### **Work Instruction - Operations**

# LOSS OF EXTERNAL POWER SUPPLY

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Hitachi Rail Honolulu JV

Work Description: This work instruction descri	Description: This work instruction describes the handling of the Loss of External Power Supply				
<b>Scope:</b> This work instruction is written specific	ork instruction is written specifically for the OCC operating staff of Honolulu Rail Transit.				
References:					
HNL-09341 Total Closure of the Metro					
PPE and precautions	Competencies or qualifications	Licenses or permits required			
Nil	OCC Supervisor, Engineering & Fault Controller, Train Controller, Information Controller, Train Operator, Station Operator	Nil			
Tools and equipment required					

### Total Loss of External Power Supply - affecting the entire mainline



#### Note

Power provided by external generators only enables the recovery and evacuation of stranded trains at the closest station. Station Emergency Lighting only lasts 90 minutes

### OCC Supervisor

#### You must:

- Suspend train service
- Instruct the Information Controller to make public broadcast announcements at stations due to temporary service suspension
- Authorize the Engineering and Fault Controller to switch to back-up power from the external generators
- Instruct the Train Controller to initiate recovery and evacuation of passengers from stranded trains at the closest stations
- Monitor the evacuation process until all passengers are evacuated safely to the closest stations
- Initiate Total Closure of the Metro following HNL-09341
- Follow the power supply rectifying progress closely; on confirmation from the Engineering and Fault Controller
  on the full recovery of the traction power then authorize the Engineering and Fault Controller to switch back to
  external power from HECO and initiate service resumption
- Log the event in the OCC Supervisor Daily Report

### Engineering and Fault Controller

### You must:

- Call the single point of contact from HECO to confirm total external power loss
- Tell the maintainer (TPE) to carry out maintenance intervention and/or shutdown on non-essential power usage at stations if required
- Attempt to find out / determine the cause of the total external power loss and recovery time from HECO
- On authorization from the OCC Supervisor, command the switch to external generator power supply via SCADA
- On instructions from the OCC Supervisor, implement Total Closure of the Metro following HNL-09341
- Keep track of the power recovery/repair progress from HECO/maintainer and inform the OCC Supervisor on full recovery of the external power supply
- Log the event in the logbook

Approved By:   □ Director, Operations and Maintenance		☐ Department Manager	☐ Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

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## **Work Instruction - Operations**

# LOSS OF EXTERNAL POWER SUPPLY

### **HITACHI**

Hitachi Rail Honolulu JV

#### Train Controller

### You must:

- Wait until all trains coasted to a stop, then apply emergency stops to prevent trains from moving suddenly when there is a restoration of power (from HECO)
- Notify all Train Operators who are operating trains manually about the power loss
- Identify stranded trains' locations and deploy Train Operators to the stranded trains
- Ensure each Train Operator a safe path to reach the stranded train
- Confirm with Engineering & Fault Controller that the external generator power supply is switched ON
- Release the hold and authorize one train movement at a time for the Train Operator to drive the stranded train manually in BYPASS mode to the nearest station for passenger detrainment
- Repeat until all stranded trains are safely berthed at stations and all passengers are evacuated to the stations
- Move trains out of the way (from docking at stations) to make way for other trains waiting to be docked
- Ensure the Train Operators turn OFF the trains before exiting
- · Log the event in the Train Controller Log

### Information Controller

#### You must:

- On instructions from the OCC Supervisor:
  - Make public broadcast announcements on service suspension to trains and stations
  - Make regular announcements to update passengers on stranded trains to wait for staff to come on board and then transport them to the next station
  - Log the event in the Information Controller Log

### Train Operator

#### You must:

- On instructions from the Train Controller, get on board the train and assist in any way possible to evacuate passengers from the train berthed at station
- On instructions from the Train Controller, access the emergency walkway and get on board the train and operate
  the train in BYPASS mode to the nearest station followed by assisting passengers to evacuate from the train
  berthed at station; turn OFF the train before exiting if no other trains are waiting to be berthed at the same
  station
- On instructions from the OCC Supervisor, implement Total Closure of the Metro following HNL-09341
- Log the event in the Duty Event Form

### Station Operator

#### ou must.

- On instructions from the Train Controller, get on board the train and assist in any way possible to evacuate passengers from the train berthed at station
- On instructions from the OCC Supervisor, implement Total Closure of the Metro following HNL-09341
- Log the event in the Duty Event Form