

INITIATE AND SECURE LOW TEMPERATURE
OVERPRESSURE PROTECTION

K/A REFERENCE: 010-K4.03 (3.8/4.1)
(NUREG-1122) 010-A4.03 (4.0/3.8)

ALTERNATE PATH JPM _____ YES NO

PERFORMANCE CHECKLIST:

SATISFACTORY - Properly performed critical step(s) and/or in sequence (if applicable)

UNSATISFACTORY - Improperly performed critical step(s) and/or out of sequence (if applicable)

Procedure adequately addresses task elements.
Enter identifier here: OP-3C, Rev. 81

_____ Other document adequately describes necessary task elements.
Enter identifier here: _____

Task elements described as attached.

DESIRED MODE OF EVALUATION:

APPLICABLE EVALUATION SETTING:

SIMULATE/WALKTHROUGH DISCUSSION _____ PERFORM IN-PLANT _____ CONTROL ROOM

VALIDATED TIME FOR COMPLETION: 15 MINUTES

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EXAMINEE _____ EVALUATOR _____

START TIME _____ FINISH TIME _____

PERFORMANCE SAT UNSAT

JOB TITLE: AOT COT SRO STA

TOOLS/EQUIPMENT/REFERENCES:

OP-3C, "Hot Shutdown to Cold Shutdown", Rev. 81
Technical Specifications
Key for Enabling LT/OP

TASK STANDARDS:

Lower RCS pressure and activate low temperature overpressure protection (LTOP).

SIMULATOR INFORMATION:

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
	IC-8	Unit 1	Cool down in progress					
Note: JPM administrator should ensure plant conditions are established for the applicable mode and then FREEZE the simulator. This can be set up ahead of time.								
Danger Tag ISI-866A/ Ensure RCS pressure is trended for NRC records.								

NOTE: Instructor must adjust temperature and ensure LT/OP keyswitch position are appropriate for mode of JPM performance.

NOTE: 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.

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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READ AND PROVIDE TO THE EXAMINEE

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.

After I read you the initial conditions and initiating cue(s)/task to be performed for this JPM and provide you a copy of the same, you may review and begin. Once you have completed the task, indicate completion by handing back this form to the evaluator unless otherwise told.

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.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

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

INITIAL CONDITIONS:

Unit 1 cool down in progress in accordance with OP-3C. RCS temperature is being maintained between 370-380 F and RCS pressure is being maintained between ~~800-1000~~ ⁴⁰⁰ psig. OP-3C has been completed through step 5.10.

INITIATING CUE(S) / TASK TO BE PERFORMED (SIMULATED):

You have been directed by the DSS/DOS to place the LT/OP system in service starting at OP-3C, Step 5.10.1 and complete through 5.10.14. The DSS notes that you will not need to stop the depressurization to place an orifice on the line because all three orifices are already in service to maximize letdown flow.

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NOTE: *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

START TIME	STEP/SEQUENCE/CRITICAL			SAT
	1	1	N	UNSAT

ELEMENT: Ensure the RCS temperature is 370 F to 380 F. (TI-451A or TI-451C, Loop B Cold Leg Temperature is the preferred indication).

STANDARD: Verifies RCS is between 370 F – 380 F using preferred indication.

CUE: RCS temperature is 375 F (or as shown on simulator)

NOTE: The examinee may decide to review the OP-3C provided. He may discover that some plant conditions may not reflect prior procedural steps. Inform him in this case that these conditions will have no impact on completing the task.

COMMENTS:

	STEP/SEQUENCE/CRITICAL			SAT
	2	2	N	UNSAT

ELEMENT: Ensure IT 200, Pressurizer Power-Operated Relief Valves and Block Valves, is complete.

STANDARD: Requests status of IT-200.

CUE: The DSS reports that IT-200 has been completed.

COMMENTS:

	STEP/SEQUENCE/CRITICAL			SAT
	3	3	Y	UNSAT

ELEMENT: Reduce RCS pressure at a rate NOT to exceed 100 psig/minute AND stabilize at a pressure of 350 to 375 psig using the highest indication (either PI-493, Pressurizer Pressure or PI-420, RC Loop A Pressure)

STANDARD: As above. Lowers RCS pressure by manually adjusting spray valves and observing pressure drop, not to exceed 100 psig/min. The 2nd orifice has already been placed in service.

CUE: RCS pressure is 360 psig on PI-493 (or as shown on simulator)

COMMENTS:

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	STEP/SEQUENCE/CRITICAL	SAT
	4 4 N	UNSAT _____
ELEMENT:	Ensure IRC-515, PORV block valve is open	
STANDARD:	IRC-515 verified open by checking red indicating light on	
CUE:	IRC-515 is open. (or as shown on simulator)	
COMMENTS:		

	STEP/SEQUENCE/CRITICAL	SAT
	5 5 N	UNSAT _____
ELEMENT:	Ensure IRC-516, PORV block valve is open	
STANDARD:	IRC-516 verified open by checking red indicating light on.	
CUE:	IRC-516 is open (or as shown on simulator)	
COMMENTS:		

	STEP/SEQUENCE/CRITICAL	SAT
	6 6 N	UNSAT _____
ELEMENT:	Ensure RC-430 control switch in "AUTO" position	
STANDARD:	RC-430 control switch in "AUTO" position.	
CUE:	RC-430 selected to "AUTO" (or as shown on simulator)	
COMMENTS:		

	STEP/SEQUENCE/CRITICAL	SAT
	7 7 N	UNSAT _____
ELEMENT:	Ensure RC-431C control switch in "AUTO" position	
STANDARD:	RC-431C control switch in "AUTO" position	
CUE:	RC-431C selected to "AUTO" (or as shown on simulator)	
COMMENTS:		

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NOTE: *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

STEP/SEQUENCE/CRITICAL
8 8 N

SAT
UNSAT

ELEMENT: Check the bistable status light L/T/O/P PCV-430 is OFF (reset)
STANDARD: Trip status light "L/T/O/P 430 checked OFF (reset)
CUE: Status light for PCV-430 indicates reset (or as indicated on simulator)
COMMENTS:

STEP/SEQUENCE/CRITICAL
9 9 N

SAT
UNSAT

ELEMENT: Check the bistable status light "L/T/O/P PCV-431C" is OFF (reset).
STANDARD: Trip status light "L/T/O/P PCV-431C" checked OFF (reset).
CUE: Status light for PCV-431C indicates reset (or as indicated on simulator).
COMMENTS:

STEP/SEQUENCE/CRITICAL
10 10 Y

SAT
UNSAT

ELEMENT: Arm one train of LTOP by turning the key operated switch for RC-430 to ON
STANDARD: RC-430 key operated switch placed to ON
CUE: RC-430 key operated switch placed to ON (or as shown on simulator)
COMMENTS:

STEP/SEQUENCE/CRITICAL
11 11 N

SAT
UNSAT

ELEMENT: Verify red armed light LIT
STANDARD: Red armed light LIT verified
CUE: RC-430 red armed light is LIT (or as shown on simulator)
COMMENTS:

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NOTE: *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

STEP/SEQUENCE/CRITICAL
12 12 Y

SAT _____
UNSAT _____

ELEMENT: Arm the second train of L/T/O/P by turning the key operated switch for RC-431C to ON

STANDARD: RC-431C key operated switch turned to ON

CUE: RC-431C key operated switch placed to ON (or as shown on simulator)

COMMENTS:

STEP/SEQUENCE/CRITICAL
13 13 N

SAT _____
UNSAT _____

ELEMENT: Verify red light LIT

STANDARD: Red armed light verified LIT

CUE: RC-431C red armed light is LIT (or as shown on simulator)

COMMENTS:

TERMINATION CUE: This completes this JPM.

COMPLETION TIME: _____