the examinee simulates placing 22 Battery Charger AC Transfer Switch to the PORTABLE CHARGER position, then inform examinee the Transfer Switch is in the PORTABLE CHARGER position.
Performance: Comments:	

DC-1,	, STARTUP THE PORTABLE BATTERY CHARGER, REV 4
Performance Step: Critical <u>Y</u>	 2C20.9 AOP4, Attachment C, Step 4.E.1 On the Portable Battery Charger: 1. CLOSE BKR 11 PBTCHGAC, 11 PORTABLE BATTERY CHARGER AC INPUT BREAKER.
Standard:	Examinee closes BKR 11 PBTCHGAC.
Evaluator Note:	If the actual Portable Battery Charger in the plant is NOT located in the 22 Battery Room, then inform examinee to simulate actions at the location where the Portable Battery Charger is currently stored.
Evaluator Cue:	When examinee simulates closing BKR 11 PBTCHGAC, then inform the examinee the breaker is closed.
Performance:	
Comments:	
Performance Step: Critical <u>Y</u>	 2C20.9 AOP4, Attachment C, Step 4.E.2 On the Portable Battery Charger: 2. CLOSE BKR 11 PBTCHGDC, 11 PORTABLE BATTERY CHARGER DC OUTPUT BREAKER.
Standard:	Examinee closes BKR 11 PBTCHGDC.
Evaluator Cue:	When examinee simulates closing BKR 11 PBTCHGDC, then inform the examinee the breaker is closed.
Performance:	
Comments:	

	,
	DC-1, STARTUP THE PORTABLE BATTERY CHARGER, REV 4
Performance Step: Critical <u>N</u>	2C20.9 AOP4, Attachment C, Step 4.F Verify 11 P CHG/AMM, 11 PORT BATTERY CHARGER DC AMMETER is 20 – 300 amps.
Standard:	Examinee determines 11 P CHG/AMM is between 20 and 300 amps.
Evaluator Cue:	When examinee locates and observes 11 P CHG/AMM, then indicate meter is reading 100 amps.
Performance: Comments:	
Terminating Cues:	When examinee has started up the Portable Battery Charger, then this JPM is complete.

Stop Time:

TURNOVER SHEET

INITIAL CONDITIONS:

- Unit 2 is at 100% power.
- The 22 Battery Charger has failed and can NOT be returned to service.
- The Portable Battery Charger is installed and connected in the 22 Battery Room.
- Steps 1 3 of Attachment C of 2C20.9 AOP4, FAILURE OF 22 BATTERY CHARGER, are complete.

- The Unit 2 Shift Supervisor directs you to startup the Portable Battery Charger in 22 Battery Room per step 4.A 4.F of Attachment C of 2C20.9 AOP4, FAILURE OF 22 BATTERY CHARGER.
- ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS DIRECTED OTHERWISE.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS			NO	N/A
1.	Are all items on the cover page filled in correctly?	\boxtimes		
2.	Has the JPM been reviewed and validated by SMEs?	\boxtimes		
3.	Can the required conditions for the JPM be appropriately			\square
	established in the simulator if required?			
4.	Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	\boxtimes		
5.	Is the standard for each performance item specific as to what	\boxtimes		
	controls, indications and ranges are required to evaluate if the			
	trainee properly performed the step?			
6.	If the task is NOT time critical, has the completion time been	\boxtimes		
	established based on validation data or incumbent experience?			
7.	If the task is time critical, is the time critical portion based upon			\boxtimes
	actual task performance requirements?			
8.	Is the Licensee level appropriate for the task being evaluated if	\boxtimes		
	required? Not applicable to Non-Licensed Operators			
9.	Is the K/A appropriate to the task and to the licensee level if	\boxtimes		
	required? Not applicable to Non-Licensed Operators			
10.	Have the performance steps been identified and typed (Critical /	\boxtimes		
	Sequence / Time Critical) appropriately?			
11.	Have all special tools and equipment needed to perform the task	\boxtimes		
	been identified?			
12.	Are all references identified, current, and accurate?	\boxtimes		
13.	Have all required cues (as anticipated) been identified for the	\boxtimes		
	evaluator to assist task completion?			

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date

2 Xcel Energy*	JOB PERFORMANCE MEASURE (JPM)				
SITE:	PRAIRIE ISLAND				
JPM TITLE:	PERFORM RCP SEAL			OSS OF ALL AC F	OWER
JPM NUMBER:	RC-8	REV.	14		
RELATED PRA INFORMATION:	LOAC (<1%)				
TASK NUMBERS / TASK TITLE(S):	NLO 000 056 05 04 000	RESPOND 1	O LOSS OF A	LL AC POWER	
K/A NUMBERS:	055 EK3.02 (4.3/4.6)				
APPLICABLE METHOD	OF TESTING:				
	Discussion:	Simulate/wa	alkthrough:	X Perform:	
EVALUATION LOCATION	N: In-Plant:	X	Control Room:		
	Simulator:		Other:		
	Lab:				
Time for Completic	on: <u>4</u> Minutes		Time Critical	NO	
Alternate Path: NO					
TASK APPLICABILITY: SRO: X RO: X NLO X					
					7
Developed by:	Fredrick Co	llins		8/12/2014	_
	Develope	r		Date	
Validated by:	Shawn Sarr	asin		8/15/2014	
	Validator See JPM Validation Check)	klist, Attachme	nt 1)	Date	
Approved by:	Travis Ou	ret		9/23/2014	
	Training Supe	rvisor		Date	

QF-1075-01 Rev. 4 (FP-T-SAT-75) Page 2 of 7 RC-8, PERFORM RCP SEAL ISOLATION FOLLOWING LOSS OF ALL AC POWER, REV 14

JPM Number:	RC-8
JPM Title:	PERFORM RCP SEAL ISOLATION FOLLOWING LOSS OF ALL AC
Examinee:	Evaluator:
Job Title:	Date:
Start Time	Finish Time
PERFORMANCE	E RESULTS: SAT: UNSAT:

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).				

EVALUATOR'S SIGNATURE:

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.

QF-1075-01 Rev. 4 (FP-T-SAT-75)

RC-8, PERFORM RCP SEAL ISOLATION FOLLOWING LOSS OF ALL AC POWER, REV 14 (Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER

Add required site specific JPM briefing material here: for example:

This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.

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.

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.

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.

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

INITIAL CONDITIONS:

• A Loss of All AC power has occurred on Unit 1.

- The Unit 1 SS directs you to perform Steps 8.b and 8.c of 1ECA-0.0, LOSS OF ALL SAFEGUARDS AC POWER.
- ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS DIRECTED OTHERWISE.

RC-8, PERFORM RCP SEAL ISOLATION FOLLOWING LOSS OF ALL AC POWER, REV 14

JPM PERFORMANCE INFORMATION

Required Materials:	Copy of 1ECA-0.0, page 8, step 8.
General References:	1ECA-0.0, LOSS OF ALL SAFEGUARDS AC POWER.
Task Standards:	Examinee closes the RCP seal injection throttle valves and RCP CC return isolation valves.

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).

IMPORTANT: Critical steps are marked with a "Y" below the performance step number. Failure to meet the standard for any critical step shall result in failure of this JPM, per FP-T-SAT-73, Licensed Operator Requalification Program Examinations.

Performance Step: Critical <u>Y</u>	1ECA-0.0, step 8.b
	RCP seal injection throttle valves:
	• VC-14-1
	• VC-14-2
Standard:	Examinee closes RCP seal injection throttle valves VC-14-1 and VC-14-2.
Evaluator Note:	VC-14-1 and VC-14-2 are located in the Auxiliary Building, second floor valve gallery, as you enter the SG Blowdown Flash Tank area.
Evaluator Cue:	When examinee simulates closing the valves, then inform examinee the valves are closed.
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌
Comments:	

RC-8, PERFORM RCP SEAL ISOLATION FOLLOWING LOSS OF ALL AC POWER, REV 14				
Performance Step: Critical Y	1ECA-0.0, step 8.c			
	RCP CC return isolation valves:			
	• CC-16-3			
	• CC-16-2			
Standard:	Examinee closes RCP CC return isolation valves CC-16-3 and CC-16-2.			
Evaluator Note:	Valves are located in the Auxiliary Building, first floor, in the overhead (near SI room door closure device, west of elevator). Reach rod operators are below the valves, about waist high.			
Evaluator Que	When even ince simulates closing the velves, then inform even ince the			
Evaluator Cue:	valves are closed.			
Performance:	SATISFACTORY 🗌 UNSATISFACTORY 🗌			
Comments:				
Terminating Cues: W	When examinee has closed the RCP seal injection throttle valves and RCP CC eturn isolation valves, then this JPM is complete.			

Stop Time:

TURNOVER SHEET

INITIAL CONDITIONS:

• A Loss of All AC power has occurred on Unit 1.

- The Unit 1 SS directs you to perform Steps 8.b and 8.c of 1ECA-0.0, LOSS OF ALL SAFEGUARDS AC POWER.
- ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS DIRECTED OTHERWISE.

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

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

REVIEW STATEMENTS			NO	N/A
1.	Are all items on the cover page filled in correctly?	\boxtimes		
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?			\boxtimes
4.	Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	\square		
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?	\boxtimes		
6.	If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	\boxtimes		
7.	If the task is time critical, is the time critical portion based upon actual task performance requirements?			\boxtimes
8.	Is the Licensee level appropriate for the task being evaluated if required? Not applicable to Non-Licensed Operators	\boxtimes		
9.	Is the K/A appropriate to the task and to the licensee level if required? Not applicable to Non-Licensed Operators	\boxtimes		
10.	Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	\boxtimes		
11.	Have all special tools and equipment needed to perform the task been identified?	\boxtimes		
12.	Are all references identified, current, and accurate?	\boxtimes		
13.	Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	\boxtimes		

All applicable questions must be answered "YES" or the JPM is not valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date