
 <b>MAHATRA</b> Maharashtra State Electricity Trans	<b>MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO. LTD</b> <b>CIN No. U40109MH2005SGCI53646</b> <b>EHV O&amp;M DIVN-II PUNE-30</b> <b>MSETCL 220kV PARVATI S/STN.,</b> <b>NEAR P.L. DESHPANDE GARDEN, SINHGAD ROAD,</b> <b>PUNE - 411030</b> <b>☎ - PH.NO.020-29910830 E-mail: ee6120@mahatransco.in</b>	
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**EE/EHV/O&M/DN-II/PN/Tech-/ 689**

**Dt: 25.09.2024**

**ENQUIRY**  
**(Through MSETCL webpage)**  
**TO WHOM SO EVER IT MAY CONCERN**

**Dear Sir,**

The budgetary offers through e-mail are hereby invited for the above work as per Schedule `A' mentioned below:-

Sr. No.	Scope of work	UOM	Ex Rate	Extra Taxes	Unit Rate
1	Work of Line performance improvement system for 220kV Urse- Chinchwad line under EHV O&M Division –II,Pune, MSETCL Pune Zone. <b>(Scope of Work as per Schedule ‘A’)</b>	EA			

***Note:- Rate shall be valid for 60 days from the date of submission of offer.***

You are requested to quote your best reasonable rate for the above work. The Term & Conditions are as follows.

**Terms & Conditions:-**

1. The rate should be quoted on firm quotation basis.
2. The rate should be exclusive of all taxes. Taxes should be quoted extra.
3. You are requested to submit your best reasonable budgetary offer as per Schedule ‘A’ for aboveworks on E-mail ID: **ee6120@mahatransco.in** upto **18:00 Hrs on dtd. 02.10.2024.**
4. Following documents should be submitted along with your offer,
  - a. Experience of at least 10 years in offering line performance improvement system commercially as complete bouquet of services to TSOs
  - b. The line performance improvement system should be reliable enough for the output to be integrated with the SCADA of Load Dispatch Centres – Documentary evidencing of at least customers who have integrated the line performance improvement system output with SCADA is essential.
  - c. Repeat orders from at least 5 customers- reference list including customer name, line name/identification and year as documentary evidence to be submitted.
  - d. Bidder shall demonstrate “On-Premises deployment” capability – provide a minimum of 3 successful references; of its system being deployed On-Premises.
  - e. Should have demonstrated experience of installing & maintaining line performance improvement system on commercial basis to at least 20 Customers in more than 5 different countries.
  - f. Bidder shall submit at least 3 customer satisfaction letters from 3 different countries.

5. Please note that said budgetary offer is only for estimate purpose & will not be considered for any bidding & No work order will be issued based on this offer.

Thanking you,

Yours Faithfully,

-Sd-  
S. S. Patil  
**Executive Engineer**  
**EHV (O&M) Dn-II, Pune**

## Schedule 'A'

### **Scope of Work:-**

- The system should be capable of monitoring the OHL for assessing the available transmission Capacity in Real Time (RT).
  - System should comprise of Sensors (Hardware) for actual measurement of relevant line parameters in Real Time & the Software (operating system, forecasting tools etc.)
  - The system provider should have demonstrated experience of having deployed both the Sensors and the software together and should have worked as a total system delivering solution, to complete satisfaction of the utilities, at least for 15 years.
  - The Software should be capable of integrating seamlessly with the EMS / SCADA of the respective load despatch centres.
  - Should support communication protocols (IEC 60870-5-104, Modbus, IEC 61850, TASE2...)
  - The line performance improvement system shall be capable of being deployed on a server 'On-Premises'
  - Sensors will be installed on spans / OHL and will have on-board measuring devices for direct measurement of critical parameters like Sag, Mean conductor temperature, Actual Wind speed impacting the conductor at the respective locations and in real time; the computations of actual capacity shall be based on these real time data measured locally.
  - Sensors / installed Devices should not require any field calibration, either during installation or any time after. There shall be no calibration of devices after they leave the mfg. facility.
  - The field measuring devices / Sensors shall be maintenance free and to this extent shall be self-powered and not be powered by any battery.
  - Accuracy of the measured parameters shall not vary and be the same irrespective of the span heights, shielding (buildings, trees, hills ...) varying weather conditions like Dust storm / Heavy rains / High Wind / snow fall etc.
  - Measured parameters shall refer to CIGRE guidelines (TB299, TB498, TB601). The thermal model shall preferably be IEEE 738-2012. Accuracy must be guaranteed and verifiable in-field.
  - The outdoor installations shall be minimal and not have any structures on the Transmission tower. Outdoor installation to be bare minimal and should avoid any weather stations or fixtures on the tower; to ensure safety of equipment & devices and to deter pilferage.
  - Communication medium for sensors: GSM/GPRS.
  - Voltage level: Should have had sufficient experience by deploying line performance improvement system at voltage levels of 400kv and above.
  - System should be capable of offering highly accurate predictions (P98 scale) of Capacity forecasts for the lines being monitored.
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- Intraday (30Mts.-6Hrs.) – for contingency management and economic dispatch.
  - Day ahead & D2 Forecasts – to facilitate Energy markets, RTM, REDAM etc.
  - Should be capable of offering Transient Forecast or 'Temporary Overloading Capacity' - of the line in short term, to mitigate crisis situations without compromising safety of operations.

-Sd-

S. S. Patil

**Executive Engineer  
EHV (O&M) Dn-II, Pune**