SUPPLY, DESIGN. INSTALLATION AND COMMISSIONING OF THE 1MVA, 11KV/400V MINI SUBSTATION AND FREE STANDING LOW-VOLTAGE PANEL, RE-ROUTING OF MEDIUM-VOLTAGE AND LOW-VOLTAGE CABLES FROM OLD SUBSTATION INTO NEW MINI SUB AND DISTRIBUTION BOARD.

TRANSNET ENGINEERING, 311 SOLOMON MAHLANGU DRIVE, ROSSBURGH.

REFERENCE No: MPE_MAIN_DBN_SOW_055

Revision 0

Date of release: JULY 2022

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DOCUMENT AUTHORITIES

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Designation	Acting Plant Engineer
Signature & Date	14/07/2022

Signature of Bidder/s: _____ Date: _____

1. INTRODUCTION / SCOPE OF WORK

This specification is for the:

#	TASK	REQUIRED
1	Design	
2	Manufacture	
3	Upgrade	
4	Refurbishment	
5	Supply	✓
6	Installation/construction	✓
7	Documentation	✓
8	Testing	✓
9	Training	✓
10	Commissioning	✓
11	Structural Investigation	

Of the specified:

#	ITEM	REQUIRED
1	Supply, Design, Installation and Commissioning of the 1MVA, 11kV/400v Mini substation and free standing low-voltage panel, re-routing of medium-voltage and low-voltage cables from old substation into new mini sub and distribution board.	✓
2	Submission of project completion documents.	✓

2. SITE INSPECTION

a) All prospective tenderers shall be required to undertake a compulsory site inspection to fully acquaint themselves with all aspects involved.

b) Arrangements to visit the site and confirmation of the date and time of the site inspection shall be made with the Transnet Engineering Project Manager.

c) The site inspection certificate shall be completed and countersigned by the Project Manager on the day of the visit and must be submitted with the tender documents.

3. INFORMATION REQUIRED

a) Offers will not be considered unless full particulars and sufficient literature is provided at the tendering stage to enable the Transnet Engineering Technical Officers the opportunity to assess each technical offer properly.

b) Prospective Tenderers will complete the relevant questionnaire in full and must indicate whether their offer complies with each item of the specification.

Signature of Bidder/s: _____ Date: _____

c) Should there be insufficient space for furnishing full details; Tenderers shall provide the additional details in their covering letter. The additional details shall be numbered in accordance with the applicable clause specified in the specification.

d) As prospective Tenderers are considered to be experts in their field, they are obliged to identify any shortcomings, such as omissions or sub-standard requirements, to the completeness of this specification. These must be brought to the attention of Transnet Engineering at tender stage with alternatives to address these shortcomings. However, each offer shall be quoted for separately.

e) Alternative offers shall be clearly indicated by the Tenderers why it shall be considered superior and / or more beneficial to Transnet Engineering than that specified.

4. TECHNICAL REQUIREMENTS

The following regulation and codes must be complied with:-

- **The Occupational Health and Safety Act – Act 85 of 1993.**
- **SANS 1507-4:** Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 4: XLPE Distribution cables.
- **SANS 1091 – Coastal spec**
- **SANS 60439-1** Low-voltage switchgear and controlgear assemblies - part 1: type-tested and partially type-tested assemblies.
- **SANS 1195** Busbars.
- **SANS 1507-4** Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 4: XLPE Distribution cables.
- **SANS 10142-2:2014 :** Part 2: Medium-voltage installations above 1 kV a.c. not exceeding 22 kV a.c. and up to and including 3 MVA installed capacity.
- **SANS 10142-1: (Edition 3: 2020)**The wiring of premises Part 1: Edition 1.8 Low-voltage installations.

5. SPECIFIC REQUIREMENTS

Any person with the intention of procuring the material shall ensure that the information below is complied with.

5.1 Environment

- Indoor and outdoor.

5.2 Scope of work

This specification requirement covers the minimum requirements		
ITEM	**REQUIRED**	**DETAILS OF OFFER Comply (Yes) / Do not comply (No)**
5.2.1	**Scope of Work** This specification covers Transnet Engineering's requirements for the Supply, Design. Installation and Commissioning of the 1MVA, 11kV/400V Mini substation and Free standing Low-voltage panel. Re-routing of Medium-voltage and Low-voltage cables from old substation into new Mini sub and Distribution board.	
5.2.2	This scope of work shall be read with annexure 1 (Transnet Engineering Safety, health and environmental management requirements). The bidder shall include costs for adhering to Safety, health and environmental management requirements.	
5.2.3	Transnet reserves the right to invite the bidders to give presentations on their proposals, products, services and/or pricing.	
5.3	**Mini substation design**	
5.3.1	The Mini substation shall be constructed using 3CR12 steel and finished to the colour Orange as defined in the SANS 1091 – Coastal spec.	
5.3.2	Each door shall be fitted with a robust three-point locking arrangement that shall be capable of being secured by means of a padlock.	
5.3.3	Hinges, locking devices and ventilation screens shall be corrosion resistant metal.	
5.3.4	Mini substation shall have a steel base of sufficient rigidity to allow the mini sub to be lifted from its stand without being permanently deformed or damaged.	
5.3.5	Mini substation shall be of modular design. The compartments shall be so designed and assembled that the transformer can be removed in its entirety without appreciable disturbance of the medium-voltage and low-voltage compartments. Conversely, the compartment housing shall be removable, after removal of the common roof, without disturbance of the transformer, the contents of the compartment or underground cables.	
5.3.6	The Mini substation with hot-dipped galvanised base, shall be mounted on suitably designed framework which elevates the mini sub 500mm above ground level. Framework shall be hot-dipped galvanised.	
5.3.7	Face brick shall be bricked around the framework to conceal the steel framework. Brickwork shall make allowance for a working level at suitable height in front of the main MV and LV compartments.	
5.3.8	The Mini substation enclosure shall have a degree of protection of at least IP35 in accordance with SANS 1222, applicable when the mini sub is completely assembled, and doors are closed.	

Signature of Bidder/s: _____ Date: _____

ITEM	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.4	**Medium Voltage Ring Main Unit**	
5.4.1	The Ring Main Unit shall comply with the following requirements. • Type: NE-IDI • 630A/200A/630A • Ur: 17,5kV • Ud: 38kV • Up: 95kV • Un: 11kV • IK: 21kA or 3 sec • Fr: 50/60Hz • SF6 VIP45 protection relay with transformer CT's.	
5.5	**Mini substation transformer**	
5.5.1	• Primary voltage: 11kV • Secondary voltage: 400V • Rating: 1MVA Vector group: Dyn11.	
5.5.2	The transformer tank shall be of welded construction type and shall be designed for the fitting of radiators.	
5.5.3	Radiators shall be hot-dipped galvanised.	
5.5.4	Transformer main lid cover shall be bolt-on to allow for relative ease of the maintenance on the MV and LV bushings.	
5.5.5	The transformer shall be equipped with drain valve, filler plug and oil level indicator.	
5.5.6	Transformer windings and fly leads shall be of copper construction.	
5.5.7	Voltage tapings shall be provided on the primary windings (5 tap position).	
5.5.8	The tap range shall be ±2,5% and ±5% of the nominal voltages.	
5.5.9	The transformer shall supply full load output at all tapings.	
5.5.10	The positions of the tap changing switch shall be clearly marked with provision for a padlock.	
5.5.11	Transformer shall be supplied with virgin insulating oil that complies with SANS 555. SANAS accredited certification shall be supplied indicating all tests including PCB.	

Signature of Bidder/s: _____ Date: _____

ITEM	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.5.12	Transformer rating plate shall be fixed to the transformer tank, giving the following information. • Makers name • Makers serial No. • Rated output in KVA • Frequency • Secondary voltage and current • Primary voltage and current • Primary voltage tapings • Transformer reactance (%) • Transformer impedance (%) • Vector diagram • Diagram of connections • Core and winding mass (kg) • Oil volume (L) • Total mini sub weight (kg)	
5.6	**Low voltage Main distribution board – Free Standing**	
5.6.1	Electrical components shall have a fault level of 36kA.	
5.6.2	Low voltage panel shall consist of normal supplied loads and generator supplied loads.	
5.6.3	Low voltage panel shall be constructed using 3CR12 steel and finished to the colour Orange as defined in SANS 1091. Generator tier shall be finished to the colour Red.	
5.6.4	Generator supplied loads shall be a dedicated tier. Fish plates will be supplied to connect both sets of busbars. These must be so installed to allow for quick removal once generator and change-over-switch are installed.	
5.6.5	The distribution board shall comply with SANS 60439-1 and the latest edition and amendments of SANS 10142-1.	
5.6.6	Form of separation shall be of form 3B Type 2.	
5.6.7	Shall have a degree of protection of at least IP35.	
5.6.8	All low-voltage cables shall be bottom entry into panel.	
5.6.9	Low-voltage panel shall be mounted on a hot-dipped galvanised stand elevated 500mm above ground level. Allowance for a working platform at the same height in front of the panel shall be made.	
5.7	**Electrical Conditions**	
5.7.1	The system of supply shall be three phase, 4 wire, 50Hz alternating current with a solidly earthed neutral at a nominal voltage of 400/230 Volts.	
5.7.2	Voltage may vary within the range of 95% to 105% of the nominal and all equipment installed shall be suitably rated.	
5.7.3	All equipment shall be adequately rated for the prospective fault level ratings.	
5.7.4	All busbars shall be designed, manufactured, marked and tested in accordance with SANS 1195.	

Signature of Bidder/s: _____ Date: _____

ITEM	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.7.5	Busbar rating shall be 2A/mm² up to 630A and 1,6A/mm² thereafter.	
5.7.6	Busbar temperature shall not exceed a 40^0C temperature rise.	
5.7.7	Busbar shall be covered with heat shrinkable sleeving and finished in standard colours.	
5.7.8	Each distribution board shall be fitted with the following labels as needed in a suitable position: • Live Busbar • Flash signs • Main label • Voltage rating • Current rating • Fault level and time • IP rating • Job number • Date of manufacture • Form of separation • Fed from	
5.7.9	Each distribution board shall be supplied with a test certificate. This certificate shall include all items as indicated in annexure I of SANS 1973-1 and annexure E of SANS 1973-3.	
5.7.10	All MCCB's shall be fitted with a direct mount rotary handle which shall prevent the opening of the front cover when the switch is in the "ON" position.	
5.7.11	All switches shall be lockable in the "OFF" position.	
5.7.12	Distribution main switch shall be a withdrawable ACB.	
5.7.13	Low voltage panel shall be supplied with Class 1/Type 1 surge protection device. Inclusive with back-up fuses.	
5.7.14	Anti-condensation 230V heaters shall be provided for all compartments. A switch with thermostat shall be provided to control the heaters.	
5.7.15	Phase identified maximum demand amp meters shall be installed on Main switch tier.	
5.7.16	Voltmeter and selector switch with suitable scale shall be installed on Main switch tier.	
5.7.17	All outgoing cables shall be bottom entry.	
5.7.18	Low-voltage panel shall have provision for 30% spare ways for future additions.	
5.8	**Re-directing and jointing of MV and LV cables**	
5.8.1	All cables shall be installed and mounted on suitably selected cable management system which will not be deformed when cables are mounted unto racking system.	
5.8.2	Core drilling through concrete slab shall be required to direct cables from basement into new distribution board. Size and quantity to allow for the free installation of all associated cables.	

Signature of Bidder/s: _____ Date: _____

ITEM	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
5.8.3	Proper sealing of core drilled hole will be required to prevent water from entering basement area.	
5.9	**Medium-voltage cables** • Existing 240mm² x 3 core PILC will required to be jointed unto 185mm² x 3 core XLPE (free issue) X2. • Two transition joints 240mm² x 3 core PILC to 185mm² x 3 core XLPE will be required. Two 185mm² x 3 core XLPE terminations will be required.	
5.10	**Low-voltage cables** The following cables shall be required to be jointed, re-directed and terminated onto new Low-voltage panel. Estimated length to be joint is 30meters/cable. Suppliers to measure to ensure correct lengths. • DB16 – 50mm²x4 core SWA ECC • Parking garage – 185mm²x4core SWA ECC • Canteen – 185mm²x4core SWA ECC • Air-conditioning for 2nd floor – 35mm²x4core SWA ECC • Area lighting – 16mm²x4core SWA ECC • DB2 – 6mm²x4core SWA ECC • DB1 – 35mm²x4core SWA ECC • DB11/Clinic – 50mm²x4core SWA ECC • Admin A Main supply – 3x120mm²x4core SWA ECC • HR – 50mm²x4core SWA ECC • DB11/Clinic – 16mm²x4core SWA ECC • DB1 – 4mm2x4core SWA ECC • DB2/Admin sub local – 4mm²x4core SWA ECC • DB16 – 16mm²x4core SWA ECC • Telecommunication – 10mm²x4core SWA ECC • Admin A – 16mm²x4core SWA ECC • Service Lift C – 35mm²x4core SWA ECC • Passenger Lift A+B – 150mm²x4core SWA ECC.	
5.11	**<u>Low-voltage supply cable between Mini sub and Distribution board</u>** Low-voltage supply cable between mini sub and Main low-voltage panel shall be 240mm² single core XLPE PVC cable as per SANS 1507-4. Cables shall be run in Trefoil formation. 3 cores per phase. Cables shall be installed on suitable heavy-duty cable management system which shall not distort or deform when cables are installed. Estimates length per core per phase is 15 meters. Neutral conductor shall have the same cross-sectional area as the phase conductor. Earth conductor between mini sub and low-voltage panel shall be 150mm² green/yellow insulated earth conductor. Estimated length is 10 meters.	

Signature of Bidder/s: _____ Date: _____

<table>
<tr><th>ITEM</th><th>REQUIRED</th><th>DETAILS OF OFFER
Comply (Yes) /
Do not comply (No)</th></tr>
<tr><td>5.12</td><td>Project completion and Handover
On completion of the project, the tenderer shall provide and handover the following documentation and certificates:
• CoC for MV installation as per SANS 10142-2
• CoC for LV installation as per SANS 10142-1
• All test certificates for Mini sub and Low voltage conducted during FAT.
• Steel certificates for enclosures of Mini sub and Low-voltage panel.</td><td></td></tr>
<tr><td>5.13</td><td>Low-voltage loads, breaker and cable size
Main ACB shall be 1600A, 3 pole ABB SACE E1.2B Ekip touch withdrawable – similar or equivalent to ABB/Schneider.
<table>
<tr><th>Load Description</th><th>Cable size</th><th>Breaker size</th></tr>
<tr><td colspan="3">Normal Loads</td></tr>
<tr><td>DB16</td><td>50mm² x 4 core SWA ECC</td><td>160A / 3 pole</td></tr>
<tr><td>Parking garage</td><td>185mm² x 4 core SWA ECC</td><td>250A / 3 pole</td></tr>
<tr><td>Air-conditioning for Building</td><td>Future installation</td><td>320A / 3 pole</td></tr>
<tr><td>Air-conditioning for Admin A</td><td>Future installation</td><td>630A / 3 pole</td></tr>
<tr><td>Canteen</td><td>185mm² x 4 core SWA ECC</td><td>250A / 3 pole</td></tr>
<tr><td>Air-conditioning for 2nd Floor</td><td>35mm² x 4 core SWA ECC</td><td>125A / 3 pole</td></tr>
<tr><td>Area lighting</td><td>16mm² x 4 core SWA ECC (contactor/bypass)</td><td>63A / 3 pole</td></tr>
<tr><td>DB2</td><td>6mm² x 4 core SWA ECC</td><td>40A / 3 pole</td></tr>
<tr><td>DB1</td><td>35mm² x 4 core SWA ECC</td><td>125A / 3 pole</td></tr>
<tr><td>DB11/Clinic</td><td>50mm² x 4 core SWA ECC</td><td>160A / 3 pole</td></tr>
<tr><td>Generator supply to change over</td><td>Future installation</td><td>320A / 4 pole</td></tr>
<tr><td>Admin A - Main</td><td>3 x 120mm² x 4 core SWA ECC</td><td>630A / 3 pole</td></tr>
<tr><td>HR Offices</td><td>50mm² x 4 core SWA ECC</td><td>160A / 3 pole</td></tr>
</table>
<table>
<tr><th colspan="3">Generator Loads</th></tr>
<tr><td colspan="3">Generator Main LV breaker shall be 320A, 4 pole</td></tr>
<tr><td>DB11/Clinic</td><td>16mm² x 4 core SWA ECC</td><td>63A / 3 pole</td></tr>
<tr><td>DB1</td><td>4mm² x 2 core SWA ECC</td><td>32A / 2 pole</td></tr>
<tr><td>DB2/Admin Sub Local DB</td><td>4mm² x 2 core SWA ECC</td><td>32A / 2 pole</td></tr>
</table></td><td></td></tr>
</table>

Signature of Bidder/s: _____ Date: _____

	DB16	16mm² x 4 core SWA ECC	63A / 3 pole	
	Telecommunications	10mm² x 4 core SWA ECC	50A / 3 pole	
	Admin A	16mm² x 4 core SWA ECC	63A / 3 pole	
	Service Lift C	35mm² x 4 core SWA ECC	125A / 3 pole	
	Passenger Lift A + B	150mm² x 4 core SWA ECC	250A / 3 pole	
5.2.7	• The electrical contractor shall do, complete an electrical installation and issue a certificate of compliance in accordance with SANS 10142.			
5.2.8	The electrical installation shall be done and completed an electrical contractor having a minimum CIDB grading of 4 EB / EP or above.			

5.4 Safety Features

- The minimum safety features shall be according to statutory and industry rules.

5.5 Services

- The tenderer to state the services required for this project.
- **A testing period of 1 month (744 hours for 24/7 shifts and 248 hours for 8 hour shifts) this shall depend on what shift the business requiring the removal of the specified equipment**
- **No completion of work will be accepted by Transnet without the satisfaction of the conditions above.**

5.6 Warranty

- **The warranty shall be 2 years.**
- **A maintenance contract for the warranty period shall be included in the quoted price and shall involve Transnet employees to learn.**
- Specify when the system becomes fully operational and when the warranty period takes effect.
- Annual testing, certification and involve TE personnel to transfer skills.

5.7 After-Sales Service

- The successful tenderer shall provide Transnet Engineering with acceptable proof that spares can be easily and speedily procured for the equipment within 7 working days through agents locally.

Note: All work to be completed in each respect by suitably qualified person.

6. OTHER INFORMATION RELATED TO THE SCOPE

6.1 This specification states the minimum requirements relating to the work and in no way absolves the contractor from responsibility for sound engineering practice.

Any omissions or sub-standard requirements of this specification must be brought to the attention of Transnet Engineering at tender stage and optional prices for addressing such omissions must be provided.

6.2 Any matter relating to this work, which requires a decision from Transnet Engineering shall be presented to the Project Manager in charge.

Signature of Bidder/s: _____ Date: _____

6.3 All offers shall be completed in every respect with this specification. Only completed tenders shall be considered.

6.4 The Technical Officer reserves the right to have the proposal checked independently by a third party.

6.5 Tenders must allow for monthly progress and clarification meetings on site initially and after commissioning for defect meetings when required.

A meeting will be held after issuing of the tender to establish the exact scope and magnitude of the contract. No tender will be considered unless it has the certificate signed by the Engineer or project manager or his representative.

7. HEALTH AND SAFETY REQUIREMENTS

7.1 All equipment and installation whether detailed in this specification or not shall comply with the requirements of the Occupational Health and Safety Act 85 of 1993 as amended and all other applicable legislation including specific set of regulations and local authority bylaws where applicable.

7.2 All the necessary safety equipment such as guards over rotating equipment shall be supplied and the equipment shall comply fully with all the requirements of the South African Occupational Health and Safety Act, Act 85 of 1993 and all other applicable legislation including specific set of regulations and local authority bylaws where applicable. At all times during the manufacture, assembly and testing of the equipment the contractor will be responsible for the safety of all persons on site and the equipment.

7.3 SHE SPECIFICATION

Prior to commencement of contract, the contractor shall be issued with a SHE specification in order to compile a SHE file in line with TE requirements.

Prior to establishing on site, it is an explicit requirement of this contract that all of the Contractor's personnel directly involved with this contract, including those of sub-contractors, attend a **Safety induction course**. Transnet will provide the course free of charge and attendance is compulsory for all personnel under the control of the Contractor who, during the duration of the contract, will be present on site whether on a full time or adhoc basis.
The contractor must allow for all additional charges because of these requirements as no claims for extras will be accepted in connection with the foregoing.

7.4 As part of the legislative and TE SHE requirements.

The successful contractor is required to conduct a Risk assessment to ascertain all potential risks associated with this project. The completed risk assessment is to be formally submitted to the Risk department via the project manager at least two weeks prior to the commencement of the actual project. A safety file and associated documents will be required from a successful tenderer and such will be communicated by the Risk department.

8. SPECIALIST SUB-CONTRACTORS

8.1 Only specialist sub-contractors who have previously successfully completed work of the type and extent specified in this document should be engaged. The tenderer shall provide the technical officer with sufficient proof of having suitable experience regarding the design and manufacturing of similar equipment.

To this end, complete and detailed reference list shall be submitted with the tender. Reference list shall include addresses as well as contact person who may be visited for inspection of the equipment during the adjudication period.

8.2 The tender shall submit a complete list of proposed sub-contractors and suppliers of major components with his tender.

8.3 The tenderer shall be prepared to commit themselves in writing to the technical officer with an adequate, experienced and stable project team for the duration of the contract.

8.4 Transnet Engineering will not consider any Tenderer's offer that, in the sole opinion of Transnet Engineering, does not have adequate experience in the design and manufacture of such equipment / product.

8.5 Contractors shall do the bird removal work simultaneously with other contractors on-site busy with other work and shall plan work that it integrates with other work performed.

9. MATERIAL AND WORKMANSHIP

9.1 The equipment shall be offered complete in all respects, including all standard accessories normally offered by manufactures, all of which shall be specified in detail.

9.2 The equipment, as made and supplied, shall be complete in every respect, of modern design, using the most advanced proven technology extensively supported by reputable local companies, and be built to good engineering practices.

9.3 All equipment shall be adequately protected against damage and contamination during shipping, transport and storage.

10. GENERAL REQUIREMENTS

Operation will be in the following conditions:

Altitude	Sea level
Ambient temperature	0˚C to 45˚C
Relative humidity	50% to 100%
Atmosphere	Heavy saline

10.1 Tenderers shall indicate clause-by-clause either that they comply in every respect with the specific requirements, or if not, exactly how it differs.

11. DEFINITIONS AND ABBERVIATIONS

CLIENT	Transnet Engineering Durban
TECHNICAL OFFICER	Project Manager, Transnet Engineering Durban
CONTRACTOR	Contractor appointed under this specification document
SABS	South African Bureau of Standards
SANS	South African National Standard
ISO	International Organisation for Standardisation

Signature of Bidder/s: _____ Date: _____

12. GENERAL

12.1 The successful tenderer will be subjected to a workshop inspection by Transnet Engineering, to ensure that the facilities are to the satisfaction of the Transnet Engineering in terms of the quality control and equipment capabilities for manufacturing such type of equipment.

13. SITE ESTABLISHMENT

13.1 The contractor shall be solely responsible for safety of his staff and for providing security to safeguard his works and material on site, until such a time.

13.2 The contractor shall be required to attend site meetings when convened by the Project Leader controlling the contract.

13.3 The contractor will be responsible for any damages caused by his staff to the building and civil works on site.

14. PENALTY CLAUSES

14.1 Due to the criticality of this project, penalties will be levied for late deliveries.

Signature of Bidder/s: _____ Date: _____

TRANSNET LIMITED

15. SCHEDULE OF PRICES:

All prices **exclude Vat** and additional items listed (with prices) shall be clearly labelled as optional or essential.

Item	Qty	Price per item	Price
		R	R
Total (Excl. VAT) to tender form			**R**

Tenderer: _____ Date: _____

Witness 1: _____ Date: _____

Witness 2: _____ Date: _____

Signature of Bidder/s: _____ Date: _____

16. TENDER EVALUATION CRITERIA

The following criteria will be used to award the tender. Should there be a criteria over and above the listed below, that will be used, such criteria will be specifically stated.

Technical evaluation criteria

No.	Pre-Qualification Criteria **TECHNICAL DESCRIPTION (The technical evaluation will be used as a threshold. All bidders who do not meet the minimum threshold of 80% will not proceed to the final stage of evaluation.)**	Weightings
16.1	**Project Plan and Final Lead time** • Project Plan final Lead time equals/less than 3 months – 30 points • Project Plan final Lead time more than 4 months but equal/less than 3 months – 20 points • Project Plan final Lead time greater than 4 months – 5 points	30
16.2	**Compliance to scope of work** • Comply to scope of work – 35 points • Non-compliance to scope of work (including not completed) – 0 points	35
16.3	**Specific knowledge relating to projects of this nature** • Previous experience of supply, delivery, installation, testing and commissioning of Low Voltage and Middle Voltage equipment e.g switchgears, cables, distribution boxes, transformers, RTU's, etc. (only completed projects) in the past 3 years, with contactable references. • 5 or more submitted letters– 35 points • 4 submitted letters – 30 points • 3 submitted letters – 20 points • 2 submitted letters – 10 points • 1 submitted letters – 5 points • 0 submitted – 0	35
	Total Weighting:	**100%**
	Minimum qualifying score required:	**80**

Signature of Bidder/s: _____ Date: _____

17. VERIFICATION OF COMPLIANCE TO THE SCOPE OF WORK

ITS IS MANDATORY FOR ALL THE SUPPLIERS/BIDDERS TO COMPLETE THIS FORM. AN INCOMPLETE FORM WILL RESULT IN DISQUALIFICATION.

No.	Heading/Subsection	Comply			Comment
		Yes	No	N/A	
1.	Scope of work				
2	Site inspection				
4	Technical requirements				
5	Specific requirements				
5.2	Scope of work				
5.3	Markings				
5.6	Warranty				
7.	Health and Safety requirements				
9.	Material and workmanship				
14.	Penalty clauses				

TENDERERS: PLEASE NOTE THAT YOUR TENDER WILL BE REJECTED IF ANY OF THE ABOVE ITEMS ARE OMITTED OR NOT FILLED.

Signature of Bidder/s: _____ Date: _____