

Transnet National Ports Authority

PROVISION OF ELECTRICAL MAINTENANCE AND SERVICE AT THE PORT OF PE FOR A PERIOD OF THREE (3) YEARS AS AND WHEN REQUIRED

Specification

1.1. Background and Purpose

Transnet National Ports Authority (TNPA), as the landlord within in the Port of Port Elizabeth, is responsible for the maintenance of electrical assets in the port. These assets include medium voltage (MV) and low voltage (LV) distribution equipment, lighting, uninterrupted power supplies (UPS), air conditioners, standby plants and more for the purpose of enabling port operations.

The purpose of this submission is to secure an electrical contractor for a period three (3) years for planned and unplanned maintenance and servicing of port electrical assets.

1.2. Scope of work

The scope of work includes the maintenance and servicing of port electrical assets. This includes providing labour and material to carry out various maintenance tasks as may be required by the port. Replacements must be the same as what is being replaced in quality, size, length, and shape. Scope of work includes but not limited to:

1.2.1 MV and LV switchgear

- Inspection, service, and repairs of circuit breakers. Replacement of MV circuit breaker is excluded.
- Inspection, repair, supply and replacement of metering equipment.
- Inspection, service and repairs of the bus couplers and associated equipment that will exclude the replacement of bus couplers and associated equipment.
- Fault finding and repairs on the substation equipment.
- Supply and install LV Protection equipment and circuit breakers.

1.2.2 Inspection, repairs, and servicing of MV and LV protection equipment. Replacement of MV protection equipment is excluded.

1.2.3 Supply and install LV Protection equipment and circuit breakers.

1.2.4 Distribution cables

- Supply and installation of piping sleeves required.
- Supply, excavation and installation of underground cables and cable sleeves. Protection of the existing underground cables and cable sleeves.
- Testing and fault finding on all cables.
- Repairs and joining of all cables.

- 1.2.5 Fault finding, issuing of certificates of compliance and reporting of electrical installation conditions for buildings around the Port as per Appendix 1.
- 1.2.6 Generators servicing and repairs. Supplying and installing new generators is excluded. Generator hire will be limited to 30 days in a year from the contractor.
- 1.2.7 Checking and maintain of all earthing system to ensure impedance is within limits (Maximum 7 ohms) this will include common earth, earth spikes and earth mat, panel earthing integrity, cable earths on end boxes.
- 1.2.8 Any work to be done on the large floor-mounted switchboard in substations, mounted switchboard in brick kiosks, glass fiber kiosks and wall-mounted switchboard must be approved by a TNPA Senior Electrical Engineer or Electrical Engineer.
- 1.2.9 Inspection, service, repairs, and replacement of substation extractor fans of a same extractor fans.
- 1.2.10 Inspection, service, and repairs to sewage pumps. Replacement of the sewerage pump is excluded.
- 1.2.11 Inspect, service and repair portable electrical equipment (1200ton High Mast winches/power tools/Battery operated tools/test equipment).
- 1.2.12 Supply and install distribution board in all TNPA buildings.

1.3 Exclusions from the scope of works

The scope does not include the following areas:

- Passenger and goods lifts or any lifting machinery
- The Port Administration building centralised HVAC system
- New assets
- Split units air conditioners
- Street lighting
- High mast lighting
- Medium mast lighting
- Indoor lighting
- Transformers
- Power factor Correction (PFC) Equipment
- Fixed appliance (Geysers, Stoves/fry-tops, hydro-boils, ceiling fans and cooker hoods)

1.4 Location of site and access

- Electrical assets are all located within the Port of Port Elizabeth (no equipment should be taken off site). access will be granted by the TNPA security guards.
- Contractor should have identification for port access and on site all the times.

1.5 Working hours

- The working hours shall be from 08h00 to 16h00, Monday to Friday.
- The service provider must not vary the working hours without a written instruction from the electrical supervisor.
- After hours and fault callouts will be from 16h01pm to 19h00pm, including weekends and holidays.
- Care should be taken to minimise the impact on occupants of the building during conduction of works.
- Contractor must within the Port Elizabeth TNPA geographic location.

1.6 Payment

1.6.1 Material will be paid on a 10% cost-plus basis. Each invoice should be accompanied by a job card stating hours and an invoice or quotation from a third-party material supplier with a list of material used on the job. The appointed contractor will then be eligible to invoice for the hours worked and material plus profit as stipulated in the pricing schedule.

1.6.2 done and the condition of inspected assets.

1.6.3 Invoices to include all day work sheets approved by the TNPA representative.

1.6.4 Payments to the contractor will be made according to TNPA payment policy from receipt of the contractor's invoice, provided that the content of the invoice has been certified as correct by the TNPA representative and nothing in the invoice is in dispute.

1.6.5 Contractor should have logbook of worked hours and must be signed by TNPA supervisor.

1.7 Compliance

1.7.1 The service provider shall ensure that all the current statutory laws and future legislation that may be passed pertaining to the storage, carrying out electrical works, removal, transportation and disposal of waste are/will be complied with and undertakes that the procedures for undertaking this work shall comply with all applicable legislation, codes of practice, local, regional, provincial, national authorities' requirements including but not limited to:

- SANS 10142-1 & 10142-2

- Occupational Health and Safety Act (1593)
- Environmental Conservation Act (1989)
- National Environmental Management Act (1998)
- National Environmental Management Waste Act (2008)
- The National Road Traffic Act (1996)
- The Hazardous Substances Act (1973)
- The Occupational Health and Safety Act (1993)
- Common Law
- SABS ARP 035:1993
- Nelson Mandela Bay Municipal Bylaws and
- Any other relevant legislation

1.7.2 The contractor shall comply with the Port of Port Elizabeth's safety, health and environmental (SHE) regulations and requirements i.e the electrical machinery regulations as mentioned above.

1.7.3 Upon award the contractor shall submit a SHE files for approval as required by the TNPA Port of Port Elizabeth SHE department before commencement of any work. A SHE files update will be required for the duration of the contract.

1.8 Parking & vehicles

Parking will be at any designated parking. Vehicles used for people and equipment transportation must be easily identifiable as a contractor vehicle. Parking is at own risk Transnet will not be liable for any damage to property.

1.9 General pricing instruction

1.9.1 Transport team mobilization is fixed per callout regardless of the size of the team being mobilized or the size of the job.

1.10 CIDB requirements

1.10.1 The tender CIDB grading values of grade3EP or higher.

2 Pricing schedule

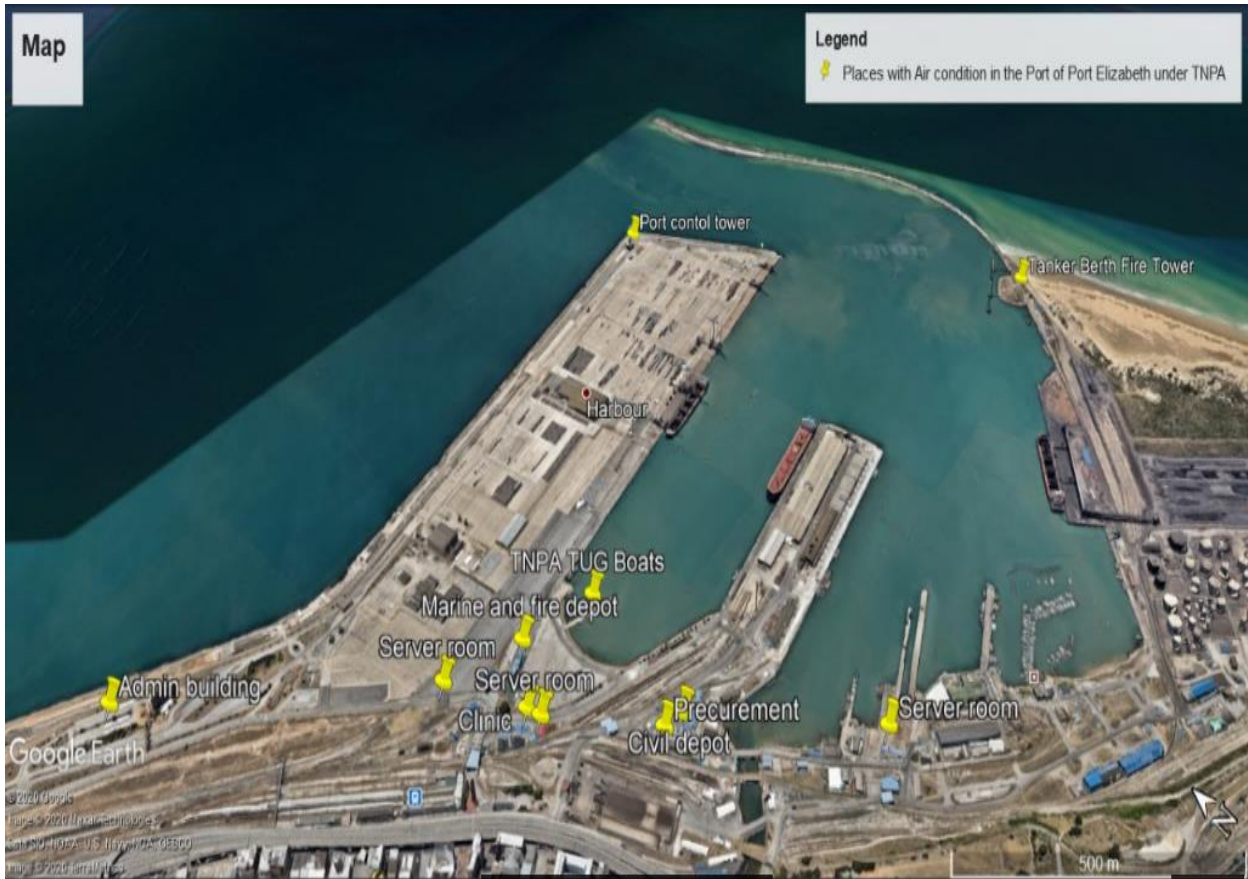
The quantities submitted below will be used to price a job for all callouts, maintenance and servicing work assigned to the contractor.

Item no.	Description	Unit	Qty	Year 1		Year 2		Year 3		Total amount ® (A+B+C+D+E)
				Rate	Amount(A)	Rate	Amount(B)	Rate	Amount(C)	
	<u>Labour rates</u>									
1	<u>Electrician (skilled) labour rates</u>									
1.1	Standard	Hourly rate	-							
1.2	Overtime	Hourly rate	-							
1.3	Weekends	Hourly rate	-							
1.4	Public holidays	Hourly rate	-							
2	<u>Assistant (semi-skilled) labour rates</u>									
2.1	Standard	Hourly rate	-							
2.2	Overtime	Hourly rate	-							
2.3	Weekends	Hourly rate	-							
2.4	Public holidays	Hourly rate	-							
3	<u>Labourer (unskilled) labour rates</u>									
3.1	Standard	Hourly rate	-							
3.2	Overtime	Hourly rate	-							
3.3	Weekends	Hourly rate	-							
3.4	Public holidays	Hourly rate	-							



4	Material									
4.1	Profit percentage (percent profit added to material cost)	Percentage							10	
5	Transport/ mobilisation									
5.1	Fixed transport or mobilisation cost per job.	Fixed rate	1							
7	Other									
7.1	TNPA safety file (once-off)	Each	1							
7.2	Issuing COC	Each	3							
7.3	Generator hire									
	20kVA 3 phase	Per day	30							
	45kVA 3 phase	Per day	30							
	80kVA 3 phase	Per day	30							
8	Other									
9	Sub-total									
10	Add 15% VAT									
11	Grand Total (3years)									

Appendix 1



List of TNPA buildings as indicated in the geographic location Appendix 1:

- 1 Civil Depo buildings;
- 2 Procurement building;
- 3 TNPA Clinic building;
- 4 Port Admin building; and
- 5 Fire and Marine building.

Appendix 2

Status Report # _____

Date inspected: _____

Status	meaning
OK	Systems and components functional
INFO	System or components had a failure or needs attention to prevent escalation
WARNING	System or component has failed but is still operating non optimally
CRITICAL	System or component has failed resulting in non-operation

Asset number	Location	Size	Comment	Status
