

Tender Notice

POWER TRANSMISSION CORPORATION OF UTTARAKHAND LTD.
(A Govt. of Uttarakhand Enterprise)
CHIEF ENGINEER, OPERATION & MAINTENANCE
GARHWAL ZONE, PTCUL
26 - CIVIL LINES, ROORKEE – 247667

E-Tender for “Providing, Installation, Testing and Commissioning of Remote Digital OTI, WTI and Oil Level Indicator on 132/33 KV, 40 MVA Transformer-I. II & III at 132 KV Substation Bhagwanpur” against E-Tender specification No. CE/GZR-05/2026-27.

DOWNLOADED BY: -

M/s / Shri _____

Sr. No.	DESCRIPTION	
1.	Tender No.	CE/GZR-05/2026-27
2.	Name of Work	Providing, Installation, Testing and Commissioning of Remote Digital OTI, WTI and Oil Level Indicator on 132/33 KV, 40 MVA Transformer-I. II & III at 132 KV Substation Bhagwanpur
3.	Completion Time	03 Months subject to the availability of shutdown.
4.	Tender issuing office	Office of Chief Engineer (O&M) Garhwal Zone, Power Transmission Corporation of Uttarakhand Ltd. " 26-Civil Lines, Roorkee-247667
5.	Tender Fees	Rs. 1,000.00+ 180.00 (GST@18%) =Rs. 1180.00 (Non refundable)
6.	EMD/Bid Security	Rs. 50,000.00
7.	Last date of Submission of Bid	25.05.2026
8.	Last Date and Time of Opening of Bid	26.05.2026
9.	Address & Place of Submission of Bid supporting documents.	Chief Engineer (O&M), Garhwal Zone, PTCUL, 26-Civil Lines Roorkee-247667.
10.	Type of Tender	Open Tender
11.	Contact & Telephone No. of the Tender issuing office	Phone No.:- 01332-272256
12.	E-mail address of the tender issuing office	ce_oandmg@ptcul.org

(CHIEF ENGINEER (O&M))
GARHWAL ZONE,
ROORKEE

Pre, Technical and Financial Qualifying Requirement/Criteria

Scope of Work:-

- 1.- Providing, Installation, Testing and Commissioning of Remote Digital OTI, WTI and Oil Level Indicator on 132/33 KV, 40 MVA Transformer-I, II & III at 132 KV Substation Bhagwanpur
- 2.- Execution of all minor associated works as per site requirement for proper execution of work.

PRE QUALIFYING CRITERIA:-

The tenders/bidders must have to visit site of work & have to submit site visit certificate issued by concerned Executive Engineer(O&M)/Superintending Engineer (O&M) along with technical bid, failing which the bid of the tender may be rejected summarily.

TECHNICAL CRITERIA

1. The Tenderers/bidders should have adequate experience of having successfully completed "Providing, Installation, Testing and Commissioning of OTI/WTI/Oil Level Indicator on 20 MVA or above capacity Transformer or any other electrical equipment at 66 KV or above voltage Substation during last 07 years of any State Transmission Utility (STU), Central Transmission Utility (CTU), Government Power Utility, PSU in which applications are invited should be either of the following:
 - a. Three similar completed works costing not less than the amount equal to Rs. 5.80 Lakh.
Or
 - b. Two similar completed works costing not less than the amount equal to Rs. 7.25 Lakh.
Or
 - c. One similar completed work costing not less than the amount equal to Rs. 11.60 Lakh .
2. The Tenderer should furnish the details of their experience and statement of past works in the form "Details of orders executed during last five years" annexed. Photostat copies of order and performance reports of these items from various State Electricity Boards/other Govt. Departments also be given.
3. Experience certificate should be issued by an officer not below the rank of Executive Engineer mentioning nature of work, Agreement No., Amount of work, Scheduled time of completion of work and Actual time of completion etc.
4. Electrical "A" Class license Certificate valid for Uttarakhand and validity of the registration should be furnished along with the technical bid.

FINANCIAL CRITERIA

1. **Minimum Average Annual Turnover (MAAT):-** The minimum annual average turnover of the tenderer for best three years (36 months) out of last five financial years should not be less than **Rs. 25.66 Lakh.**
2. For Financial Qualification Criteria, Joint Venture Partners shall jointly/collectively meet 100% of Financial Qualification Requirement (FQR) of the respective Tender.
Note: The Balance sheet and all other financial documents attested/certified by CAs to substantiate fulfillment of FQR should be within UDIN failing which tender will be summarily rejected without any further reference.
3. A copy of PAN of the firm and all its partners.
4. A copy of GST Registration.
5. A copy of EPF Registration
6. Solvency certificate from Bank (20% of bid value) should be submitted

[Handwritten signature]
EG

[Handwritten signature]
S.E. (O&M)
Roorkee

TECHNICAL SPECIFICATIONS

FOR

WINDING TEMPERATURE INDICATOR (WTI), OIL TEMPERATURE INDICATOR (OTI) AND MAGNETIC OIL LEVEL GAUGE (MOLG) WITH REMOTE DIGITAL DISPLAY FOR POWER TRANSFORMERS

1.0 SCOPE

This specification covers the design, engineering, manufacture, testing and supply of **Winding Temperature Indicator (WTI)**, **Oil Temperature Indicator (OTI)** and **Magnetic Oil Level Gauge (MOLG)** equipped with local analogue indication and **remote digital display** units suitable for oil-immersed power transformers.

The devices shall be suitable for outdoor installation in tropical climate and shall provide reliable local indication along with remote analog (4-20 mA) signals.

2.0 APPLICABLE STANDARDS

The equipment shall comply with the latest editions (including amendments) of the following standards:

- IEC 60076-1, IEC 60076-2, IEC 60076-7, IEC 60076-22-1
- IS 2026 (all relevant parts)
- IS 3639 – Fittings and Accessories for Power Transformers
- DIN 42569 (for MOLG flange where applicable)

3.0 GENERAL TECHNICAL REQUIREMENTS

- All local units shall be weatherproof, outdoor type with minimum **IP65** degree of protection.
- Remote digital displays shall be suitable for panel mounting in marshalling box / control room.
- All metallic parts: Aluminum die-cast or SS 304 with polyester powder coating (minimum 80 microns thickness).
- Capillary tubes: Armored, UV-resistant, stainless steel braided, length 12 m to 15 m as required.
- All alarm/trip contacts: Potential-free micro-switches, independently adjustable.
- Maximum temperature pointer (resettable type) shall be provided on local dials.

[Handwritten signature]
GCT

[Handwritten signature]
SELO&M
Rooke

4.0 WINDING TEMPERATURE INDICATOR (WTI) WITH REMOTE DIGITAL DISPLAY

4.1 Technical Parameters

Sl. No.	Parameter	Specification
1	Temperature Range	0 to 150°C
2	Dial Size	150 mm diameter (minimum)
3	Accuracy (Local Dial)	±1.5% of Full Scale Deflection (FSD) per IEC 60076-22-1
4	Accuracy (Remote Signal)	±1% of FSD
5	Number of Contacts	4 nos. (Alarm, Trip, Cooler control, etc.)
6	Contact Rating	15A @ 250V AC and 5A @ 110V DC
7	CT Input	1A or 5A secondary (as per transformer design)
8	Capillary Length	12 m to 15 m (armored) with inbuilt RTD sensor.
9	Remote Output	4–20 mA DC (2 or 4 channels)
10	Remote Digital Display	4-digit 7-segment LED, Aux. supply 110V DC,
11	Degree of Protection (Local Unit)	IP65
12	Case Material	Aluminum die-cast, powder coated

5.0 OIL TEMPERATURE INDICATOR (OTI) WITH REMOTE DIGITAL DISPLAY

5.1 Technical Parameters

Sl. No.	Parameter	Specification
1	Temperature Range	0 to 150°C
2	Dial Size	150 mm diameter (minimum)
3	Accuracy (Local Dial)	±1.5% of Full Scale Deflection (FSD) per IEC 60076-22-1
4	Accuracy (Remote Signal)	±1% of FSD
5	Number of Contacts	4 nos. (Alarm, Trip, Cooler control, etc.)
6	Contact Rating	15A @ 250V AC and 5A @ 110V DC
7	Capillary Length	12 m to 15 m (armored) with inbuilt RTD sensor.
8	Remote Output	4–20 mA DC (2 or 4 channels)
9	Remote Digital Display	4-digit 7-segment LED, Aux. supply 110V DC
10	Degree of Protection (Local Unit)	IP65
11	Case Material	Aluminum die-cast, powder coated



5m
HFB
SELOXM
Rookey

6.0 MAGNETIC OIL LEVEL GAUGE (MOLG) WITH REMOTE DIGITAL OIL LEVEL DISPLAY

6.1 Type

Magnetic coupling type (float operated, leak-proof design) with local dial indication and remote transmitter.

6.2 Technical Parameters

Sl. No.	Parameter	Specification
2	Indication	Continuous level with clear Min, Normal & Max markings.
3	Angular Sweep	300°
4	Float Material	Oil-compatible Polyurethane / Rohacell
5	Float Arm Material	SS 304, length as per conservator diameter
6	Mounting Flange	As per DIN 42569 or equivalent
11	Remote Output	4–20 mA
12	Remote Digital Display	4-digit 7-segment LED, Aux. supply 110V DC
13	Degree of Protection	IP65 (local gauge)

8.0 TESTS

Routine Tests (on each unit):

- Calibration test
- Insulation resistance test
- Contact operation & setting test

Type Tests (on prototype or similar type-tested model):

- IP65 verification
- Switch differential & rating test

9.0 MARKING, PACKING & DOCUMENTATION

- Stainless steel nameplate on each unit with all details.
- Robust packing suitable for transportation.
- Documents: GA drawings, O&M manuals, test certificates, gradient graph (WTI), float arm drawing (MOLG), wiring diagrams.

10.0 QUALITY ASSURANCE

- Manufacturer shall have valid **ISO 9001** certification.

5m
H. K. P. S.
SFZ (O&M)
Rooker

Guaranteed Technical Particulars for Oil Temperature Indicator (OTI)

Sl. No.	Parameter	Requirement
1	Type	Liquid expansion (sealed capillary)
2	Temperature Range	0 to 150°C
3	Dial Size	150 mm diameter (minimum)
4	Accuracy (Local Dial)	±1.5% of FSD (IEC 60076-22-1)
5	Accuracy (Remote Signal)	±1% of FSD
6	Number of Contacts	4
7	Contact Rating	15A, 250VAC and 5A @110VDC
8	Capillary Length	12 m to 15 m (armoured, UV resistant, SS braided)
9	Remote Analog Output	4–20 mA DC (minimum 2 channels)
10	Remote Digital Display	4-digit 7-segment LED, Resolution 0.1°C, Aux. Supply 110 VDC
11	Degree of Protection (Local Unit)	IP65
12	Case Material	Aluminium die-cast, polyester powder coated


EG


SECOB
Roorkee

Guaranteed Technical Particulars for Winding Temperature Indicator (WTI)

Sl. No.	Parameter	Requirement
1	Type	Liquid expansion (sealed capillary)
2	Temperature Range	0 to 150°C
3	Dial Size	150 mm diameter (minimum)
4	Accuracy (Local Dial)	±1.5% of FSD (IEC 60076-22-1)
5	Accuracy (Remote Signal)	±1% of FSD
6	Number of Contacts	4
7	Contact Rating	15A, 250VAC and 5A @110VDC
8	CT Input	1A or 5A secondary (to be specified by purchaser)
9	Capillary Length	12 m to 15 m (armoured, UV resistant, SS braided)
10	Remote Analog Output	4–20 mA DC (minimum 2 channels)
11	Remote Digital Display	4-digit 7-segment LED, Resolution 0.1°C, Aux. Supply 110 VDC
12	Degree of Protection (Local Unit)	IP65
13	Case Material	Aluminium die-cast, polyester powder coated

[Handwritten signature]
E4

[Handwritten signature]
SE (02/2011)
Roonkee

Guaranteed Technical Particulars for Magnetic Oil level gauge (MOLG)

Sl. No.	Parameter	Requirement
1	Type	Magnetic coupling type (float operated, leak-proof)
2	Indication	Continuous level with clear Min / Normal / Max markings
3	Angular Sweep	300°
4	Float Material	Oil compatible Polyurethane / Rohacell
5	Float Arm Material & Length	SS 304, length as per conservator diameter
6	Mounting Flange	As per DIN 42569 or equivalent
7	Remote Analog Output	4–20 mA
8	Remote Digital Display	4-digit 7-segment LED, Aux. supply 110 VDC
9	Degree of Protection (Local Gauge)	IP65

[Handwritten signature]
E4

[Handwritten signature]
SE (SXM)
Rookce