

Technical Specifications and Compliance sheet

(a) The bidder must fill and submit the schedule of specification and compliance sheet by providing detailed specifications of the product(s) offered in comparison to the specifications required by the purchaser.

(b) The provider shall not make any alternations, deletion or insertions in the specifications provided in the purchaser's column. However, the provider is free to provide additional or detailed specifications under the column "***Specifications offered by the bidder, including the manufacturer's name and Country of Origin***"

(b) Use of the words "yes" by the vendor shall be deemed to mean that the product offered by the vendor complies with all the specifications stated by the vendor.

(e) The use of a brand name in the specification schedule is to provide guidance to the vendors of the minimum specifications required by the purchaser and not an endorsement or preference for the stated brands.

(g) **The provider shall and must indicate clearly parameters where the offered product does not meet the specifications of the purchaser. The vendor's failure to highlight the differences between specifications required by the purchaser and specifications offered by the vendor shall be construed to mean that the product offered by the vendor meets all the specifications of the purchaser.**

(h) **The Purchaser shall not accept vendor's request(s) for change of specifications during evaluation or after contract award; All such vendor's requests shall lead to cancellation of the bid and/or award and forfeiture of the bid security and/or performance bond.**

(i) The purchaser shall reject bids of vendors who fail to complete and submit the schedule of specifications together with the bidding document.

(j) **For each quoted product, the vendor should attach a sample, including detailed product information and previous/current quality test reports**

The Specification and Compliance sheet is Authorized By:

Signature: _____

Name: _____

Position: _____

Date: _____

Authorized for and on behalf of:

(DD/MM/YY)

Company: _____

Stamp or seal:

Name of Equipment: 1000KVA Transformer 03- Phase Step Down Pole Mounted		CODE NUMBER (filled by the bidder)
Tender Specifications		Bidder's Specification
Quantity: 01	Manufacturer:	
	Type / Model	
	Country of Origin	
General Specifications		
Rated Power [KVA]; 1000		
Vector Group Dyn; 11		
Rated High Voltage [V]; 11000		
Connections [HV/LV]; Delta/Star		
Rated Low Voltage [V]; 415		
No. of Terminals [HV/LV]; 3/4		
Number of Phases [ϕ]; 3		
HV Bushings position; Top plate		
Insulation Class; A		
LV Bushings position; Top plate		
No. of HV Taps; 6		
Winding Material [HV/LV]; Copper/Copper		
Taps [+%]; 2.5,5.0		
Service Altitude [m]; <1000		

Taps [-%]; 2.5,5.0,7.5	
Transformer Type; Oil immersed/Conservator	
Maximum Ambient Temp. [°C] ; 40	
Installation; Indoor/Outdoor	
Temp. Rise (Oil/Winding) [K]; 60/65	
Oil Type; Mineral Oil (IEC 60296)	
Type of Cooling; ONAN	
Standard/Specs; IEC 60076	
General Specifications	
No-Load Loss [kW]; 1.550	
Basic Insulation Level (BIL) [kV]; HV LI 75 AC 28	
Load Loss at Principal Tap [kW]; 13.500	
Level BLK - KV; LV LI -- AC 03	
Impedance [%]; 5.0	
Regulation (ΔV) at 1.0 PF & Rated Current; 1.47%	
HV Line Current [A]; 52.49	
Regulation (ΔV) at 0.8 PF & Rated Current; 4.01%	
LV Line Current [A]; 1391.21	
Efficiency (η) at 100% Load 1.0 PF; 98.52%	
Frequency [Hz]; 50	
Efficiency (η) at 50% Load 1.0 PF; 99.02%	
Transformer Accessories	

HV Porcelain Bushing with Arcing Horn	
LV Porcelain Bushing	
Off Circuit Tap Changer (OCTC)	
Earthing Terminals (SS)	
Lugs for lifting Complete Transformer	
Transport Pulling Eyes	
Silicagel Breather	
Oil Conservator	
Rating & Diagram Plate(SS)	
Bi-Direction Roller Wheels	
Oil Filling Plug (at Conservator)	
Oil Drain Valve with Oil sampling extension	
Oil Level Indicator (Conservator Mounted)	
Double Float Buchholz Relay	
Top Oil Temperature Indicator (with contacts)	
Pressure Safety Valve	
Routine test shall be conducted as per IEC 60076 at Manufacturing Testing Lab.	
Tolerances applicable as per IEC 60076	
Warranty 01 years whole unit and minimum 3 years coils unit or manufacturer recommended warranty terms from the date of installation and commissioning.	
Pre-Delivery Inspection and Testing: The vendor may be required to submit the manufacturer's testing report/certificate and provide access to its warehouse, firm/vendor premises, or manufacturing facility for physical inspection. The Procuring Agency may conduct a pre-delivery inspection of a sample prior to shipment and delivery to the CMU Warehouse. The vendor shall facilitate such inspection and provide all necessary access, samples, records, and documentation as required by the Procuring Agency.	

Name of Equipment: 11KV 630A WAPDA Industrial Protection Panel			CODE NUMBER (filled by the bidder)
Tender Specifications			Bidder's Specification
Quantity: 01 No	Manufacturer:		
	Type / Model		
	Country of Origin		
VCB Section:			
VCB 630 Amp TP, 50Hz, Draw Out (Cassette Type); Qty=01			
Rated Voltage Ur : 12Kv Rated Breaking Capacity (BC/Isc): 25Ka Rated Withstand Voltage (Ud): 36Kv Rated Insulation Level (BIL/Up): 95KV Standard : IEC 62271-100 & NTDC P44:2018 Classification : M2, E2, C2; Mechanical Operation Counter Manual Charging Lever for Motor Spring		Qty=01	
Shunt Closing Coil: 93VDC~121VDC		Qty=01	
Shunt Opening Coil: 77VDC~121VDC		Qty=02	
Spring Charging Motor: 240 VAC		Qty=01	
Rack-In/Rack-Out Lever		Qty=01	
Cable Section:			
Current Transformer; 12kV, 25kA, 50Hz BIL: 12/36/95kV		Qty=03	

Ratio : xxx/5A Metering Core : Burden: 10VA, Class: 0.5FS10		
Current Transformer; 12kV, 25kA, 50Hz BIL: 12/36/95kV Ratio : xxx/5A Protection Core : Burden: 15VA, Class: 5P20	Qty=03	
Potential Transformer; 12kV, 25kA, 50Hz BIL : 12/36/95kV Ratio : 11kV/ $\sqrt{3}$ / 110V/ $\sqrt{3}$ Burden: 100VA, Class : 0.5	Qty=03	
LV Section:		
Digital Multi-Function OC, EF & SC Feeder Protection Relay	Qty 01	
Trip Circuit Supervision Relay Supervision of Trip Coil in Open & Close Position Pickup Voltage: 80% of 110VDC, Rated Voltage 60~200VDC	Qty 02	
MV Relay Socket With Plug	Qty 01	
Capacitor Trip Unit, 110VAC To 110VDC	Qty 02	
Energy Meter, Combined kW+MDI & kVARh 3-Element, 3-Phase 4-Wire	Qty 01	
Analogue Amper Meter, 96x96mm, Class:1.0	Qty 01	
Analogue Volt Meter, 96x96mm, Class:1.0	Qty 03	
Volt Selector Switch, 4-Position	Qty 01	
Analogue PF Meter, 96x96mm, Cap 0.5-1-0.5, Class:1.0	Qty 01	
Digital Temperature Meter, With Temp Sensors	Qty 01	
S203-C10, MCB TP 10A Icu=10KA, IEC/EN 60947-2	Qty 02	
S202-C10, MCB DP 10A Icu=10KA, IEC/EN 60947-2	Qty 03	
S2C-H11L Auxiliary Contact 1NO/1NC, Left Side Mounting	Qty 05	
S2C-S/H6R Auxiliary/Signal Contact 1CO, Right Side Mounting	Qty 05	

PR 62J-C10, MCB DP 10A VDC, With 1NO+1NC Contact	Qty 03	
Push Button, 2NO	Qty 02	
Indication LED Light	Qty 06	
NF22E-13 100-250V50/60HZ-DC Contactor Relay, For VDC	Qty 02	
NF22E-13 100-250V50/60HZ-DC Contactor Relay, For VAC	Qty 01	
On-Delay Timer Relay with Base, 100~240VAC	Qty 01	
CT Short Terminal Block 6mm, For Protection Circuit	Lot	
CT Shorted Link 2-Way	Lot	
End Plate 4mm	Lot	
Routine test shall be conducted as per IEC at Manufacturing Testing Lab.		
Warranty 01 years whole unit or manufacturer recommended warranty terms from the date of installation and commissioning.		
Pre-Delivery Inspection and Testing: The vendor may be required to submit the manufacturer's testing report/certificate and provide access to its warehouse, firm/vendor premises, or manufacturing facility for physical inspection. The Procuring Agency may conduct a pre-delivery inspection of a sample prior to shipment and delivery to the CMU Warehouse. The vendor shall facilitate such inspection and provide all necessary access, samples, records, and documentation as required by the Procuring Agency.		

Name of Equipment: Single Core 120 mm 15kv XPLE Copper		CODE NUMBER (filled by the bidder)
Tender Specifications		Bidder's Specification
Quantity: 52 Meters	Manufacturer:	
	Type / Model	
	Country of Origin	
Technical Specifications		
Single core 120 mm 15kv XPLE copper 52 meter, from HT metering panel to protection cable		

Name of Equipment: Earth cable 1-core 25 sqmm bare copper conductor for Protection Panel, Transformer and HT Panel		CODE NUMBER (filled by the bidder)
Tender Specifications		Bidder's Specification
Quantity: 43 Meters	Manufacturer:	
	Type / Model	
	Country of Origin	
Technical Specifications		
Earth cable 1-core 25 sqmm bare copper conductor		

Name of Equipment: Earth connectivity cable		CODE NUMBER (filled by the bidder)
Tender Specifications		Bidder's Specification

Quantity: 45 Meters	Manufacturer:	
	Type / Model	
	Country of Origin	
Technical Specifications		
Earth connectivity cable 1-core 25 sq mm yellow green Insulated		

Name of Equipment: Supply of 11KV Termination Kit Heat Shrink		CODE NUMBER (filled by the bidder)
Tender Specifications		Bidder's Specification
Quantity: 04 Set	Manufacturer:	
	Type / Model	
	Country of Origin	
Technical Specifications		
Supply of 11KV termination Kit heat shrink type for the following equipment. 1. Wapda metering panel. 2. Transformer protection panel. 3. 1000 KVA transformer		

Name of Services: Earth upto ECP	CODE NUMBER (filled by the bidder)
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Installation Services/Work	Bidder's Specification
Quantity: 01 Job	
Installation Of Services/Work	
Earth upto ECP	

Name of Services: Execution of all the jobs from serial 1 to 7 along with the Installation of 1000 KVA transformer & 11KV transformer protection panel, laying & termination of power cables & earth cables.	CODE NUMBER (filled by the bidder)
Installation Services	Bidder's Specification
Quantity: 01 Job	
Installation of Transfer, Protection Panel, Three 30 Feet Boring Earthing with Chemicals, Testing, Commissioning, Reports, other related documents and all related job/services etc during this project, and till to completion and functional at site.	
Execution of all the jobs from serial 1 to 7, including the supply, installation, testing, and commissioning of the 1000 KVA transformer and 11KV transformer protection panel, laying & termination of power cables, construction of three earthing pits 30 feet deep with GI Pipes and earthing chemical; earthing of the transformer, HT Panel, protection panel, and associated cables; submission of electrical drawings to the end user; and provision of one day of onsite operational training to the end user.	

