



COMSATS University Islamabad, Lahore Campus
Defence Road, Off Raiwind Road, Lahore

Tender No. CUI-LHR-TN-13-20-1415

Case # 3105

Single Stage Two Envelop Procedure

Title of Tender: **Power Distribution Trainer for Department of Electrical & Computer Engineering**

TERMS AND CONDITIONS

1. All pages of bidding documents are mandatory to be signed / stamped, meaning thereby bidder agrees to our terms & conditions mentioned herein, failing which the bid may be rejected.
2. Any addition, deletion or modification of any clause of the procurement terms & conditions/ BoQs of CUI Lahore Campus by any vendor will not be acceptable and may lead to rejection of the bid.
3. Only registered Suppliers, who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.
4. The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS University Islamabad, Lahore Campus.
5. Documents along with Pay Order / Demand Draft amounting to **Rs. 1000/-** as a tender document fee (Non-Refundable) shall be submitted in favor of COMSATS University Islamabad, Lahore Campus to the address given below. No bid will be accepted without tender documents' fee.
6. Part / Advance payments is not allowed.
7. **The exact completion/installation/ delivery time from the date of the purchase / work order will be 60 days. The handing over / completion time for this contract is of critical importance.**
8. Your bid proposal should be inclusive of freight and all other taxes and to be delivered at COMSATS University Islamabad (CUI), Lahore Campus's premises.
9. After opening of bids, CUI-Lahore Campus will examine the bids for completeness as per tender document.
10. In case more than one bidder have quoted same rates for an item; the bidder securing more items (in terms of cost) will be awarded the specific item.
11. Purchase order (s) will be awarded to the lowest or technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs.
12. The bid should be submitted in a sealed envelope up to **October 07, 2020** on or before **1400hrs** and will be opened on the same date **at 1430hrs** in the presence of available bidders. In case of any holiday is announced by the Govt. OR any unforeseeable circumstances that prevent the tender from being opened on the date announced (Force Major Situation), the tenders will be opened on the very next working day. Timing will remain as mentioned in the tender notice.
13. COMSATS University Islamabad, Lahore Campus, will follow the PPRA rule of **single stage two envelope procedure;**

Signature & Stamp of Bidder

- i. The bid shall comprise a single package containing **two separate envelopes**. Each envelope shall contain separately the **financial proposal** and the **technical proposal**;
 - ii. The envelopes shall be marked as **“FINANCIAL PROPOSAL”** and **“TECHNICAL PROPOSAL”** in bold and legible letters to avoid confusion;
 - iii. Initially, only the envelope marked **“TECHNICAL PROPOSAL”** shall be opened;
 - iv. The envelope marked as **“FINANCIAL PROPOSAL”** shall be retained in the custody of the procuring agency without being opened;
 - v. The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
 - vi. During the technical evaluation no **amendments** in the technical proposal shall be permitted;
 - vii. The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
 - viii. After the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders;
 - ix. and
 - x. The bid found to be the lowest evaluated bid shall be accepted.
14. The envelope should be marked as under;
- Secretary, Purchase Committee**
COMSATS University Islamabad, Lahore Campus
 Defence Road, Off Raiwind Road, Lahore.
 Tel: 042-111-001-007, Ext: 875
15. The envelope shall also bear the word **“CONFIDENTIAL”** and following identification quotation of **“Power Distribution Trainer for Department of Electrical & Computer Engineering”**.
16. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.
17. **If the vendor fails to deliver the goods / services to COMSATS University Islamabad (CUI), Lahore Campus within the given deadline, any of the following can be opted by CUI Lahore campus on the recommendation of the end user and approval of the authority;**
- a. An extension in the delivery period may be granted in case a valid reason/justification with necessary documentary evidence is provided by the vendor supporting the reason for delay.
 - b. A penalty upto 10% of the invoice value may be charged.
 - c. Purchase order may be cancelled along with confiscation of earnest money if the vendor fails to deliver the goods / services after the initial or extended delivery time, as the case may be.
18. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The vendor would be required to supply as per requirements mentioned in our BoQs, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money.

- 19. Deduction of Income Tax and any other tax will be deducted at source according to Government prevailing rules.
- 20. Payment will be made on submission of Invoice in the name of “COMSATS University Islamabad (CUI), Lahore Campus” with a copy of delivery challan (s) after the complete order has been supplied, inspected and accepted which includes delivery / installation, and COMSATS acceptance / inspection thereof.
- 21. All prices should be valid for at least **120 days**. Withdrawal or any modification of the original offer within the validity period shall entitle CUI-Lahore Campus to forfeit the earnest money in favor of the CUI-Lahore Campus and / or put a ban on such vendor participation in tenders / works.
- 22. It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.
- 23. In case of any dispute or grievance, the matter shall be addressed as per PPRA rules.
- 24. The CUI-Lahore Campus reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
- 25. **05% of the total value of the Invoice will be retained as security by COMSATS University Islamabad (CUI), Lahore Campus, and will be released after warranty period i.e. (One Year) which will be counted from the date of Installation / Completion of work / Supply.**
- 26. **The bidder is required to furnish in form of Bank deposit/ CDR / Pay order equivalent to 2% of the total Bid price as Earnest Money crossed in favor of “COMSATS University Islamabad, Lahore Campus”.**
- 27. **CUI Lahore Campus** reserves the rights to reject the bid if;
 - i. Received without earnest money
 - ii. Received later than the date and time fixed for tender submission
 - iii. The tender is unsigned/ unstamped
 - iv. The offer is ambiguous
 - v. The offer is conditional
 - vi. The offer is from a firm, which is black listed by any Govt. Office.
 - vii. The offer is received by telephone/telex/fax/telegram.
 - viii. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
- 28. The bidder should furnish a certificate as worded below in token of acceptance of all the terms and conditions of the tender otherwise the tender will not be considered under any circumstances.
- 29. The undersigned affirm that the terms and conditions as contained in this document have been read and accepted and that in the event of selection of my/our rate the agreement in the prescribed form will be entered into:
 - **Company / Vendor Name:**.....
 - **Postal Address:**.....
 - **Tel. / Mobile:**.....**Email:**.....
 - **NTN#:**.....**GST#:**.....
 - **Signature:**
 - **Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.**

BoQs of Power Distribution Trainer for Department of Electrical & Computer Engineering

Technical Portion (Please mention the quoted model/ brand in technical portion with no mention of price otherwise the bid will be rejected)

| No change in the BoQs (Specs & Qty.) of CUI-Lahore Campus, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CUI-Lahore Campus BoQ may lead to rejection of bid (fully or partially). | | | Qty | Please mention the quoted Model / Brand with meeting the all specifications mentioned in BoQs |
|--|--|----|------|---|
| Sr. # | Item Name & Specifications | | | |
| 01 | <p><u>Power Distribution Trainer (With Trolley and drawer)</u> <u>With Supply & Load</u></p> <ul style="list-style-type: none"> • 3 phase Power Distribution trainer. • 0-440/220V, 50Hz <p><u>Features</u></p> <ul style="list-style-type: none"> • Training system allows for a complete study of Power Distribution Line. • This distribution line trainer investigates single phase and three phase distribution lines. • Distribution line under variable RLC load, as well as with inserted faults. • Double busbar system model • Distribution transformer • PFI capacitor bank • PFI controller • Energy analyzer • KWh meter analog • KWh meter digital • 3 phase distribution with phase loss • Residential distribution method (3phase and 1phase) • Variable supply • Peterson coil (Multi tapping) • Harmonics 31 (Voltage & Current) • Real time Data Logging with all Power Measurement parameter. • RLC Load Connection with different values. • Energy Analyzer with a compact energy log. • Four-quadrant measurement (consumption and generation) also for the measurement of V, I, KW, KWh, Pf, Hours, fundamental frequency, voltages harmonics, current harmonics. | 05 | Nos. | |

- **Three phase transformers**
- **Multi tapping transformer**
- **Analog 3phase disc type Power Meter used for power distribution**
- **Digital 3phase meter used for power distribution**
- **Wheel Trolley with drawer**

Protection includes

- Earth fault relay
- Under frequency relay
- over frequency relay
- Under Voltage relay
- over Voltage relay
- Under Current relay
- over Current relay
- Synchronous check relay
- Phase loss unbalance relay
- Phase sequence relay
- Reverse power relay
- Electronic over current relay (EOCR)
- Current transformers
- Contactors

Resistive Load Set

- Maximum power in three phase connection = 2KVA
- Rated Voltage = 440/220V
- With protection

Inductive Load Set

- Three phase inductive loads 800mA to 1Amp
- Three or more stage inductive load
- Rated Voltage = 440/220V
- With protection

Capacitive Load Set

- Three phase loads
- Three or more stage capacitive load
- Rated Voltage = 440/220V
- With protection

Heating Load Set

- Inductive Heating load = 500VA to 1KVA
- Rated Voltage = 440/220V
- With protection

Lighting Load

- Incandescent bulb
- Florescent bulb
- LED Bulb

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|--|--|--|--|
| <p><u>Motor Load</u></p> <ul style="list-style-type: none"> • 1HP induction motor <p><u>3 phase variable AC power supply</u></p> <ul style="list-style-type: none"> • 3 phase VRIAC • 3 phase cables • 0-380Volts • Each phase 2KVA with protection scheme • Connectors • Circuit breaker • Power distribution board <p><u>Insolation Mat</u></p> <ul style="list-style-type: none"> • Electrical Safety & Protection for Low, Medium Voltage • Length = 72Inch • Width = 18Inch • Thickness = 6mm <p>Trainer should include all necessary meters, connectors, and protection equipment i.e. breakers, fuses, screwdriver, and L-key set etc.</p> <p>The device coupled with an activity manual along with experiment list for 14 power distribution labs. Experiment list should be included with the quote</p> <p>This trainer should include all needs for students to complete several hands-on activities.</p> <p>The equipment should be complete with all aspects including Installation & commissioning with one-year warranty starting from date of installation.</p> <p>Venders should have prior experience in delivering similar equipment in HEC recognized universities for BS Electrical Engineering program.</p> | | | |
|--|--|--|--|

Bid Evaluation Criteria

All bids shall be evaluated in accordance with the following evaluation criteria and other terms & conditions set forth in this bidding document.

- a. **The bids shall be evaluated to strictly ensure that the quoted brand/ model meet all the BoQ/ specification requirements given in the tender document for each item.**
- b. **In addition to the BoQ requirements, vendors must meet the vendor qualification criteria /company profile requirements (if any), as set forth in this tender document.**

- c. Supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the technical committee. In case of any clash is found between the quoted model and the supported literature may lead to rejection of bid.
- d. Venders should have prior experience in delivering similar equipment in HEC recognized universities for BS Electrical Engineering program.

Financial Portion (Price and Brand/Model to be mention only in Financial Proposal in a separate sealed envelope) Strictly on our BoQs Form.

Vendors are required to provide both unit and total price of each item and calculations must be made carefully to avoid mistakes. However, in case, total price does not match with the unit price and quantity due to calculation error or typo error, any of the following can be opted

1. The bid may be rejected on the reason of ambiguity (OR)
2. Unit price will be considered as final and total price of the respective item will be calculated by multiplying it with the quantity required. Sub-totals and grand total will also be corrected accordingly.

No change in the BoQs (Specs & Qty.) of CUI-Lahore Campus, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CUI-Lahore Campus BoQ may lead to rejection of bid (fully or partially).

Prices should be quoted inclusive of all applicable taxes

| Sr. # | Item Name & Specifications | Qty | Quoted Model / Brand / Make | Unit Price (Rs) | Total Price (Rs) |
|-------|---|-----|-----------------------------|-----------------|------------------|
| 01 | <p><u>Power Distribution Trainer (With Trolley and drawer) With Supply & Load</u></p> <ul style="list-style-type: none"> • 3 phase Power Distribution trainer. • 0-440/220V, 50Hz <p><u>Features</u></p> <ul style="list-style-type: none"> • Training system allows for a complete study of Power Distribution Line. • This distribution line trainer investigates single phase and three phase distribution lines. • Distribution line under variable RLC load, as well as with inserted faults. • Double busbar system model • Distribution transformer • PFI capacitor bank • PFI controller • Energy analyzer • KWh meter analog • KWh meter digital • 3 phase distribution with phase loss • Residential distribution method (3phase and 1phase) • Variable supply | 5 | Nos. | | |

Signature & Stamp of Bidder

- Peterson coil (Multi tapping)
- Harmonics 31 (Voltage & Current)
- Real time Data Logging with all Power Measurement parameter.
- RLC Load Connection with different values.
- Energy Analyzer with a compact energy log.
- Four-quadrant measurement (consumption and generation) also for the measurement of V, I, KW, KWh, Pf, Hours, fundamental frequency, voltages harmonics, current harmonics.
- **Three phase transformers**
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- **Wheel Trolley with drawer**

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- Earth fault relay
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Resistive Load Set

- Maximum power in three phase connection = 2KVA
- Rated Voltage = 440/220V
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Inductive Load Set

- Three phase inductive loads 800mA to 1Amp
- Three or more stage inductive load
- Rated Voltage = 440/220V
- With protection

| | | | | | |
|---|--|--|--|--|--|
| <p><u>Capacitive Load Set</u></p> <ul style="list-style-type: none"> • Three phase loads • Three or more stage capacitive load • Rated Voltage = 440/220V • With protection <p><u>Heating Load Set</u></p> <ul style="list-style-type: none"> • Inductive Heating load = 500VA to 1KVA • Rated Voltage = 440/220V • With protection <p><u>Lighting Load</u></p> <ul style="list-style-type: none"> • Incandescent bulb • Florescent bulb • LED Bulb <p><u>Motor Load</u></p> <ul style="list-style-type: none"> • 1HP induction motor <p><u>3 phase variable AC power supply</u></p> <ul style="list-style-type: none"> • 3 phase VRIAC • 3 phase cables • 0-380Volts • Each phase 2KVA with protection scheme • Connectors • Circuit breaker • Power distribution board <p><u>Insolation Mat</u></p> <ul style="list-style-type: none"> • Electrical Safety & Protection for Low, Medium Voltage • Length = 72Inch • Width = 18Inch • Thickness = 6mm <p>Trainer should include all necessary meters, connectors, and protection equipment i.e. breakers, fuses, screwdriver, and L-key set etc.</p> <p>The device coupled with an activity manual along with experiment list for 14 power distribution labs. Experiment list should be included with the quote</p> <p>This trainer should include all needs for students to complete several hands-on activities.</p> <p>The equipment should be complete with all aspects including Installation & commissioning</p> | | | | | |
|---|--|--|--|--|--|

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|---|--|--|--|--|--|
| <p>with one-year warranty starting from date of installation.</p> <p>Venders should have prior experience in delivering similar equipment in HEC recognized universities for BS Electrical Engineering program.</p> | | | | | |
|---|--|--|--|--|--|

Special Terms and conditions;

- i. Please submit the technical and financial bid (rates) on our prescribed BoQs Form and clearly mention the quoted model / brands, with complete terms and conditions signed, stamped with both bids, otherwise your bid (s) may be rejected.
- ii. Vendor will be responsible for Onsite Installation & Commissioning of the delivered equipment's.
- iii. Purchase / work order (s) will be awarded on **Item Wise Basis.**
- iv. Kindly attach the **Tender fee with Technical Bid and Bid money / CDR with Financial Bid.**
- v. **Multiple rates of an item may also lead to the rejection of bid / item.**