

JOB PERFORMANCE MEASURE

STATION:	SALEM		
SYSTEM:	Conduct of Operations - Administrative		
TASK:	Identify and Isolate Non-Essential Chilled Water Loads IAW S2.OP-SO.CH-0001, Attachment 2		
TASK NUMBER:	0980020202		
JPM NUMBER:	16-01 NRC SRO-A1		
ALTERNATE PATH:	<input type="checkbox"/>	K/A NUMBER:	G 2.1.25
APPLICABILITY:	IMPORTANCE FACTOR:		4.2
EO <input type="checkbox"/>	RO <input type="checkbox"/>	STA <input type="checkbox"/>	SRO <input checked="" type="checkbox"/>
EVALUATION SETTING/METHOD:	Classroom		
REFERENCES:	S2.OP-SO.CH-0001 Rev. 34 (checked 10-3-17) Salem 2 Tech Specs		
TOOLS AND EQUIPMENT:	Calculator		
VALIDATED JPM COMPLETION TIME:	<u>10 min</u>		
TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS:	<u>N/A</u>		
Developed By:	R. Chan <i>Ruehobal Chu</i> Instructor	Date:	10-3-17
Validated By:	<i>Mahn</i> SME or Instructor	Date:	10-4-17
Approved By:	<i>[Signature]</i> Training Department	Date:	11/13/17
Approved By:	<i>[Signature]</i> Operations Representative	Date:	11/13/17
ACTUAL JPM COMPLETION TIME:			
ACTUAL TIME CRITICAL COMPLETION TIME:			
PERFORMED BY:			
GRADE:	<input type="checkbox"/> SAT	<input type="checkbox"/> UNSAT	
REASON, IF UNSATISFACTORY:			
EVALUATOR'S SIGNATURE:			DATE:

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REVISION HISTORY

JPM NUMBER: 16-01 NRCSRO-A1

Rev #	Date	Description	Validation Required
00	10-3-17	Added revision history and simulator setup pages. Editorial comments from IP 71111.11 FASA.	No

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SIMULATOR SETUP INSTRUCTIONS

SYSTEM: Conduct of Operations - Administrative
TASK: Identify and Isolate Non-Essential Chilled Water Loads IAW S2.OP-SO.CH-0001
TASK NUMBER: 0980020202
SIMULATOR IC: N/A
MALFUNCTIONS / REMOTES: N/A

OVERRIDES: N/A

SPECIAL INSTRUCTIONS: None

JOB PERFORMANCE MEASURE

SYSTEM: Conduct of Operations - Administrative

TASK: Identify and Isolate Non-Essential Chilled Water Loads IAW S2.OP-SO.CH-0001

TASK NUMBER: 0980020202

INITIAL CONDITIONS:

- It is July 15th time 1800 and you have just assumed the watch as the Unit 2 CRS. It was turned over that both 21 and 22 Chillers tripped at 1600 and you are currently in T/S 3.7.10 action 'b', entered at 1600.
- To comply with the T/S action, the crew is implementing S2.OP-SO.CH-0001, Chilled Water System Operation, Section 4.6, Isolation of Non-Essential Heat Loads.
- During preparations to align #2 ECAC cooling to Service Water IAW S2.OP-SO.CA-0001, Control Air System Operation, it was reported that the spool pieces required to align to service water cannot be located.
- Unit 2 CREACS has been removed from service IAW step 4.6.2 of S2.OP-SO.CH-0001.
- CW Inlet Water Temperature Readings from SC.OP-DL.ZZ-0008(Q), Circulating / Service Water Log are:

2TL3756 = 83.4°F

2TL3757 = 83.6°F

INITIATING CUE:

- You are the Unit 2 CRS.
- The Shift Manager directs you to NOT isolate the #2 ECAC and to re-perform the Non-Essential heat load determination IAW Attachment 2.

DETERMINE the total Non-Essential heat load and **SELECT** the required components for isolation IAW S2.OP.SO-CH-0001, Chilled Water System Operation, Attachment 2 to comply with Tech Specs.

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.

Task Standard for Successful Completion:

1. Determines the Total Heat Load Isolation value required is 902.8 kBTU / HR.
2. Selects the required components on Table B for isolation and ensures that the total value is greater than 902.8 kBTU / HR.

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Task: Identify and Isolate Non-Essential Heat Loads IAW S2.OP-SO.CH-0001

Date:

* #	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)
		Provide the following: <ul style="list-style-type: none"> ▪ blank copy of TS 3.7.10, Chilled Water System – Auxiliary Building Subsystem, and ▪ S2.OP-SO.CH-0001(Q), Chilled Water System Operation. 			
	CUE:	PROVIDE the operator the initiating cue AND ENTER START TIME AFTER operator repeats back the Initiating Cue. START TIME: _____			

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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)
*	1.C	RECORD the TOTAL HEAT LOAD ISOLATION from Table A: _____ kBTU / HR	From Table A, Determines 902.8 kBTU / HR. (Based on Inlet water temp of 85.1 F, 2 chillers Inoperable and in Maintenance Mode with Unit 2 EACS Out of Service)		
	1.D	IDENTIFY the components to be isolated in Table B as follows:			
*	1.E	RECORD the value from the HEAT LOAD column into the Isolation column for the components selected for isolation.	Selects the value of heat load by annotating the values in Table B to ensure value greater than value recorded in step 1.C. 21 PACU = 145.7 22 PACU = 145.7 23 PACU = 145.7 Secondary Lab = 192.1 Primary Lab = 165.9 Counting Room = 73.0 PASS = 38.5		
*	1.F	RECORD "N/A" for the components selected to remain available.	Selects N/A for Emergency Control Air Compressor (ECAC)		

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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)
*	1.G	ADD the values recorded in the Isolation column AND RECORD the Total Isolation value in Table B.	Determines that the Total Heat Load Isolation value per Table B is 906.6 kBTU / HR .		
*	1.H	ENSURE that the Total Isolation value recorded in Table B is \geq the Total Heat Load Isolation recorded in Step C of this attachment.	Determines the Total Heat load Isolation value recorded in Table B (906.6 kBTU / HR) is greater than or equal to the Total Heat Load Isolation in Step C (902.8 kBTU / HR).		
	1.I	ISOLATE the selected components IAW Section 4.6 of this procedure.	CUE: The NCO will isolate the selected components IAW Section 4.6.		
	CUE:	JPM is Complete <u>THEN RECORD</u> the STOP TIME. STOP TIME: _____	Terminate JPM when operator determines the loads that need to be isolated.		

JOB PERFORMANCE MEASURE

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

JPM #: 16-01 NRCSRO-A1

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

- MA 1. Task description and number, JPM description and number are identified.
- MA 2. Knowledge and Abilities (K/A) references are included.
- MA 3. Performance location specified. (in-plant, control room, or simulator)
- MA 4. Initial setup conditions are identified.
- MA 5. Initiating and terminating Cues are properly identified.
- MA 6. Task standards identified and verified by SME review.
- MA 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- MA 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. 34 Date 10-3-17
- MA 9. Pilot test the JPM:
 - a. verify Cues both verbal and visual are free of conflict, and
 - b. ensure performance time is accurate.
- N/A 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- N/A 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor: Mahm Morales

Date: 10/4/17

SME/Instructor: _____

Date: _____

SME/Instructor: _____

Date: _____

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