SAFE SHUTDOWN – LOCAL ACTIONS

K/A REFERENCE: 068 AK3.09 (3.9/4.4)
(NUREG-1122) 068 AA1.06 (4.1/4.2)
068 AA1.26 (3.6/3.8)

ALTERNATE PATH JPM _____ YES __X__ 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)

__X__ **Procedure adequately addresses task elements.**
Enter identifier here: **AOP-10A, Rev. 28**

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

__X__ **Task elements described as attached.**

DESIRED MODE OF EVALUATION: **APPLICABLE EVALUATION SETTING:**

SIMULATE/WALKTHROUGH __X__ **DISCUSSION** ____ **PERFORM** ____ **IN-PLANT** __X__ **CONTROL ROOM** ____

VALIDATED TIME FOR COMPLETION: __40__ **MINUTES**

SAFE SHUTDOWN – LOCAL ACTIONS

EXAMINEE _____ **EVALUATOR** _____

START TIME _____ **FINISH TIME** _____

PERFORMANCE ☐ **SAT** ☐ **UNSAT**

JOB TITLE: ☐ **AOT** ☒ **COT** ☐ **SRO** ☐ **STA**

TOOLS/EQUIPMENT/REFERENCES:

AOP-10A, "Safe Shutdown – Local Control", Revision 28

TASK STANDARDS:

Perform Unit 2 CO Safe Shutdown AOP-10A actions up to and including transfer of 1P-2A, "Charging Pump", to local control.

READ AND PROVIDE TO THE EXAMINEE

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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.

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INITIAL CONDITIONS:

- You are the Unit 2 control operator
- Both unit reactors have been tripped due to a control room fire
- The control room has been evacuated and actions in accordance with AOP-10A, "Safe Shutdown-Local Control" have been completed through Step 32.
- You have possession of your AOP-10A pack, radio and spare batteries.
- Turbine Driven AFW mini-recirculation valves have been gagged open.

INITIATING CUES (IF APPLICABLE):

- You are directed to perform AOP-10A, "Safe Shutdown – Local Actions" beginning at Step 2 of Attachment D using G05 as the preferred power option.

PERFORMANCE INFORMATION

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

STEP	SEQUENCE	CRITICAL		
1	1	Y	SAT	_____
			UNSAT	_____

ELEMENT: Open auxiliary charging line isolation (1CV-323A)

STANDARD: Locate 1CV-323A on PAB 8' and turn handwheel counter-clockwise after removing red lock.

CUE: Valve stem is extended.

COMMENTS:

STEP	SEQUENCE	CRITICAL		
1	2	N	SAT	_____
			UNSAT	_____

ELEMENT: Shut normal charging isolation (1CV-384A)

STANDARD: Locate 1CV-384A on PAB 8' and turn handwheel clockwise.

CUE: Valve steam inserted.

COMMENTS:

	STEP	SEQUENCE	CRITICAL		
*	1	3	N	SAT	_____
				UNSAT	_____

ELEMENT: Verify charging pump emergency makeup valve 1CV-112B open.

STANDARD: Locate 1CV-112B on PAB 8' and check 1CV-112B open by observing stem position and/or turning valve in clockwise direction noting movement after engaging handwheel clutch lever.

CUE: Valve position indicator extended, valve movement occurred if asked.

COMMENTS:

* Examiners gave cue that valve positions were as-found in the actual plant. In this case 2CV-112B and 1CV-112B were as-found closed. Since the applicant found these valves closed, the step to verify open became a critical step. However, per facility policy, the applicant should open 1CV-258 and 2CV-258 (since 1CV-112B & 2CV-112B were not in correct position. Credit was given to the applicants who manually opened 1CV-112B & 2CV-112B since this is the desired flow path.

PERFORMANCE INFORMATION

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

STEP/SEQUENCE/CRITICAL
1 4 N

SAT _____
UNSAT _____

ELEMENT: Check waste condensate overboard discharge valve shut (WL-18)

STANDARD: Locate WL-18 on PAB 8' and verify valve shut by observing valve stem inserted (touching lower limit switch or green lights lit on C-59).

CUE: Valve stem inserted.

COMMENTS:

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*See note on previous page.

STEP/SEQUENCE/CRITICAL
1 5 N

SAT _____
UNSAT _____

ELEMENT: Verify charging pump emergency make-up valve (2CV-112B) open.

STANDARD: Locate 2CV-112B on PAB 8' and verify open by observing valve stem extended and turning valve clockwise noting movement after engaging handwheel clutch lever.

CUE: Valve position indicator extended, valve movement occurred if asked.

COMMENTS:

STEP/SEQUENCE/CRITICAL
1 6 N

SAT _____
UNSAT _____

ELEMENT: Shut normal charging isolation valve (2CV-384A).

STANDARD: Locate 2CV-384A on PAB 8' and shut valve by turning clockwise noting valve stem position inserted.

CUE: Valve stem is inserted.

COMMENTS:

PERFORMANCE INFORMATION

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

STEP/SEQUENCE/CRITICAL
1 7 N

SAT _____
UNSAT _____

ELEMENT: Open auxiliary charging line isolation valve (2CV-323A)

STANDARD: Locate 2CV-323A on PAB 8' and open valve by turning valve counter-clockwise noting valve stem position extended after removing red-locking device.

CUE: Valve stem extended.

COMMENTS:

STEP/SEQUENCE/CRITICAL
2 1 N

SAT _____
UNSAT _____

ELEMENT: Check gas decay tank rad control trip valve (WG-14) shut.

STANDARD: Locate WG-14 on PAB 26' and verify valve position indication is shut.

CUE: Valve position indicates shut or verified at C-59 green light lit.

COMMENTS:

STEP/SEQUENCE/CRITICAL
2 2 N

SAT _____
UNSAT _____

ELEMENT: Verify Unit 1 VCT outlet valve (1CV-112C) is shut.

STANDARD: Locate 1CV-112C on PAB 26' in the VCT cubicle.

CUE: **DO NOT ENTER HIGH RADIATION AREA** 1CV-112C valve stem is fully inserted.

COMMENTS:

PERFORMANCE INFORMATION

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

STEP/SEQUENCE/CRITICAL
2 3 N

SAT _____
UNSAT _____

ELEMENT: Verify Unit 2 VCT outlet valve (2CV-112C) is shut.

STANDARD: Locate 2CV-112C on PAB 26' in the VCT cubicle.

CUE: **DO NOT ENTER HIGH RADIATION AREA** 2CV-112C valve stem is fully inserted.

COMMENTS:

STEP/SEQUENCE/CRITICAL
3 1 Y

SAT _____
UNSAT _____

ELEMENT: Align switches on D04.

STANDARD: Proceed to PAB El. 26' Yellow Instrument Bus Room B and open D04 switch 5, 7 and 9 by placing to OFF position. After receiving cue, recognizes the need to move on to Step 9 of the procedure.

CUE: After completing standard, inform examinee G05 is the selected source of power.

COMMENTS:

STEP/SEQUENCE/CRITICAL
4 1 Y

SAT _____
UNSAT _____

ELEMENT: Shut seal injection inlet valves in Unit 1. (1CV-300A and B)

STANDARD: Locate 1CV-300A and 1CV-300B in pipeway #1 (Unit 1) and turn valves in clockwise direction until valve stems are fully inserted.

CUE: Valve stems are fully inserted.

COMMENTS:

PERFORMANCE INFORMATION

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

STEP/SEQUENCE/CRITICAL			SAT / UNSAT
5	1	N	

ELEMENT: Align 1P-2A charging pump to alternate shutdown power.

STANDARD: Verify 1P-2A selector switch (B854B) across from 1P-2A cubicle to the 1P-2A position.

CUE: 1P-2A selector switch is in the 1P2A position (handle up position).

COMMENTS:

STEP/SEQUENCE/CRITICAL			SAT / UNSAT
5	2	Y	

ELEMENT: Locally align the following breakers at 1B313A – B854B charging pump transfer panel.

- Breaker A3 to open
- Breaker A4 to open
- Breaker A1 to closed
- Breaker A2 to closed

STANDARD: Align breakers as above across from 1-P2A cubicle. (Breaker A4 open, A2 shut)

CUE: After recognizing breaker A2 and A4 need realignment, breaker A4 has been opened (OFF) and breaker A2 shut (ON). Mechanical interlock has been repositioned.

COMMENTS:

STEP/SEQUENCE/CRITICAL			SAT / UNSAT
6	1	N	

ELEMENT: Inform supervisor at C-45 that 1P2A is aligned to alternate power supply.

STANDARD: Contact supervisor on radio and inform him that 1P2A is aligned to alternate.

CUE: Supervisor acknowledges. This completes this JPM.

COMMENTS:

TERMINATION CUE: THIS COMPLETES THIS JPM. **COMPLETION TIME:** _____