

# MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO.LTD.



#### Office of the Superintending Engineer

Protection, Automation & Communication Circle,

Block No. 12, New Admin Building,

MSETCL, Near Durgamata Mandir, Old Saikheda Road, Jail Road,

Nashik Road - 422 101

Email Id: se5500@mahatransco.in

Ref. No. SE/TCC/NSK/T-12/271

Date 3 1 JUL 2024

**Sub:** - Budgetary Offer for supply of Numerical Distance relay for various substations under EHV PC (O&M) Zone, Nashik for preparation of estimate.

**Ref:** - 1. CE/EHV PC (O&M) Zone/NSK/T-15/No. 445 Dt: 14.03.2023.

Dear Sir,

In connection with the above subject; this office is processing estimate for the subjected work & for same budgetary offer are invited by the undersigned from approved vendors of MSETCL. The offer for relays having GTP as per Annexure "A" should be indicated in Schedule for price provided below & submitted to this office on or before 07.08.2024 18:00Hrs.

- The budgetary offer rates should include charges for T&P, skilled workmen etc.
- The quantities mentioned in schedule are tentative & subject to be varied.
- The GST & other taxes should be mentioned separately in budgetary offer orelse will be considered as inclusive.
- Budgetary offer received after due date will not be accepted.

Thanking you,

Yours faithfully,

Superintending Ingineer (I/C) EHV PAC Circle, MSETCL, Nasik

Copy to: - The Manager (F&A), EHV (O&M) Circle, MSETCL, Nasik



### **Schedule**

	Sr. No.	Particulars	Unit	Quantity	Rate
	1	Supply of Numerical Distance relay	Nos.	1	
ACOC		Taxes if any		West Control of the C	
1 20		Total			

Superintending Engineer (I/C) EHV PAC Circle, MSETCL, Nasik



# MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO.LTD. $\Delta$ NNEXURE – $\Delta$

# GUARANTEED TECHNICAL PARTICULARS (GTP) FOR NUMERICAL DISTANCE PROTECTION RELAYS

Sr.		Desired by Purchaser	Offered by Bidder
1	Manufacturers Name and Country of Manufacture	To be indicated by the bidder	
2	Type/Model details of offered equipment	To be indicated by the bidder	
3	General design	Numerical, fully programmable and Communicable	
4	Type of protocol for communication	Site selectable IEC-61850 Edition 1&2, KEMA/CPRI certificate. (without Protocol Convertor)	
5	Whether Numerical Relay offered is suitable for harsh environment to sustain wide operating temperature range & humidity range, particle & Moisture repellence capability?	Bidder to confirm.	
6	Built-in features available	Distance Protection, SOTF, Auto-Reclose, VT Supply Supervision, Carrier supervision, Power Swing Blocking, Broken Conductor, LBB, UFR/OFR, Rate of Change of Frequency, O/C–E/F Protection, Disturbance Recording, Fault Locator, Events Recording, Self-Diagnosis etc.	
7	Number of measuring element/loops	Not less than six independent & continuous measuring loops	
8	Measuring element/loop Characteristic	Quadrilateral & MHO (site selectable) Required.	
9	Number of zones	Not less than 4	
10	Direction of zones	Programmable for forward/reverse Direction	
1	Zone-I operating time	Instantaneous. Not more than 40ms including trip time	
2	Zone-II operating time	With programmable time delay (0 to 5 sec in steps of 10 ms)	

Sr. No.	Particular	Desired by Purchaser	Offered by Bidder
13	Zone-III operating time	With programmable time delay, but greater than Zone-II timing (0 to 5 sec in steps of 10 ms)	
14	Zone-IV operating time	Fully programmable, independent of others with timer (0 to 5 sec in steps of 10 ms)	
15	Processor capabilities of relay	Minimum 32 bit	
16	Auxiliary DC Voltage	48V to 220V DC	
17	Whether bi-stable Input/ Output are compliant of ENA 48-4 or equivalent standard	Yes (it is required). To be indicated by the bidder	
18	Number of programmable bistable inputs available	Minimum 24 programmable (Settable for 110V / 220V DC)	
19	No. of trip contacts and Bi-stable outputs available	Minimum 24	
20	Number of output LEDs available	Minimum 12 (8 Programmable + 4 fix)	
21	Contact rating	5A continuous & make & carry capacity 30A for 0.2 seconds or better (As per IEC60255-1).	
23	Whether contacts are Programmable?	Yes (it is required)	
24	Whether blocking or unblocking (to trip) feature is programmable?	Yes, should be programmable with time setting for blocked condition	
25	Details of the software employed for remote Parameterization of disturbance recorder and evaluation Purpose	To be indicated by the bidder	
26	Whether LBB feature is available?	Yes (it is required; No. of stages to be indicated)	
27	Whether offered numerical relay is having facility to synchronize its time generator from time synchronization equipment/ substation monitoring system?  Specify inputs/ limitations.	Yes (it is required).  To be indicated by the bidder	

(S. Iyei)
Superintending Engineer (I/C)
EHV PAC Circle, MSETCL, Nasik