

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

STATION:	SALEM		
SYSTEM:	A.C. Electrical Distribution		
TASK:	Respond to loss of 2A 4KV Vital Bus IAW S2.OP-AB.4KV-0001		
TASK NUMBER:	N1140050401		
JPM NUMBER:	20-01 NRC Sim-g		
ALTERNATE PATH:	<input checked="" type="checkbox"/>	K/A NUMBER:	062 A2.04
APPLICABILITY:		IMPORTANCE FACTOR:	3.1 3.4*
	EO <input type="checkbox"/>	RO <input checked="" type="checkbox"/>	SRO <input type="checkbox"/>
	STA <input type="checkbox"/>		
EVALUATION SETTING/METHOD:	Simulator		
REFERENCES:	S2.OP-AB.4KV-0001, Rev. 11 (checked 8-3-21)		
TOOLS AND EQUIPMENT:	None		
VALIDATED JPM COMPLETION TIME:	_____ 10 min _____		
TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS:	_____ N/A _____		
Developed By:	K. Hantho Instructor	Date:	8-3-21
Validated By:	Rydell / Zirkle SME or Instructor	Date:	8-12-21
Approved By:	M. Wadusky (signature on file) Training Department	Date:	2-10-22
Approved By:	W. Hargrave Operations Department	Date:	1-11-22
ACTUAL JPM COMPLETION TIME:			
ACTUAL TIME CRITICAL COMPLETION TIME:			
PERFORMED BY:	_____		
GRADE:	<input type="checkbox"/> SAT	<input type="checkbox"/> UNSAT	
REASON, IF UNSATISFACTORY:			

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DATE:

EVALUATOR'S SIGNATURE:

REVISION HISTORY

JPM NUMBER: 20-01 NRC Sim-g

Rev #	Date	Description	Validation Required
00	8-3-21	New JPM	Yes
01	1-3-22	Incorporated NRC comments from ES-301-7.	No

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SIMULATOR SETUP INSTRUCTIONS

SYSTEM: A.C. Electrical Distribution

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TASK NUMBER: N1140050401

SIMULATOR IC: IC-256

MALFUNCTIONS:

1. Reset the simulator to IC above.
2. Verify the following on the summary/ET trigger lists:

MALF ID #	Description	Delay Time	Initial Value	Ramp Time	Trigger	Severity
01	EL0144 LOSS OF 2A 4160V VITAL BUS	N/A	N/A	N/A	RT-1	TRUE
02	CV0208A 21 CHARGING PUMP TRIP	N/A	N/A	N/A	ET-1	TRUE

OVERRIDES/ REMOTES: None

EVENT TRIGGERS:

ET #	Description	Assigned malfunction
1	Kb417pbj//21CHGPump-START(Remote-SHTDWN	CV0208A

SPECIAL INSTRUCTIONS: None

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DATE: _____

SYSTEM: A.C. Electrical Distribution

TASK: Respond to a loss of 2A 4KV Vital bus IAW S2.OP-AB.4KV-0001

**TASK
NUMBER:** N1140050401

INITIAL CONDITIONS:

100% power, BOL.

INITIATING CUE:

You are the Reactor Operator. Respond to all indications and alarms.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

Task Standard for Successful Completion:

1. Operator closes the 2CV55 and starts 21 Charging Pump. Upon receiving indications that 21 Charging Pump trips; starts 22 Charging Pump.

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* #	STEP No.	STEP (Shaded area denotes Critical Step) (* Critical Step) (# Sequential Critical Step)	STANDARD (Bolded area identifies Task Standard)	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
	CUE:	Fill in the JPM Start Time when the student acknowledges the Initiating Cue. START TIME: _____			
		Simulator Operator: Insert RT-1 on direction from Evaluator. - Loss of 2A 4KV Vital Bus			
		Evaluator note: Many OHA's will actuate and additional required equipment will automatically start. Operator is expected to acknowledge and review alarms and make transition to Abnormal procedure of the loss of A 4KV vital bus based on indications and Alarm Response Procedure's available to the operator.	Acknowledges alarms and indications of vital bus loss. Enters procedure S2.OP-AB.4KV-0001. Operator enters based on assessment of Overhead alarms or from direction of overhead alarm response procedures.		

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	3.1	INITIATE Attachment 1, Continuous action summary	<p>Operator will review CAS and determine if any actions required.</p> <p>Operator determines no actions required at this time.</p> <p>Cue: CRS will assign the CAS to another NCO.</p>		
	3.2	<p>INITIATE Diesel Generator running checks for any operating Diesel Generator(s) IAW applicable procedures, while continuing with this procedure:</p> <ul style="list-style-type: none"> ◆ S2.OP-SO.DG-0001(Q), 2A Diesel Generator Operation ◆ S2.OP-SO.DG-0002(Q), 2B Diesel Generator Operation ◆ S2.OP-SO.DG-0003(Q), 2C Diesel Generator Operation 	<p>Identifies that A EDG has started and pages primary plant operator or tells CRS that the A EDG needs running checks completed.</p> <p>Cue: CRS will direct an operator to perform running checks.</p>		

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	3.3	IF 23 Charging Pump was providing Seal Injection and Charging Flow to Unit 1, THEN NOTIFY Unit 1 NCO.	Identifies 23 CV pump was in operation to unit 2 RCS.		
*	3.4	Was 23 Charging Pump providing Seal Injection and Charging Flow to Unit 2?	Operator answers YES and continues to step 3.5		
*	3.5	CLOSE 2CV55. Evaluators note: Valve has a long stroke time approximately two minutes.	Operator Closes 2CV55.		
*	3.6	START 21 Charging Pump.	Operator starts 21 Charging pump by depressing pushbutton and subsequently identifies that the pump has tripped and acknowledges flashing stop pushbutton.		

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ALTERNATE PATH STARTS HERE:			21 CHARGING PUMP TRIPS AFTER THE INITIAL START		
*	3.7	Is 21 Charging Pump running?	Operator answers the step NO and continues to step 3.8		
*	3.8	START 22 Charging Pump.	Operator starts 22 Charging pump by depressing pushbutton. Cue: JPM is Complete		
	CUE:	<u>WHEN</u> operator starts 22 charging pump, OR the JPM has been terminated for other reasons, <u>THEN</u> RECORD the STOP TIME. REPEAT BACK any message from the operator on the status of the JPM, and then state " This JPM is complete ". STOP TIME: _____	Terminate JPM once 22 Charging pump has been started.		

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JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

JPM#: 20-01 NRC Sim-g

NOTE: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 and 11 below.

- KH_ 1. Task description and number, JPM description and number are identified.
- KH_ 2. Knowledge and Abilities (K/A) references are included.
- KH_ 3. Performance location specified. (in-plant, control room, or simulator)
- KH_ 4. Initial setup conditions are identified.
- KH_ 5. Initiating and terminating Cues are properly identified.
- KH_ 6. Task standards identified and verified by SME review.
- KH_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- KH_ 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. 11 Date 8/27/2015
- KH_ 9. Pilot test the JPM:
 - a. verify Cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- NA_ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- KH_ 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor: _____

Date: _____

SME/Instructor: _____

Date: _____

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**INITIAL
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