GIK INSTITUTE OF ENGINEERING SCIENCES AND TECHNOLOGY

REQUEST FOR QUOTATION FOR INSTALLATION OF NEW EARTH ELECTRODES & REHABILITATION OF EXISTING EARTHING SYSTEM (GIKI/PD/RFQ-225/2026-2027)

Sealed quotations, in Pak rupees on D.D.P basis, are invited from registered firms/contractors, authorized dealers, distributor, having relevant experience in electrical earthing systems for the **Installation of New Earth Electrodes and Rehabilitation of the Existing Earthing System**

S#	Item Description	Annexures
1.	Installation of New Earth Electrodes and Rehabilitation of Existing Earthing System	Detail attached at Annexure- A

Interested parties are requested to keep following points into consideration before submitting their quotations.

- Your quotations must be delivered to the office of the undersigned on or before **27 November 2026, Friday at 3:00 PM.** Any quotation received later than the scheduled date and time will be rejected and returned unopened.
- All quotations must be valid for a period of Thirty (30) days from the closing date of the Request for Quotation.
- The quotation shall be completed and signed by an authorized representative of the supplier.
- The quoted price should include all applicable Govt taxes.
- Delivery will be made to GIK Institute, Topi, Swabi. **The delivery Timeline must be clearly indicated in the Quotation.**
- Payment will be made within 2-3 weeks after acceptance of the items subject to deduction of taxes as per law.
- In the case of any arithmetical discrepancy between the unit rate and the total amount quoted, then the unit rate shall prevail both for the evaluation of quotations and for the subsequent purchase order.
- The GIK Institute reserves the right to reduce or increase the quantity, accept or reject any quotation as per rules.
- The vendor is strictly prohibited from changing the BOQ. Any substitution, if unavoidable due to non-availability, shall be limited to an equivalent item fully compliant with the demanded specifications and shall require prior written approval of the Procuring Agency. No deviation shall be accepted without such approval.
- The vendor must clearly mention the brand and model being offered. Quotations containing copy-pasted specifications without clear identification of the brand/model offered may lead to disqualification.
- Institute reserves the right to increase or decrease the quantity of the item.
- **Mention Account details in Quotation.**
- **Mention RFQ number & Opening date on the envelope.**
- **The supplier must mention their NTN & GST number on the quotation.**
- **For any query contact** saif@giki.edu.pk Ph: 0938-281026 Ext. 2340.

Assistant Director Procurement, GIK Institute, Topi, Swabi (KP)

Ph: 0938-281026 Ext. 2444 Email: Osama.zahid@giki.edu.pk

ANNEXURE-A

S#	Item Description	Qty
1.	**Two New Chemical Earth Electrodes:** two dedicated electrodes for the SEM (Scanning Electron Microscope) connected in parallel with a target resistance of approximately 0.25Ω. Copper strip 3x6= 18 ft, Earth chemical imported, Bore 20 ft, Copper Rope 70mm 30 ft. Manhole ETP: 2 bores set less than 0.5 home. The Installation should include proper testing & Verification. 1) Select electrode locations after a site survey, keeping **at least 15 ft (about 4.5 m)** clearance from the solar earthing pits, from each other (or as justified by the vendor's design), and from the existing SEM (Scanning Electron Microscope) and departmental electrodes. 2) Carry out any required soil resistivity measurement and submit a short design note showing how the 0.25 Ω target will be achieved (electrode type, length/diameter, number of backfill/chemical bags, and any enhancement measures). 3) Supply and lay appropriately sized low-resistance copper conductor/strip/cable from each electrode to a common test/inspection chamber and onward to the SEM earth terminal, as per the SEM pre-installation requirements. 4) Provide a concrete/PVC inspection chamber with a removable cover and a test link for each electrode, allowing isolation and independent measurement. 5) Provide a bolted/exothermic-welded, corrosion-protected connection at all joints, with all underground joints sealed. 6) Carry out all excavation, backfilling, civil restoration and removal of debris, restoring the site to its original condition. 7) Verify the achieved resistance by testing (see Section 4) and verify the SEM earth bonding and continuity.	02
2	**Rehabilitation of existing earth electrodes:** through appropriate chemical treatment, other necessary improvements, to bring their resistance within the required limits (≤1.0Ω) for sensitive laboratory equipment. 1) Inspect and test the **four (04) existing departmental earth electrodes** and record their as-found resistance values. 2) Rehabilitate each electrode through appropriate chemical treatment and other necessary improvements (for example: replacement of corroded copper conductors/lugs, cleaning and re-making of connections, addition or replacement of backfill compound, improved watering/maintenance arrangement, inspection chamber repair) to bring the resistance to ≤ **1.0 Ω** for sensitive laboratory equipment. 3) Where an electrode cannot reach ≤ 1.0 Ω by treatment alone, the vendor must clearly state this in the quotation or inspection report and propose a priced alternative (e.g., extension or supplementary electrode). 4) Record the as-left resistance values and submit a before-and-after report.	04
Note: A site visit is mandatory for all interested firms/vendors prior to submission of their quotations. (Mon-Fri: 9:00 AM to 5:00PM)		

Site Investigation (Recommended)

The vendor shall assess the interaction between the SEM earthing and the nearby solar earthing pits and, if required, recommend corrective measures (such as relocating or re-spacing electrodes, or bonding arrangements permitted by applicable standards and safety requirements). Any such

recommendation must be submitted as a separate priced option and must not compromise the safety of the solar system.

Technical Requirements

#	Item	Requirement
1	Electrode type	Maintenance-free chemical earth electrode, copper-bonded/copper or equivalent corrosion-resistant material
2	Service life	Typically around **25 years**, subject to manufacturer specification; the manufacturer's life/warranty statement must be provided
3	Target resistance (SEM)	Approximately **0.25 Ω** combined (two electrodes in parallel)
4	Target resistance (existing electrodes)	**≤ 1.0 Ω** each after rehabilitation
5	Spacing	About **15 ft (4.5 m)** minimum from the solar earth pits and between independent electrodes (vendor to justify any deviation)
6	Conductors and connections	Copper, adequately sized for the fault current; corrosion-protected joints; exothermic or approved bolted clamps
7	Inspection chamber	One per electrode, with cover, test link and identification label
8	Compliance	Applicable standards (e.g. IEEE 142 / IEC 62305 / local electrical codes) and the SEM manufacturer's pre-installation requirements (Annexure A)
9	Chemical/backfill compound	Non-toxic, non-corrosive, environmentally safe; datasheet and MSDS to be provided
10	Materials	New, genuine, with manufacturer certificates/datasheets