



SCOPE OF WORK

ENQUIRY NO: AHT26057

DESCRIPTION: INSTALLATION OF 2V DC POWER SUPPLY CELLS FOR DCS SUPPLY BATTERY BANKS (UP TO 400V) FOR LARGE UPS SUPPLIES AT PetroSA IN MOSSEL BAY

START DATE: 18 NOVEMBER 2024

DURATION: 1 MONTH

1. SCOPE OF WORK

1.1 SERVICES

The required Service is for the provision a labour team with suitable equipment and a vehicle (hi-ab or pickup and forklift) to remove and replace lead acid cells and batteries to and from various satellite buildings in the GTL Refinery, Mossel Bay. These cells and batteries need to be interconnected in series to form a specified battery voltage.

This Scope of Work includes the following:

- The safe disconnecting of all battery links as specified below and their replacement and reconnecting as per the original cell/battery bank.
- This will require accurate alignment of the units in order not to stress the cell terminals due to misalignment.

1.2 2V LEAD ACID CELLS FOR DCS SUPPLY UNITS

- ± 182 x 2V cells in various satellite buildings. Their capacities range from 220Ah to 1 600Ah. All cell voltages are 2V DC.
- The cell mass can range from 25kg to ± 120 kg.
- PetroSA will indicate the faulty cells and the Supplier must remove, load, transport and unload them at a storage location on the GTL Refinery site.
- The new cells must be loaded and transported from the storage location on site to the relevant satellite building. They must be unloaded from the

transport vehicle (supplied by Supplier) and placed inside the building where the faulty cells were.

- The Supplier shall provide a hi-ab or pickup and forklift to load and offload the cells at relevant satellite buildings or at the storage location on site.
- The Supplier shall provide any special 'grabs' or tools to move these cells manually from the access door to their position inside the satellite building battery bank stands.

1.3 GENERAL

The cells that were identified to be replaced have deteriorated to the extent where the reliability of the full set of 13 cells making up the 24V DC power supply battery bank, has become a risk to the operation of the plant should a power outage occur.

These cells are heavy and large in size. They vary in capacity ratings from 220Ah to 1 600Ah. They need to be removed and replaced using manual labour. They are filled with a corrosive electrolyte and must be handled with utmost care during the removal of the deteriorated cells and the reinstallation of the new cells. Full acid-proof PPE must be worn in order to protect the Supplier's personnel from chemical burning in the event of a spill. The Supplier shall supply safety neutralising powder (bicarbonate of soda) to neutralise any spillage of acid.

1.4 WORKING HOURS

Refinery

Normal working hours are as follows:

- Monday to Friday: 08:00 to 16:30 - with half hour lunch break
- Saturday & Sunday: Normal day off.

1.5 SAFETY EQUIPMENT AND APPAREL

The Supplier shall ensure that all its personnel engaged in the performance of the Services are provided as a minimum with the following safety equipment/apparel in good condition:

- Safety shoes/boots
- Overall with long sleeves
- Hard hat
- Rain suit
- Safety gloves
- Hearing protection
- Safety glasses
- Safety harness

The Supplier shall supply any additional safety equipment/apparel required for the safe execution of the Services.

All safety equipment/apparel shall bear the SABS mark and be approved by the PetroSA Safety Department.

PetroSA will supply free of charge to the Supplier any additional safety equipment/apparel to satisfy specific area safety requirements. This safety equipment/apparel will remain the property of PetroSA and any damage as a result of abuse, neglect, misuse, etc. will be for the account of the Supplier.

1.6 ACCOMMODATION & TRANSPORT

No accommodation or transport will be provided by PetroSA. No costs will be refunded by PetroSA.