FAIRMONT SHIPPING SINGAPORE
TAMAR SHIP MANAGEMENT

ELECTRICAL POWER FAILURE / BLACKOUT

7

	ACTION TO BE TAKEN (NOT NECESSARILY IN ORDER)
☐	Inform bridge, Master and activate engineer's call
☐	Engage emergency steering as soon as possible to steer the vessel using residual speed away from any danger.
☐	Exhibit 'not under command' lights /shapes.
☐	Commence sound signals if appropriate.
☐	Broadcast URGENCY message to Port Control, VTIS, and/or ships in the vicinity, as appropriate.
☐	Assess when main electrical power will be available.
☐	Assess the dangers to which the ship is exposed and the urgency with which assistance may be required. Consider preparing ETS if in immediate danger and assistance is available.
☐	Consider anchoring if in shallow water.
☐	Advise authorities as appropriate.
☐	Implement necessary action to mitigate any hazards.
☐	If standby generator has not started and come on load, do it manually or start the emergency generator.
☐	Confirm sequential start of all essential machinery. If not, manually start them.
☐	Change over main engine control to ECR (as applicable) and reset all safety trips.
☐	Stop freshwater generator and chemical dosing.
☐	Start lube oil pumps and turn the engine that has shut down. Investigate the cause for shutdown.
☐	Confirm cooling water and fuel oil system to auxiliary engines are in order.
☐	Check boiler is firing in auto.
☐	Reset and restart all auxiliary machinery. Inform bridge that stable power is available to put on navigation systems and radio equipment.
☐	Restart main engine after confirming that all systems are back to normal.
☐	On resumption of main electrical power ensure gyro compass and navigational aids are settled and functioning properly prior to resuming normal passage.

ELECTRICAL POWER FAILURE / BLACKOUT

	CONTINGENCY PLAN FOR ELECTRICAL POWER FAILURE AT SEA
1.	In the event of an electrical power failure at sea the immediate action is to steer the vessel away from any danger that may be present and at night to keep the vessel visible by displaying navigation lights.
2.	Most vessels are fitted with an emergency generator that will start automatically in the advent of a blackout. The emergency generator usually supplies power to one steering motor and the emergency lighting (including navigation lights), as well as certain essential navigational aids.
3.	It is essential that the emergency generator is tested and maintained in a good condition and always kept ready to start automatically.
4.	Be aware that the sudden stop of the main engine may cause the vessel to lose steerage and to sheer into the wind (this is particularly evident on all-aft accommodation tankers, which will normally then come to rest +/- 4 points off the wind.)
5.	A vessel stopped at sea has a natural tendency to come broadside on to the sea and wind and may result in heavy rolling and shipping of seas on deck. This can make repair efforts hazardous and slow and could cause damage to the ship or cargo. The danger of flooding or cargo shifting may exist.
6.	Modern steering gear systems do not have an 'emergency mode' – only an emergency power supply and local steering from the steering flat. All officers are to be intimately familiar with the changeover procedure so as to allow immediate transfer of control in case of emergency. If the vessel is in a close quarter situation or takes a sheer towards a hazard the emergency steering system should be engaged without delay. Once normal power is restored, the steering system must be switched back to wheelhouse control.
7.	The Master must use his judgement and the authority given him to implement the necessary action and assistance to ensure the safety of life, the safety of the ship and its cargo, and the protection of the environment, which are paramount.
8.	It is acknowledged that it is better to overact on the side of safety and pollution prevention than to delay action in the hope that the situation may improve.

9.	Reference should be made to the following publication(s) on board;
	• PERIL AT SEA AND SALVAGE
	  ○ Chapter 1 Assistance, including salvage assistance.
	  ○ Chapter 2 Communications.
	  ○ Chapter 4 Evaluation of situation.
	  ○ Chapter 5 Action when the ship is disabled but not aground.
	  ○ Chapter 6 Emergency towing.
	• BRIDGE TEAM MANAGEMENT
	  ○ Chapter 3 Passage Planning (see Aborts; Contingencies)