

MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO. LTD.

Office of From: Office of the Superintending Engineer, EHV (O&M) Circle, MSETCL,
10, Ground Floor, New Admin Building,
Old Saikheda Road, Nasik Road - 422 101.
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Ref No.: - SE/EHV/O&M/Circle NSK/TECH/No. 129

DATE:27.01.2025

To whomsoever it may concern

Sub: Budgetary offer for work of supply, installation, testing, commissioning of Transformer Auxiliary Monitoring system (TAMS) at 132KV Kalwan, 132KV Chandwad, 132KV Rajur & 220KV Bhenda for preparation of estimate.

Ref: 1) MSETCL/CO/Tr.(O&M)/SE_I/EE-II/TE/No.6959 Dtd- 08.10.2024
2) MSETCL/CO/Tr.(O&M)/SE_I/EE-II/TE/No.0596 Dtd- 23.01.2025

Dear Sir,

With ref to the above subject, this office is processing the estimate of subject work and for the same budgetary offer are invited by the undersigned from reputed, experienced & approved vendors of MSETCL for the above said work, till Date 03.02.2025, 18:00 Hrs, as per attached schedule A.

- The budgetary offer rates shall include all charges for T&P, skilled workmen etc.
- The Quantities mentioned in our schedule are tentative & subject to vary.
- The bidder should be approved vendor of MSETCL for TAMS. The product offered by bidder should be verified at Automation Lab MSETCL Airoli. Necessary approval should be attached.
- The bidder should submit IEC 61850 ed. 1 & 2 certificate, IEC 62351 Certificate, IEC 61000-4-2, IEC 62443-4-2, IEC 61000-4-8, Environmental Certificate as per IEC 600068, IEC 600068-2-6 certificate.
- The GST & other taxes should mention in the budgetary offer.
- Budgetary offers received after the due date will not be accepted.

Thanking you.

Sd/-

**Superintending Engineer,
EHV O&M Circle Nasik**

Schedule “A”

Item	Description	Product Details	Quantity
<p>Providing & Fixing of TAMS TAP Changer Controller software with necessary customization as per S/s requirement</p>	<p>This software collects data from various IED installed in the field near T/F and process it as per S/s. requirement and it provides easy to use graphical user interface for substation operating staff. Software should support scalability.</p>	<p>MSETCL approved / Std. make</p>	<p>1 Nos. for Multiple T/F</p>
<p>Providing & Fixing of TAMS TAP Changer Controller cum Transformer Monitoring Unit (TF IED)</p>	<p>This device collects the data from Fan Control Cubicle and On Load Tap Changer Drive Mechanism and applies the necessary interlocks and logic and process the data and forward it to TAMS software installed in the control room. Usually one IED installed per T/F. This IED should be capable of accepting inputs such as 4-20mA, RS485 Comm. And it should work on 220V DC/110V DC whichever available at S/s. And this communicates on 61850/104 protocols.</p>	<p>MSETCL approved / Std. make</p>	<p>1 Nos. for Each T/F</p>
<p>Providing & Fixing of TAMS TAP Changer Controller RTU/PT IED</p>	<p>This device is required for configuration of transformer LV side voltage & current (for AVR & temperature curve purpose). Also, it shall act as a data exchange unit on protocol such as IEC 61850, 104, Modbus. This device shall have minimum 02 ports for each of above protocol.</p>	<p>MSETCL approved / Std. make</p>	<p>1 Nos. for Multiple T/F</p>
<p>Providing & Fixing of TAMS TAP Changer Controller Terminal Board (Yard Cabinet)</p>	<p>This IP 65 rated panel with necessary stand of almost 4 feet height installed near each T/F in the field and grounded using cement in the field. IED and necessary devices installed in this panel. As it occupies one of the important devices i.e. IED/RTU, this should follow all the standards of panel to be installed in harsh environment.</p>	<p>MSETCL approved / Std. make</p>	<p>1 Nos. for Each T/F</p>
<p>Providing & Fixing of TAMS TAP Changer Controller Industrial Grade PC along with Standard Kiosk in the Control Room</p>	<p>Industrial grade PC used as it runs important TAMS software and standard industrial grade PC used for this project as it runs 24X7 and used for monitoring and controlling various parameters of T/F auxiliaries, this should be enclosed in KIOSK as per MSETCL standards OR Industrial Grade furniture for work station PC can be provided.</p>	<p>MSETCL approved / Std. make</p>	<p>1 Nos. for Multiple T/F</p>

Providing & Fixing of 6 core Armoured Fiber Optic Cable	Fiber optic cable drawn from each IED installed in the field to control room accompanied by ring topology to achieve maximum uptime of TAMS. As this runs throughout the cable trench of the substation it is recommended to use armoured fibre optic along with HDPE pipe for safety from rodents throughout the trench length.	MSETCL approved / Std. make	RMT at actual
Providing & Fixing of 12 Core , 1.5 sq mm Copper Cable	Copper Cable for configuration/ wiring of FCC/OLTC with TAMS IED.	MSETCL approved / Std. make	RMT at actual
Providing & Fixing of 4 Core , 1.5 Sq mm Copper Cable	Copper Cable for configuration/ wiring of FCC/OLTC with TAMS IED.	MSETCL approved / Std. make	RMT at actual
Providing & Fixing of FO Joint Box/LIU	As IED gives communication O/P in Ethernet/ FO Patch cords, LIU and convertor to be installed for conversion of Ethernet / FO Patch. Cords to armoured FO in the field and same needs to be reversed in the control room to establish necessary communication. Each T/F will require 1 no. of Joint box.	MSETCL approved / Std. make	1 Nos. for Each T/F
Providing & Fixing of TAMS TAP Changer Controller Managed Ethernet Switch	Managed ethernet switch will be used to build communication infrastructure.	MSETCL approved / Std. make	1 Nos. for Multiple T/F

Sd/-
Superintending Engineer,
EHV O&M Circle Nasik