



CONSTRUCTION AND  
MAINTENANCE DIVISION

## STANDARD OPERATING PROCEDURE

### GENERAL HIGH VOLTAGE SHORE CONNECTION (HVSC)\* DISCONNECTION

(DIVISION 147)

\*Also known as Alternative Maritime Power (AMP)

Revision Date: 08/01/2016

Revision #: 6

Document #: Safety\_Electrical  
SOP HV-02

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#### Notes and Clarifications:

- Minimum one QEW and one QP observer are required for the following tasks:**
- 1- Racking the substation breaker in and out as needed.
- 2- Troubleshooting.

#### 1. POLA AMP SAFETY CHECKS AT TERMINAL - POLA

- POLA Person In Charge (PIC) shall be QP (Qualified Person) and shall follow and complete SOP checklist for during disconnection process.
- POLA PIC shall identify hazard locations (i.e. areas being loaded/unloaded, vehicles, forklift working around the crew, lifting, etc.).
- POLA PIC verifies the location of: communication equipment (i.e. walkie-talkies, emergency phone numbers), e-stops, light source if needed, etc.
- POLA PIC verifies must have the proper PPE (i.e. hard hat, safety shoes and leather gloves).
- POLA PIC completes top of POLA HVSC Pre-Power Transfer Conference form (Pre-Power Transfer Conference is not required).

#### 2. SHIP TRANSFERS TO SHIP POWER- SHIP

- Ship opens shore breaker remotely, via the E-stop or other means.

#### 3. AMP SUBSTATION BREAKER DISENGAGEMENT TO DE-ENERGIZE - POLA

- Only after items 1 thru 2 have been completed, POLA PIC opens the main breaker and feeder HVL switch for shore vault used and visually verify all three blades are disengaged and removes Kirk key KC.
- POLA PIC inserts Kirk key KC in earth ground switch, close the earth ground switch, visually verify all three blades are engaged
- POLA PIC shall lock-out the earth ground switch and remove Kirk keys KA & KB.
- POLA PIC takes meter reading from main breaker and record on HVSC Pre-Power Transfer Conference form "for POLA use only" section.
- POLA PIC provides Kirk keys KA & KB to Ship PIC/designee.
- POLA PIC monitors ship cable disconnection to ensure use of appropriate procedures and avoid damage to equipment.

#### 4. DISCONNECTION VAULT ON DOCK – SHIP/SHIP DESIGNEE

- Only after items 1 thru 3 have been completed, Ship PIC/designee lock-out ground switch.
- Ship PIC/designee insert Kirk keys KA & KB, remove Kirk key safety interlock pins, remove securing chains, and unplug cables from shore vault.



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- Ship rolls cables up from shore vault onto ship (except when using barge or cruise terminal AMP mobile).
- Ship PIC/designee secure vault.
- Ship PIC/designee remove lock from ground switch.

**5. SUBSTATION AMP BREAKER SECURED – POLA**

- Only after items 1 thru 4 have been completed, POLA PIC remove lock from ground switch.
- POLA PIC closes and secures substation.
- POLA PIC completes POLA HVSC Pre-Power Transfer Conference form “for POLA use only” section, including time of ship disconnection from shore power, if known.
- POLA PIC submits completed POLA HVSC Pre-Power Transfer Conference form and SOP checklist for HVSC disconnection to Division 147 by end of shift.

NAME OF SHIP	DATE (mm/dd/yy):
TERMINAL	BERTH
POLA PIC (print)	SIGNATURE
POLA QP (print)	SIGNATURE


**APPROVAL:**



C&M Director  
Joe Maldonado



Division 147 Level I Supervisor,  
Thomas Noltensmeier (QEW)



Division 147 Level II Supervisor,  
Chuck Smith (QEW)



Division 147 Level I Supervisor,  
Lee Warren (QEW)



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#### REVISION HISTORY

REVISION #	DATE	SECTIONS AFFECTED
0	12/04/2013	All
1	12/19/2013	(1) Added requirement to complete checklist. (4) Ship lock-out made mandatory. Correction of typographical errors.
2	01/13/2014	All: Changed to bullet format.
3	01/27/2014	(3) Clarified need to monitor for equipment damage. (5) Added removal of POLA PIC lock as a step. All: Updated name of form.
4	03/04/2014	(1),(3), (4), and (5): Clarification regarding ability to change order of numbered items and ability to proceed with some tasks prior to arrival of complete crew.
5	07/03/14	(1) Equipment and PPE items updated specific to task. All: Reformatted into checklist format. Added Document # to header and changed approval signatures consistent with Electrical Safety Manual provisions.
6	08/01/2016	(1)Number of personal performing the task. Added notes and clarifications for the procedures.