Alternate Power Supply Failure Following Transfer of UPS Static Transfer Switch from Normal to Alternate Power Supply

Job Position(s): ☒ RO ☒ SRO

Source: ☐ New ☐ Bank ☒ Modified JP-OP-315-0262-002
(Facility ID No. for Bank or Modified)

K/A Reference: 262002.A2.01, Ability to (a) predict the impacts of UPS bus under voltage; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences.

Method of testing: ☒ Simulated/Walk-thru Performance [Classroom/Plant]

☐ Actual Performance [Simulator/Lab]

Type: (Check all that apply)

☐ Administrative Topics ☐ Control Room Systems ☒ In-Plant Systems
☒ Alternate Path ☐ Emergency/Abnormal ☐ ESF
☐ Low-Power/Shutdown ☐ Time Critical

Task Standard: UPS A (B) Power Supply is in service aligned to the Normal source.

Validation Time: 15 Minutes

Simulator Setup:

N/A

Required Materials:

23.308.01, Uninterruptible Power Supply System

General References:

23.308.01, Uninterruptible Power Supply System

Initial Conditions:

UPS A (B) Power Supply is in service aligned to the Normal source.

Initiating Cue:

Transfer UPS A (B) Power Supply from Normal to Alternate using the Static Transfer Switch.

Performance Information

Critical Steps are annotated by "**c"** and italicized text.

	ELEMENTS	STANDARDS
	NOTE TO EVALUATOR: The following steps are from section 5.1 of 23.308.01	
	EVALUATOR PROMPT	
	Provide cue to indicate that Mode switch in MAN	
c	*1. Place Return Mode switch in MAN (Mimic Bus).*	*Simulates placing Return Mode switch in MAN*
	EVALUATOR PROMPT	
	Provide cue as needed to indicate that Sync Switch is in ON	
	2. Verify Sync Switch is in ON.	
	EVALUATOR PROMPT	
	Provide cue to indicate that Amber Retransfer Blocked light is ON	
	3. Verify amber Retransfer Blocked light is ON.	Verifies Amber Retransfer Blocked light is ON.
	EVALUATOR PROMPT	
	Provide cue to indicate that Sync Monitor light is OFF	
	4. Verify clear Sync Monitor light is OFF (Mimic Bus).	Verifies Sync Monitor light is OFF
	EVALUATOR PROMPT	
	Provide cue to indicate that Test switch was placed to ALT LINE	
c	*5. Place Test switch to ALT LINE (Mimic Bus).*	*Test switch to ALT LINE*
	EVALUATOR PROMPT	
	Provide cue to indicate that Amber Alternate Line light is ON	
	6. Verify amber Alternate Line light is ON (Mimic Bus).	Verifies Amber Alternate Line light is ON
	EVALUATOR PROMPT	
	Provide cue to indicate that Red Inverter light is OFF	
	7. Verify red Inverter light is OFF (Mimic Bus).	Verifies Red Inverter light is OFF

	ELEMENTS	STANDARDS
	NOTE TO EVALUATOR: This begins the Alternate Path sequence of the JPM.	
	EVALUATOR PROMPT Cue the applicant that the Amber REGULATOR FAILURE light is ON, and that the Static Transfer Switch Output voltage (UPS AC VOLTAGE) is reading 100 VAC. Additionally report from the Control Room that the UPS UNIT A/B TROUBLE alarm (3D22) has been received.	
	NOTE TO EVALUATOR: The following steps are from section 5.2 of 23.308.01	
	EVALUATOR PROMPT Provide cue to indicate that Amber Alternate Line light is ON	
	8. Verify amber Alternate Line light is ON (Mimic Bus).	Re-verifies Amber Alternate Line light is ON
	EVALUATOR PROMPT Provide cue to indicate that Mode switch in still in MAN	
	9. Verify or Place Return Mode switch in MAN (Mimic Bus).	Verifies Mode switch in MAN
	EVALUATOR PROMPT Provide cue to indicate that Test switch has been placed in CENTER	
	10. Verify or place Test switch in CENTER (Mimic Bus).	Test switch in CENTER
	EVALUATOR PROMPT Provide cue to indicate that Sync Switch is in ON.	
	11. Verify Sync Switch is in ON.	Verifies Sync Switch is in ON
	EVALUATOR PROMPT Provide cue to indicate that Sync Monitor light is OFF	
	12. Verify clear Sync Monitor light is OFF (Mimic Bus).	Verifies Sync Monitor light is OFF
	EVALUATOR PROMPT Provide cue to indicate that Reset pushbutton was depressed.	
c	*13. Depress Reset pushbutton (Mimic Bus).*	*Simulates depressing Reset pushbutton.*

ELEMENTS	STANDARDS
EVALUATOR PROMPT	
Provide cue to indicate that Red Inverter light is ON	
14. Verify red Inverter light is ON (Mimic Bus).	Verifies Red Inverter light is ON
EVALUATOR PROMPT	
Provide cue to indicate that Amber Alternate Line light is OFF	
15. Verify amber Alternate Line light is OFF (Mimic Bus).	Verifies Amber Alternate Line light is OFF
EVALUATOR PROMPT	
Provide cue to indicate that Mode switch has been placed in AUTO	
16. Place Return Mode switch in AUTO (Mimic Bus).	Simulates placing Mode switch in AUTO.
EVALUATOR PROMPT	
Provide cue to indicate that Alarm Latch Reset pushbutton has been depressed.	
17. Depress Alarm Latch Reset pushbutton (Mimic Bus).	Simulates depressing Alarm Latch Reset pushbutton
EVALUATOR PROMPT	
Provide cue to indicate that Amber Retransfer Blocked light is OFF	
18. Verify amber Retransfer Blocked light is OFF.	Verifies Amber Retransfer Blocked light is OFF.
EVALUATOR PROMPT	
Provide cue to indicate that Summary Alarm light is OFF	
19. Verify amber Summary Alarm light is OFF (Mimic Bus).	Verifies Summary Alarm light is OFF

Terminating cue: Terminate JPM when applicant reports status to Main Control Room.

EXAMINEE CUE SHEET

Initial Conditions:

UPS A (B) Power Supply is in service aligned to the Normal source.

Initiating Cue:

Transfer UPS A (B) Power Supply from Normal to Alternate using the Static Transfer Switch.