

WP 04-ED2001

Revision 3

Backup Power for Underground Bulkheads

Technical Procedure

EFFECTIVE DATE: 07/13/06

Bob Kirby
APPROVED FOR USE

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INTRODUCTION

This procedure provides instructions for initiating backup power for underground (U/G) bulkhead doors. This procedure applies only to providing backup power to U/G bulkhead doors and is performed by U/G services.

Performance of this procedure does not generate any records.

REFERENCES

BASELINE DOCUMENTS

- WP 10-2, Maintenance Operations Instruction Manual
- WP 12-IS.01, Industrial Safety Program - Overview
- Panel Schedules-2, Underground Panel Schedules
- SDD-VU00, System Design Description U/G Ventilation System
- 54-W-012-W, U/G Bulkhead Locations
- 53-J-009 W1, W2, W3, U/G HV, and LV Power Cable Routing and Equipment Locations
- Bulkhead wiring schematics for bulkhead used U/G

PRECAUTIONS AND LIMITATIONS

- Caution must be used when working around U/G backup power switches; 120 vac is present in the power switches.
- Operator must stand as far to the right as possible when operating U/G backup power switches.
- Operator must wear the following when initiating backup power for the U/G bulkhead doors:
 - A long-sleeve cotton shirt (100% cotton)
 - Long pants (100% cotton)
 - V-rated gloves with leathers
 - Leather footwear (ANSI 241-EH or SD)

PERFORMANCE

1.0 ALTERNATE POWER TO U/G BULKHEAD DOORS

<p style="text-align: center;">WARNING</p> <p style="text-align: center;">Potential Electrical Shock or Arc Hazard Exists</p> <p>To prevent injury to personnel:</p> <ul style="list-style-type: none">● Appropriate Personal Protective Equipment for 50-150 volts and an incident energy of 0.096 cal/sq cm (< 1.2 cal/sq cm) shall be worn.● A five-foot minimum flash protection boundary shall be maintained.● The two-person rule shall be observed for all energized work.

1.2 **WHEN** performing maintenance on inverters or batteries, **THEN** using Table 1, perform the following to provide alternate power to the U/G bulkhead doors:

1.2.1 Operate the identified switch to the specified position.

NOTE

Each set of bulkhead doors has a signal bell that will sound or a blue light that will illuminate when that set of doors is reset.

1.2.2 Reset the bulkhead doors.

Table 1. Alternate Switch Lineup

Alternate Power for Panel	Switch Number (Switch Location)	Switch to Position	Additional Action
534-CP03/319	53P-SW03/46 (S700/E200)	Fed from 53P-DP03/2, CB-5	Reset bulkhead doors
534-CP03/303	53P-SW03/55 (E140/S375)	Fed from 53P-MPC03/51, CB-7	Reset bulkhead doors
534-CP03/305	53P-SW03/44 (W30/S150)	Fed from 53P-MPC03/14, CB-7	Reset bulkhead doors
534-CP03/524	53P-SW03/50 (W50/S2180)	Fed from 53P-MPC03/17, CB-3	Reset bulkhead doors
534-CP03/329	53P-SW03/52 (Salt Shaft Station)	Fed from 53P-MPC03/2, CB-2	Reset bulkhead doors
534-CP03/415	53P-SW03/48 (S700/E250)	Fed from 53P-DP03/2, CB-7	Reset bulkhead doors
534-CP03/527	53P-SW03/42 (E140/N250)	Fed from 53P-MPC03/12, CB-15	Reset bulkhead doors
534-CP03/402	53P-SW03/57 (S90/E0)	Fed from 53P-DP03/6, CB-17	Reset bulkhead doors
534-CP03/336	53P-SW03/60 (S400/E300)	Fed from 53P-DP03/9, CB-12	Reset bulkhead doors

2.0 RESTORING NORMAL POWER TO U/G BULKHEAD DOORS

WARNING

120 vac is present in bulkhead power switches and could cause injury. Personnel should use caution and stand as far to the right of the power switches as possible during switch positioning.

2.1 **WHEN** maintenance is complete, **THEN** using Table 2, perform the following to restore normal power to U/G bulkhead doors:

2.1.1 Operate the identified switch to the specified position.

NOTE

Each set of bulkhead doors has a signal bell that will sound or a blue light that will illuminate when that set of doors is reset.

2.1.2 Reset the bulkhead doors.

Table 2. Normal Switch

Normal Power for Panel	Switch Number (Location)	Switch to Position	Additional Action
534-CP03/319	53P-SW03/46 (S700/E200)	Fed from Inverter	Reset bulkhead doors
534-CP03/303	53P-SW03/55 (E140/S375)	Fed from Inverter	Reset bulkhead doors
534-CP03/305	53P-SW03/44 (W30/S150)	Fed from Inverter	Reset bulkhead doors
534-CP03/524	53P-SW03/50 (W50/S2180)	Fed from Inverter	Reset bulkhead doors
534-CP03/329	53P-SW03/52 (Salt Shaft Station)	Fed from Inverter	Reset bulkhead doors
534-CP03/415	53P-SW03/48 (S700/E250)	Fed from Inverter	Reset bulkhead doors
534-CP03/527	53P-SW03/42 (E140/N250)	Fed from Inverter	Reset bulkhead doors
534-CP03/402	53P-SW03/57 (S90/E0)	Fed from Inverter	Reset bulkhead doors
534-CP03/336	53P-SW03/60 (S400/E300)	Fed from Inverter	Reset bulkhead doors