TASK CONDITIONS:

1. You are an extra NSO.
2. Unit 1 has experienced a loss of Offsite power while in mode 3.
3. Unit 1 EDGs are carrying the ESF buses, but the Non-ESF bus 144 is still de-energized.
4. The crew is currently performing 1BwOA ELEC-4
5. Unit 2 is at full power.
6. Bus 143 has been re-energized previously.

INITIATING CUES:

The US has directed you to re-energize 4KV Non-ESF bus 144 per step 7 of 1BwOA ELEC-4.
Another NSO will monitor the remainder of the control panels.

TASK TITLE: **Crosstie of ESF and Non-ESF Bus**

JPM No.:	**SIM-611**	REV:	NRC 09-1
TPO No.:	4D.OA-60, 61	K&A No.:	062000A4.01
TASK No.:	R-OA-024, Energize an Electrical bus	K&A IMP:	3.3/3.1

EXAMINEE: _____ RO SRO (Circle One)

EVALUATOR: _____ DATE:_____

The Examinee: PASSED _____ this JPM. TIME STARTED: _____

FAILED _____ TIME FINISHED:_____

JPM TIME:_____ MINUTES

CRITICAL ELEMENTS: **(*) 3,4** APPROX COMPLETION TIME 6 MINUTES

CRITICAL TIME: **NA**

EVALUATION METHOD:
_**X**_ PERFORM
___ SIMULATE

LOCATION:
___ IN PLANT
_**X**_ SIMULATOR

GENERAL REFERENCES:

1. 1BwOA ELEC-4, Rev 104, Loss of Offsite Power Unit 1, Step 7.

MATERIALS:

1. 1BwOA ELEC-4, Rev 104, Loss of Offsite Power Unit 1, Step 7.

TASK STANDARDS:

1. Perform the required actions of 1BwOA ELEC-4, Step 7, to crosstie an ESF and Non-ESF Bus.

TASK CONDITIONS:

1. You are an extra NSO.
2. Unit 1 has experienced a loss of Offsite power while in mode 3.
3. Unit 1 EDGs are carrying the ESF buses, but the Non-ESF bus 44 is still de-energized.
4. The crew is currently performing 1BwOA ELEC-4
5. Unit 2 is at full power.
6. Bus 143 has been re-energized previously.

INITIATING CUES:

The US has directed you to re-energize 4KV Non-ESF bus 144 per step 7 of 1BwOA ELEC-4.
Another NSO will monitor the remainder of the control panels.

RECORD START TIME _____

Note: Provide a copy of 1BwOA ELEC-4, step 7.

	PERFORMANCE STEP	STANDARD	Circle applicable
1.	1BwOA ELEC-4, Step 7	Review 1BwOA ELEC-4, Step 7	SAT UNSAT N/A **Comments:**
2.	Determine ESF Bus 142 is energized.	**DETERMINE** ESF Bus 142 is energized: o Bus 142 live light is LIT o Bus 142 voltage normal on 1EI-AP086	SAT UNSAT N/A **Comments:**
***3**.	**Prepare to Cross tie ESF to Non-ESF buses.** **CUE: (IF ASKED) Previously dispatched EO reports 0A Service Bldg. chiller in pull out.**	Prepare to crosstie ESF and Non-ESF bus: At 1PM02J, **PLACE** in PULL OUT all breakers on bus 144: • ACB 1441 • ACB 1442 • ACB 1445RA • ACB 1445XY • ACB 1445ZW • ACB 1445BC PZR HTR • ACB 1445VU Check Bus lockout alarms NOT LIT • 1-22-A1 • 1-22-A2 At 0PM01J, **PLACE** 0B WS pump in PTL. At 0PM02J, **PLACE** 1B CNMT Chiller PTL. At 1PM02J**, OPEN** all 480-volt LOW side breakers for bus 144. • ACB 034R1 • ACB 034P1 • ACB 134X1 • ACB 134Y1 • ACB 134Z1 • ACB 034W1 • ACB 134V1 • PZR HTR GRP B (1PM05J) • PZR HTR GRP C (1PM05J)	SAT UNSAT N/A **Comments:**

***4.**	**Energize bus 144 from bus 142 via the crosstie breaker.** **CUE: Acknowledge as US that bus 144 is crosstied to bus 142 and inform examinee that another operator will continue with the procedure.**	**CLOSE** Non-ESF to ESF crosstie breaker: • 1421 Inform US that bus 144 is crosstied to bus 142.	SAT UNSAT N/A **Comments:**

CUE: THIS COMPLETES THIS JPM.

RECORD STOP TIME _____

COMMENTS:

JPM NO: SIM-611

REQUIRED SIMULATOR MODE (S): Mode 3 IC.

MALFUNCTION #'S:

1. Fault SAT 142-1 via **IMF ED04A**

COMMENTS:

1. Perform actions of 1BwOA ELEC-4, steps 1-6 and step 8.