MAHATRANSCO
Maharashtra State Electricity Transmission Co. Ltd.

स्वातंत्र्याचा अमृत महोत्सव

RIGHT TO INFORMATION

MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO. LTD.

Name of Office : Superintending Engineer, PAC Circle, Karad.	
Office Address : Administrative Building, Ground Floor,Vijaynagar, Post – Supane, Tal – Karad Dist – Satara, Pin No. 415114	
Contact No. : 02164-255211 Fax. No. 02164-255211	
Email ID : se3500@mahatransco.in	
Website : www.mahatransco.in.	
CIN No. : U40109MH2005SGC153646	

Ref No.SE/PAC/C/KRD/T /   No 2 5 = 3 3   Date:- 16 JAN 2024

Budgetary offer
(Through MSETCL webpage)
TO WHOM SO EVER IT MAY CONCERN

Dear Sir,

The budgetary offers through email are invited for supply of **RTU, Ethernet Switch, Router, IEDs as per technical specification** at SE, PAC Circle Office, Karad as per Schedule A. You are requested to quote your lowest rates for tentative quantities as per schedule attached herewith

SCHEDULE 'A

Sr. No.	Particular	Unit	Qty	Ex. rate in Rs	GST in %	Estimated Rate/unit (in Rs.) including all Taxes
1	**Supply of RTU, Ethernet Switch, Router, IEDs as per technical specification at SE, PAC Circle Office, Karad**					
A	Station RTU	EA	06			
B	Station level Ethernet switch	EA	06			
C	Router	EA	06			
D	Intelligent Electronic Device (IEDs)	EA	06			
	Total Amount in Rs					

The above rates are inclusive of all taxes and charges.

Note:-
1) Please note that said budgetary offer is only for estimate purpose & not considered for any bidding & no work order will be issued based on this Enquiry.
2) All interested bidders are requested to submit their best reasonable budgetary offer for above works on Email ID: se3500@mahatransco.in upto 18:00 Hrs on Dtd. 25.01.2024
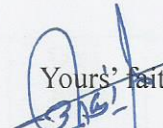
Thanking you,

Yours' faithfully,

Superintending Engineer
PAC Circle, Karad.

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Technical specification for RTU, Ethernet Switch, Router, IEDs

Sr.no.	Item	Type	Specification and Scope
1	Station RTU	Ports	6 Ethernet LAN TCP/IP, 10/100BaseTx (IEC61850 & IEC104) Modbus TCP
			4 serial ports (RS485/RS232-C)
			2 SFP base optical ports
			Separate port for RTU configuration
		Protocol	IEC 61850 Station level IEC 60870-5-101 · IEC 60870-5-104 · Modbus TCP · master/slave Modbus RS485 SNMP · network management NTP / SNTP · clock synchronization
		Inputs/ outputs Expandable	AI= 8 (4-20 mA, 2-3 kV isolation)
			DI= 200, DO= 50 (Capable 80-300 V DC) Expandable upto DI= 300, DO= 70 2-3 kV isolation
		Processor	32 bit processor
		Memory	1 GB memory (512 MB SDRAM, 512 MB SLC Flash)
		Power supply	Universal 60-300VDC
		Hardware compliance	IEC61850 -3 Compliant; MMS Compliance
		Cyber security	NERC/CIP, IEC 62351, IEEE 1686
		IEC-104 addressing	Struct URE format as per MSETCL requirement
		GPRS MODEM/ LTE	BUILT IN
2	Station level Ethernet switch	Switch Type	Managed Layer 2 switch with LED indicators, DIN RAIL type, Industrial
		Ports	8 RJ45 Cu 10/100BaseTX & 4 X1GBPS (SFP)
		Protocol	STP, RSTP, PRP, HSRP
		Standard	IEC61850 -3 Compliant; MMS Compliance
		Power supply	Dual redundant Power Supply: 80-300V DC and AC
3	Router		MPLS Router with LED indicators
		Ports	6 Nos Copper Ports (6 x 10/100/1000 Tx RJ45) 4WAN + Console
		Standard	IEEE 802.3u: Auto negotiation on TP, IEEE 802.3x, 802.1p: flow control and prioritization, IEEE 802.1Q: VLANs, maximum 32 VLANs, IEEE 8021.1d, 802.1w: Spanning Tree, , IEEE 802.1p: Diff Serv, traffic prioritization for routed IP flows/ports; Support IPv4 and IPv6 simultaneously.
		Protocol	All standard Routing protocols such as RIP, IGRP, EGRP,OSPF with latest version, BGP, HSRP etc.Shall support unicast as well as multicast IP traffic
		Power supply	Dual redundant Power Supply: 80-300V DC and AC
			Network Address Translation DES/AES Encryption NERC Compliance

		Firewall	Support IPsec/VPN with 3DES/AES, Encryption -Stateful firewall - RADIUS -Syslog IP firewall features – address/port inspection/filtering -Shall support static Network Address Translation
4	Intelligent Electronic Device(IEDs)	Power supply	48-250V DC (Universal),
		Display	LCD Display for indication of measured values
		Metering Function	Calculation of derived measured values i.e. active and reactive power, power factor and frequency
		Integrated FO interface	Integrated FO interface with IEC61850 Protocol Ed. 1 / Ed. 2
		Digital Inputs & Outputs	Digital Inputs: 24/36 Nos. & Digital Outputs: 11/16 Nos.,
		Parameters	Instantaneous parameters: voltage, current, frequency, power factor, apparent power, reactive power, active power, etc. integrated parameters like Mwh, Mvarh, etc
			Event and Alarm recording time stamp with 1ms resolution,
			4 CT Inputs with continuous current rating 3 times the nominal current rating and short time current rating of 100 times the nominal current for 1 sec.
			4 PT Input rated from 100V to 170V
			Software tool for configuration

Yours' faithfully,

**Superintending Engineer
PAC Circle, Karad.**

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