

TENDER DOCUMENT FOR

Supplies of the following equipment are required in the Department of Electrical Engineering, Indian Institute of Technology (BHU), Varanasi-221005

(a) “Feeder Protection Over Current Relay with accessories for protection and control objective”

(b) “Phasor data concentrator along with accessories for time synchronization”

(NOTICE INVITING TENDER)

On behalf of the Director, IIT (BHU) Varanasi, **online tender from** manufactures (or their ‘authorized’ dealers by submitting letters/certificates, in original, from the manufacturers that they have been authorized to quote in response to this NIT) of the following items are invited:

Sl. No.	Tender no.	Specifications & quantity of the item	Earnest Money Deposit (EMD)
1.	<p>Ref: IIT (BHU)/EE/PROJECT/21-22/ 04 Dated 14.07.2021</p> <p>Bid Submission End Date: 04.08.2021, up to 16.00 Hrs.</p>	<p>A. “Feeder Protection Over Current Relay with accessories for protection and control objective” 1 complete Unit Approx. Cost:12.62 Lakhs</p> <p>B. Phasor data concentrator along with accessories for time synchronization 1 complete Unit Approx. Cost:6.01 Lakhs</p> <p>TECHNICAL BID: (MUST be submitted online in .pdf format)</p> <ol style="list-style-type: none"> 1. Scanned Copy of Proof of Tender Fees and Bid Securing Declaration Form (Annexure ‘C’) as EMD. 2. Scanned Copy of Technical supporting documents in support of all claims made at Annexure-1. 3. Scanned Copy of Technical Compliance statement as per Annexure-2, Bidder information form. 4. Scanned Copy of Organization Declaration Sheet, Compliance sheets for Essential Pre Bid Criteria. 5. List of organizations/clients where the same products have been supplied. (Annexure-3). 6. Scanned Copy of Tender Acceptance Letter, Checklist given in Section-5, Tender Form etc. 7. Scanned Copy of Brochure of quoted product and other documents, if any. <p>PRICE BID: (MUST be submitted online in given BOQ only and scanned copy should be attached in pdf format.)</p> <ol style="list-style-type: none"> 1. BOQ for Supply of “Transmission Line Protection Relay with accessories for protection and control objective” and “Phasor data concentrator along with accessories for time synchronization” in the Department of Electrical Engineering, IIT (BHU), Varanasi in .xls format. 2. Duly filled and signed Tender form (Price Bid). 3. Duly filled and signed BOQ in PDF Format. 	<p>Bid Securing Declaration Form (Annexure ‘C’)</p>

The Tender Documents for the given items will be on One Bid System consisting of Technical Bid and Price Bid. The Tender Documents will be submitted item-wise in online. Any firm may bid for any number of items but each offer must be item-wise in two bid cover enclosing Technical Bid and Price Bid.

No manual bids will be accepted. All bids, both Technical and Financial should be submitted on the E-procurement portal.

The Tender Document along with detailed specifications, terms and conditions may be downloaded **from the institute website (www.iitbhu.ac.in) under Tenders (<https://www.iitbhu.ac.in/tenders>) and(<https://www.eprocure.gov.in/cppp>) by the interested supplier.**

1. Tender Processing Fee: Rs. 5900/- (Five Thousand Nine Hundred only, Non-refundable and inclusive of GST).

Last date and time for receipt of Tender Processing fee (if in form of DD or by NEFT/RTGS): **28.07.2021(up to 16:00 Hrs.)**

The Tender Processing Fee of Rs. 5900/- (Inclusive of GST and Non-Refundable) for this Tender to be paid in the form of Bank Draft in favour of Registrar, IIT (BHU) or by RTGS/NEFT payable at Varanasi before the Bid Opening Date and time. The hard copy of DD for tender processing fee should be reached on or before the Bid Opening Date and Time at the address:

**Dr. Soumya Ranjan Mohanty (PI),
Electrical Engineering Department,
Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005, UP.**

GST at concessional rate will be applicable as per GST Notification No. 45/2017- CENTRAL TAX (RATE) & 47/2017- INTEGRATED TAX (RATE) Dated 14-11-2017, @ 5%. Tender fees can be paid through RTGS/NEFT) as per the following details:

Name of Account - Registrar, IIT(BHU)

Name of the Bank - State Bank of India

Name of Branch - IT, BHU, Varanasi

Account No. - 32778803937

IFSC Code - SBIN0011445

The proof of payment must be enclosed with Technical Bid.

Note: Both the transactions are to be done separately.

This Tender Document contains the following:

SECTION 1: Instruction For Online Bid Submission	: Page No.5-7
SECTION 2: Instructions to Bidders	: Page No.7-12
SECTION 3: General conditions of contract (GCC)	: Page No.13-19
SECTION 4: Special conditions of contract (SCC)	: Page No.20
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SECTION 6: DECLARATION	: Page No.22
SECTION 7: TENDER FORM(Techno commercial un-priced Bid)	: Page No.23-24
TENDER FORM (Priced Bid)	: Page No.25-26
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PBG format	: Page No.28
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Technical compliance	: Page No.38-45(Annexure 2)
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Bid Submission	: Page No.47(Annexure B)
Bid Securing Declaration form	: Page No. 48 (Annexure C)

The Tender should be addressed to **Dr. Soumya Ranjan Mohanty, Electrical Engineering Department, Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005, UP.**, and should be submitted on or before the date and time of Bid opening date and time as mentioned in critical date sheet on e-portal.

The Institute shall not be responsible for any delay in submitting Bids by online. The Institute reserves the right to accept or reject any bid, cancel the Tender without assigning any reason thereof. No correspondence in this regard will be entertained. Earnest Money shall be forfeited in case it is found at any stage that information/particulars regarding supply of tendered item (s) is false.

Dr. Soumya Ranjan Mohanty (Principal Investigator)
Electrical Engineering Department
IIT (BHU)

TENDER DOCUMENT FOR:

- 1. “Feeder Protection Over Current Relay with accessories for protection and control objective”**
- 2. Phasor data concentrator along with accessories for time synchronization.**

CRITICAL DATE SHEET

Published Date	14-07-2021 (05:00 PM)
Bid Document Download Start Date	14-07-2021 (05:00 PM)
Clarification Start Date	14-07-2021 (05:00 PM)
Clarification End Date	28-07-20201 (05:00 PM)
Bid Submission Start Date	14-07-2021 (05:00 PM)
Bid Document Download End Date	04-08-2021 (04:00 PM)
Bid Submission End Date	04-08-2021 (04:00 PM)
Bid Opening Date	05-08-2021 (04:00 PM)
Address For Communication	Dr. Soumya Ranjan Mohanty (PI), Electrical Engineering Department, Indian Institute of Technology (Banaras Hindu University), Varanasi – 221 005, U.P., INDIA E-mail: soumya.eee@iitbhu.ac.in

TENDER DOCUMENT FOR:

- 1. “Feeder Protection Over Current Relay with accessories for protection and control objective”.**
- 2. Phasor data concentrator along with accessories for time synchronization.**

SECTION 1: INSTRUCTION FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at: <http://eprocure.gov.in/eprocure/app>.

1. Registration

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL: http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link “Click here to Enroll”. Enrolment on the CPP Portal is free of charge.
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / n-Code / e-Mudra etc.), with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

2. Searching for Tender Documents

- There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective „My Tenders“ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

Preparation of Bids

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.

2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents – including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

4. Submission of Bids

1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder has to select the payment option as “on-line” to pay the tender fee as applicable and enter details of the instrument. Whenever, Tender fees are sought, bidders need to pay the tender fee separately on-line through RTGS.
4. A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the white colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
5. The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

5. Assistance to Bidders

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787

6. General Instructions to the Bidders

1. The tenders will be received online through portal <http://eprocure.gov.in/eprocure/app> . In the Technical Bids, the bidders are required to upload all the documents in **.Pdf format**.
2. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link "Information about DSC".
3. Tenderer are advised to follow the instructions provided in the Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at <https://eprocure.gov.in/eprocure/app>.

SECTION 2: INSTRUCTIONS TO BIDDERS

A. Introduction

1.Scope of Work

IIT - BHU invites online bids from the manufacturers/suppliers on behalf of The Director, IIT-BHU for supply of Equipment as per the technical specifications given in Annexure- 1 and as per terms and conditions of this tender document. Supplier should assure complete commissioning of the system including installation and application training for

(a) **“Feeder Protection Over Current Relay with accessories for protection and control objective”.**

(b) **Phasor data concentrator along with accessories for time synchronization.**

2. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its bid, and "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

3. Cost of Bidding Documents

The cost of bidding documents (**Rs. 5900/-**) **should** be submitted in the form of Bank Draft or by NEFT/RTGS as per the details mentioned above. Further, the proof of payment must be uploaded with Technical Bid.

4. Content of Bidding Documents

4.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to Invitation of Bids, the bidding documents include:

- (a) Instructions for Online Bid Submission
- (b) Instruction to Bidders (ITB);
- (c) General Conditions of Contract (GCC);
- (d) Special Conditions of Contract (SCC)
- (e) Schedule of requirements;
- (f) Tender form (technical bid).
- (g) Tender form (financial bid).

4.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents.

Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

5. Amendment of Bidding Documents

5.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

5.2 All prospective bidders who have received the bidding documents will be notified of the amendment in writing, which will be binding on them.

5.3 In order to allow prospective bidders reasonable time within which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

6. Language of Bid

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English language.

7. Documents Comprising the Bid

7.1 Techno commercial un-priced bid and priced Bids:

The bids are to be submitted in two parts i.e. Techno commercial un-priced bid and priced Bids.

(a) Techno commercial un-priced bid along with Earnest Money Deposit (submitted in the form of Bank Draft in favour of **Registrar, IIT (BHU)** payable at **Varanasi** or By NEFT/RTGS) as shown in invitation to bids shall be submitted through CPP Portal. If the proof of payment of EMD is not received along with the technical bid, such bid will not be considered. The samples (if required) of all the items shown in the schedule of requirements of each tender should also accompany the techno commercial un-priced bid in a separate sealed envelope.

(b) Priced bid.

7.2 Techno commercial un-priced bid: The Techno commercial un-priced bid prepared by the bidder shall be provided in the following Model Response format:

Model Response format

(a) Standing of each Bidder Manufacturer/Dealer and past experience in supply of the material (certificates to be enclosed), proof of manufacturing Unit/Dealership along with all the documents required for proving the credentials regarding the fulfilment of essential pre-bid criteria.

(b) List of other Govt. Departments, Public Sector units and Central Autonomous Bodies for which the bidder is supplying material or having the same type of contracts and a certificate regarding the satisfactory performance of the contract (In the Annexure-3 format).

(c) Copy of the audited balance sheet of the vendor for the previous financial year indicating the turnover in supply of the relevant materials/service.

(d) Details of Permanent Account Number and latest income tax clearance certificate.

(e) Details of GST No. along with a copy of certificate to be attached.

(f) Submission of samples if required, for all items indicated in the schedule of requirements. The make of items proposed to be supplied should be indicated in the format of the schedule of requirements and submitted along with the techno commercial un-priced bid without indicating the pricing components.

(g) Willingness to execute all orders which are placed to meet emergency requirement on priority basis. The Bidder shall note that standards for workmanship, material and equipment, and references to brand names designated by the Purchaser in the schedule of requirements are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in his bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

7.3 Price Bid

The price bid shall comprise the techno commercial bid along with the price component indicating the Unit prices for each and every item indicated in the schedule of requirements (Annexure 1).

(a) The prices quoted must be net per unit as shown in the Schedule and must include all charges for delivery at the designated stores i.e. FOR IIT (BHU), Varanasi

(b) The rate must be stated for each item separately both in words and figures. If there is a discrepancy between the price quoted in word and figures the higher price quoted will be treated as final.

(c) The price quoted by the tenderer should be exclusive of Custom Duty (in case of Import) and other taxes as applicable from time to time. The Institute will provide the valid exemption certificate as and when needed.

(d) Quoted prices should be firm and inclusive of freight and forwarding charges, handling charges, loading and unloading charges, and insurance charges etc.

(e) The prices once accepted by the Institute shall remain valid till the successful execution of the order and till supplies is fully effected and accepted or **12 months** from the date of acceptance of tender whichever is later. The Institute shall not entertain any increase in the rates during the period. However, in the event there is a reduction or increase in Government levy/duties during the period of execution of the order, the rates shall be suitably adjusted with effect from the date notifying the said reduction or increase in the Government levy/excise duty.

8. Bid Prices

8.1 The Bidder shall indicate on the Schedule of requirements (BOQ), the unit prices of the goods it proposes to supply under the Contract and enclose it with the priced bid.

8.2 Prices indicated on the Price Schedule shall be entered separately in the following manner:

(i) The prices quoted must be net per unit as shown in the schedule of requirements and must include all charges for delivery at the designated stores.

(ii) Any Indian duties, GST and other taxes which will be payable on the goods if this Contract is awarded;

8.3 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account.

8.4 The price should be quoted without custom duty, since IIT (BHU) is exempted from payment of custom duty being the premier Academic Institution. Necessary certificate will be issued on demand.

9. Bid Currencies

Prices shall be quoted in Indian Rupees only.

10. Period of Validity of Bids

10.1 Bids shall remain valid for **180** days after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

10.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. A Bidder granting the request will not be required nor permitted to modify the bid.

10.3 Bid evaluation will be based on the bid prices without taking into consideration the above modifications.

D. Submission of Bids

11. The tender has to be submitted ONLINE before the due date. The offers received after the due date and time will not be considered. **No manual bids will be considered.**

12. Deadline for Submission of Bids

12.1 Bids must be received by the Purchaser ONLINE not later than the time and date specified in the Invitation for Bids.

12.2 The Purchaser may, at his discretion, extend this deadline for submission of bids by amending the bid documents in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

13. Late/Delayed Bids

The offers received after the due date and time will not be considered.

14. Modifications and Withdrawal of Bids

14.1 The Bidder may modify or withdraw its bid after the ONLINE bid's submission, as per the provision of CPP Portal.

14.2 No bid may be modified subsequent to the deadline for submission of bids. No documents will be accepted in support of essential pre-bid criteria after the last date of submission of bids.

14.3 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its EMD.

E. Bid Opening and Evaluation of Bids

15. Opening of Techno commercial un-priced Bids

The purchaser will open all techno commercial un-priced bids in the first instance.

16. Clarification of Bids

16.1 During evaluation of the bids, the purchaser may, at its discretion, ask the Bidder for clarification of its bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

16.2 No Bidder shall contact the purchaser on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Institute it should be done in writing.

16.3 Any effort by a Bidder to influence the purchaser in its decisions on bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidder's bid.

17. Evaluation of Techno commercial un-priced Bid

17.1 Prior to the detailed technical evaluation, the purchaser will determine the substantial responsiveness of each bid. A substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviations and meets all the essential pre-bid criteria. If any bidder does not meet the essential pre-bid criteria as laid down in the Instruction to Bidders, then his bid will be summarily rejected. No documents will be accepted in support of essential pre-bid criteria after the last date of submission of bids.

17.2 The purchaser will reject a bid determined as not substantially responsive.

17.3 The bidders may be called for discussion and may be allowed to modify their technical bids to suit the

organization's requirement. The idea is to arrive at a threshold level of acceptability above which all the bidders shall be treated on par. Those whose technical specifications do not reach the threshold level of acceptability shall be rejected as technically unsuitable. The price bids of the bidders who finally emerge as technically acceptable shall be opened, evaluated and the contract awarded to the lowest evaluated bidder.

17.4 The bidders short-listed by the purchaser based on meeting the essential pre-bid criteria and detailed evaluation regarding satisfying the technical criteria laid down in this tender document may be called for detailed discussions with a team selected for the purpose, at a specified date, time and venue, if needed.

18. Opening of Priced Bids

18.1 The Purchaser will open the Priced Bids of only those bidders who meet the essential pre-bid criteria and whose techno commercial un-priced bids have been found to be substantially responsive.

18.2 The priced Bids of the technically qualified bidders shall be opened by the tender committee.

19. Evaluation and Comparison of priced Bids

19.1 Arithmetical errors will be rectified on the following basis: If there is a discrepancy between words and figures, whichever is the higher of the two shall be taken as bid price. If the Vendor does not accept the correction of errors, its bid will be rejected

19.2 Bidders shall state their bid price for the payment schedule outlined in the Clause 14 of General Conditions of Contract. Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The purchaser may consider the alternative payment schedule offered by the selected Bidder but it may not be binding on the purchaser.

19.3 The purchaser, at its option may ask some more bidders to match the rates of the lowest bidder for creating parallel suppliers.

19.4 The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: **Indian Rupees**

19.5 The source of exchange rate shall be: **Reserve Bank of India.**

19.6 The date for the exchange rate (if applicable) shall be: **Date of opening of Financial Bids.**

20. Purchasers right to accept any bid and to reject any bid or all bids

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

21. Award Criteria

Subject to Clause 19, the purchaser will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the best evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

22. Notification of Award

Prior to the expiration of the period validity, the purchaser will notify the successful Bidder in writing by letter or by fax, to be confirmed in writing by speed post or hand delivered letter, that its bid has been accepted.

23. Factors Affecting the Award of Supply

23.1 The bidder should have its own Contract support facilities. The support facilities should be fully owned and managed by the bidder.

23.2 Conformity with the Request for Bid/Tender required and conditions.

23.3 The assessment based on the response to Model Response Outline.

23.4 The assessment of the capability of the bidder to meet the terms and conditions.

23.5 The bidders must have executed same orders, for which the bidder is quoting, as indicated in clause 1 for Govt./Semi-Govt./Autonomous Organizations.

23.6 The cost and the discount offered, if any.

24. Fall clause

24.1 The price quoted by the supplier should not be higher than the maximum retail price, if any, for the stores and the same shall not be higher than the price usually charged by the supplier for stores of the same nature, class or description to any other purchaser.

24.2 The price charged for the stores supplied under the contract by the supplier shall in no event exceed the lowest price at which the supplier sells the stores of identical description to any other person during the period till performance of all supply orders placed during the currency of the contract is completed. If at any time during the period the supplier reduces the sale price of such stores or sells such stores to any other person including his dealers at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the purchaser and the price payable under the contract for these items of stores supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

24.3 If it is discovered that the supplier has contravened the above conditions, then without prejudice to any other action which might be taken against him, it shall be lawful for the purchaser to (a) revise the price at any stage so as to bring it in conformity with sub-clause(i) above, or (b) to terminate the contract and purchase the items of stores at the risk and cost of the supplier and in that event the provisions of Clause 28 of General Conditions of Contract shall, as far as possible, be applicable or recover the loss.

SECTION 3: GENERAL CONDITIONS OF CONTRACT (GCC)

1. Definitions

In this Contract, the following terms shall be interpreted as indicated:

- (a) "The order" means the agreement entered into between the Purchaser and the Supplier including all the attachments and appendices and all documents incorporated as per notification of award.
- (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations; "The Goods" means all the items, which the Supplier is required to supply to the Purchaser under the Contract;
- (c) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services training and other obligations of the Supplier covered under the Contract;
- (d) "GCC" means the General Conditions of Contract contained in this section.
- (e) "The Purchaser" means the organization purchasing the Goods i.e. Department of Electrical Engineering, IIT (BHU), VARANASI.
- (f) "The Purchaser's country" is India.
- (g) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
- (h) "Day" means calendar day.

2. Application

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3. Standards

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned Institution.

4. Use of Contract Documents and Information

4.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

4.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information except for purposes of performing the Contract.

4.3 Any document, other than the Contract itself, shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

5. Patent Rights

The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6. Submission of the bids.

6.1 All bids complete in all respect must reach the purchaser within the last date and time of receipt of bid. No extension shall be allowed for any reason what so ever. Late tenders/delayed bids and tenders received without earnest money etc. shall be rejected.

6.2 Tender documents are available for sale with the purchaser. Interested bidders may purchase the tender documents on payment of the cost there of. The purchaser shall not be liable for either non-receipt of the tender document or for delay in receipt of tender document.

7. Inspections and Tests

7.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser.

7.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to the Purchaser.

7.3 Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.

7.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

7.5 Nothing in GCC Clause 7 shall in any way release the Supplier from any warranty or other obligations under this Contract.

8. Consequences of rejection

If in the event the stores are rejected by the purchaser at the destination and the supplier fails to make satisfactory supplies within the stipulated period of delivery, the purchaser will be at liberty to:

- (a) Allow the supplier to resubmit the stores in replacement of those rejected, within a specified time without any extra cost to the purchaser or
- (b) Reject the material, which shall be final and binding on the contractor.
- (c) Procure the rejected materials of comparable quality from the open market/Govt. stores and the supplier shall be liable to pay the difference in price over the RC prices or get the amount adjusted from the outstanding bills of the supplier, if any or EMD.

9. Packing

9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

10.1 The Supplier shall make delivery of the Goods within 60 days from the placement of purchase order in pursuance of the notification of award. The purchase order would be placed after assessing the requirements on quarterly basis. However, the supplier shall also arrange to execute all orders on priority basis which would be placed to meet any emergent requirements.

10.2 In case the purchaser decides to conclude parallel rate contracts, then the requirements would be split on different firms on equitable basis as per the discretion of the purchaser.

10.3 The delivery of Stores shall be affected at the premises of the Institute free of all delivery charges and within the stipulated time and as may be elucidated in the confirmed order, accompanied by a delivery challan. No extension of time for delivery of Stores shall normally be accorded.

Time and date of delivery – the essence of the contract: The time for and the date of delivery of the stores stipulated shall be deemed to be of the essence of the contract and delivery must be completed not later than the date(s) specified.

11. Insurance

The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. The insurance shall be obtained by the suppliers in an amount equal to 110% of the value of the goods from “warehouse to warehouse” (final destinations) on “all risks” basis including war risks and strikes.

12. Transportation

Where the Supplier is required under the Contract to transport the Goods within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the contract Price.

13. Warranty

13.1 The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in India.

13.2 Minimum Ten year or as per term and condition given in Annexure I

13.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.

13.4 Upon receipt of such notice, the Supplier shall with all reasonable speed, repair or replace the defective Goods or parts thereof, without any extra cost to the Purchaser.

13.5 If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

14. Payment

14.1 Payment will be made 100 % on successful installation and submission of PBG after satisfactory installation and submission of PBG@3% of order value valid for period of 60 days beyond all warranty obligations.

14.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed and by documents, submitted pursuant to GCC Clause10 and upon fulfilment of other obligations stipulated in the contract.

15. Prices

Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in his bid.

16. Change Orders

16.1 The Purchaser may at any time, by written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:

- (a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) The method of shipping or packing;
- (c) The place of delivery; and/or
- (d) The services to be provided by the Supplier.

16.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

17. Contract Amendments

Subject to GCC Clause 16, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

18. Assignment

The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

19. Subcontracts

The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

20. Delays in the Supplier's Performance

20.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser as per GCC clause 10.

20.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

20.3 Except as provided under GCC Clause 23, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCC Clause 21, unless an extension of time is agreed upon pursuant to GCC Clause 20.2 without the application of liquidated damages.

21. Penalty

Subject to GCC Clause 23, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 1% per week and the maximum deduction is 10% of the contract price of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 22.

22. Termination for Default

22.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

(a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase order, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 20; or

(b) If the Supplier fails to perform any other obligation(s) under the Contract: or

(c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

‘For the purpose of this Clause:

“Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

“Fraudulent practice: a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;”

22.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 22.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

23. Force Majeure

23.1 Notwithstanding the provisions of GCC Clauses 20 & 21, the Supplier shall not be liable for imposition of liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

23.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

23.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

24. Termination for Insolvency

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

25. Termination for Convenience

25.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

25.2 The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices.

26. Resolution of Disputes

26.1 The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

26.2 If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms as specified below. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and national or international arbitration.

26.3 In case of Dispute or difference arising between the Purchaser and a supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996.

27. Governing Language

The contract shall be written in English language. Subject to GCC Clause 28, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

28. Applicable Law

28.1 The contract shall be governed by the Law of Contract for the time being in force.

28.2 Irrespective of the place of delivery, the place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued.

28.3 Jurisdiction of Courts: The courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of this contract.

28.4 One month notice will be given by either party for termination of Contract during the tenure of Contract for breach of Clause or otherwise.

29. Taxes and Duties

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.

30. Performance Security:

(i) Successful bidder have to furnish **03 %** of the order value as a performance security in the shape of Bank Guarantee/ Fixed Deposit Receipt in favour of the **Registrar, Indian Institute of Technology (BHU)** for a period of 60 days beyond the end of all warranty obligations or as the case may be.

(ii) Earnest Money Deposit, if deposited, will be refunded to the successful bidder on receipt of Performance Security.

31. The Institute Reserves The Right To:

- i. Increase or decrease the quantity of the item(s) as per requirement.
- ii. Reject the quotation in absence of not furnishing the documentary evidence in respect of GST and Income Tax clearance certificates together with the performance of supplies in various branches/institutions.
- iii. Reject the quotation in the event of non-furnishing the authentic documentary evidence in respect of Testing reports / Performance report of the concerned Govt. Organization / Institutions about the products being manufactured and marketed. The performance test of the product can be conducted at Institute level also for which charge will have to be borne by the suppliers.
- iv. Reject the supplies already made, if not found up to the mark. Thorough checking may be adopted to test the correctness of the supply. In such an event further action may call to conform or discard the supply.
- v. To reject any addition/alteration in respect of local dealerships intimated by the Principals after consideration of the case by the committee appointed by the Institute for the purpose.
- vi. The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:
 - a. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase order, or within any extension thereof granted by the Purchaser.
 - b. If the Supplier fails to perform any other obligation(s) under the Contract.
 - c. If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

‘For the purpose of this Clause:

“Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

“Fraudulent practice: a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition”. To reject any or all the offers without assigning any reasons thereof.

All disputes are subject to “*Varanasi Jurisdiction*” only.

The decisions of the Institute in all respect shall be final and binding on all. Kindly note that we attach great significance to the list of the organizations of repute where a firm is on rate contract, therefore please enclose certified photocopies of the rate contract.

Please ensure that your offer is complete in all respect as no further clarifications shall be sought from you and reaches us within the last date mentioned above. **The Institute shall not be responsible for any postal delay / loss in transit etc.**

Please mention our reference number and due date on the sealed envelope, otherwise your quotation may not be entertained.

A checklist (list documents to be attached) with proper signature, seal and date should be enclosed with tender document for verification; otherwise the proposal will not be entertained.

SECTION 4: SPECIAL CONDITIONS OF CONTRACT

1. The bidder must have executed same nature of works in the last 3 years in any IITs/NITs/Govt. Office/PSU/University/Autonomous Body with order value of at least Rs. 10 lakhs each.

I. User List: Provide users for last 2 years with contact person name, address, phone, and email IDs.

II. The Tender should be enclosed with proper certifications like **Authorization Certificate and Proprietary Certificate in case of Proprietary items.**

III. Pre-installation site preparation/inspection requirements to be indicated and specified along with the bid.

IV. Warranty period to be clearly mentioned and should begin from the date of installation.

V. The firm must quote item wise separately. L-1 will be assessed on overall price basis.

NOTE: THE BID OF THOSE BIDDERS WHO FAILS TO COMPLY THE ABOVE ESSENTIAL CRITERIA WILL NOT BE CONSIDERED FOR TECHNICAL EVALUATION.

2. Documents Comprising the Bid

The tender/Bid shall be submitted online in two parts, viz., Technical Bid and Commercial Bid.

I. Technical Bid

The following documents are to be scanned and uploaded as part of the Technical Bid as per the tender document:

- (a) Scanned copy of Tender Forms (Techno Commercial Un-Priced Bid), Declaration, Bidder's Information Form, and Tender Acceptance Letter;
- (b) Scanned copy of proof for submission of Tender Document Fee/ Earnest Money Deposit etc.;
- (c) Scanned copy of quoted product brochure
- (d) Scanned copy of
 - (i) Documentary evidence that the Goods and Related Services to be supplied by the Bidder are of eligible origin and
 - (ii) Conform to the Bidding Documents,
 - (iii) Any other document required as per the tender;
- (e) Scanned copy of Technical Compliance Sheet (Annexure 2)

II. Commercial Bid

The commercial bid comprises of:

- (i) Scanned copy of Tender Form (Price Bid)
- (ii) Price bid in the form of **BOQ.xls**.
- (iii) Scanned copy of signed price bid in pdf format.

The Price bid format is provided as BOQ.xls along with this Tender Document at <http://eprocure.gov.in/eprocure/app.Bidders> are advised to download this BOQ.xls and quote their offer/rates in the prescribed column. Bidders can quote Basic Price in INR or other CURRENCY available in given BOQ (for other than INR) but it is mandatory to quote taxes/levies in INR only, in the prescribed column and upload the same in the commercial bid.

In addition to the above requirements, bids submitted by a Joint Venture, shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement, there to.

The Bidder shall furnish in the Tender Forms information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

sd/-
Dr. Soumya Ranjan Mohanty (PI)
Department of Electrical Engineering
IIT (BHU)

SECTION 5 : CHECKLIST FOR BID/TENDER UPLOADING

(The following check-list must be filled in and uploaded with the bid documents)

Sl. No.	Particulars Techno Commercial Unprized Bid (Cover 1)	Yes/No
1.	Have you uploaded the techno commercial unprized bid form duly filled in appropriately?	
2.	Have you uploaded a copy of the last three financial years (starting from the year 2017-18) audited balance sheet and P & L Account of your firm.	
3.	Have you uploaded the details of the PAN, copy of GST registration certificate and OEM authorization letter specifically for this bid?	
4.	Have you executed the same nature of work in last 3 years with order value as mentioned in essential pre-bid criteria and uploaded the copies of relevant work orders and satisfactory installation certificates.	
5.	EMD and Tender Processing Fee: Have you submitted DD/transferred online EMD and Tender Processing Fee asked for separately and uploaded their proof of submission.	
6.	Have you uploaded the schedule of requirement indicating the make offered without indicating the pricing components along with the techno commercial unprized bid?	
7.	Have you uploaded the bids both techno commercial unprized and priced bid separately for each tender?	
8.	Have you enclosed the statement of deviations from financial terms and conditions, if any?	
9.	Have you submitted the Technical Compliance Sheet?	
10.	Have you attached Manufacturer's Authorization certificate for this Tender?	
11.	Have you attached the Declaration on the letter pad of Bidder?	
12.	Have you attached the signed Tender acceptance letter?	
Price Bid (Cover 2)		
1.	Have you signed and uploaded the priced bid form?	
2.	Have you uploaded the schedule of requirements duly priced i.e. BOQ and its pdf version?	

SECTION 6

DECLARATION

(To be uploaded on the letter head of the firm submitting the bid)

1. I, ----- Son /Daughter of Shri-----
----- Proprietor/ Partner/ CEO /MD/ Director/
Authorized Signatory of M/s. ----- am competent to sign
this declaration and execute this tender document.
2. I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.
3. The information/ documents furnished along with the above application are true and authentic to the best of my knowledge and belief.
4. I/ we/ am are well aware of the fact that furnishing of any false information/ fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.
5. Each page of the tender document and papers submitted by my Company is authenticated, and I take full responsibility for the entire documents uploaded.
6. This is certified that our organization has been authorized (Copy uploaded) by the OEM to participate in Tender. We further certify that our organization meets all the conditions of essential eligibility criteria and technical specifications laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.
7. The prices quoted in the price bids are subsidized due to academic discount given to IIT (BHU), Varanasi.
8. We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/Govt. Department/Public Sector Undertaking in the last three years.

Signature of the Authorized Person

Date: -----

Full Name -----

Place: -----

Company Address with Seal

SECTION 7

TENDER FORM

(Techno commercial un-priced Bid)

(On the letter head of the firm submitting the bid)

Tender No.

To

Dr. Soumya Ranjan Mohanty (PI)
Department of Electrical Engineering,
Indian Institute of Technology (Banaras Hindu University)
Varanasi – 221005, U.P

Dear Sir,

1. I/We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders;
2. I/We meet the eligibility requirements and have no conflict of interest;
3. I/We have not been suspended nor declared ineligible in India;
4. I/We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: *[insert a brief description of the Goods and Related Services]*;
5. I/We offer to supply the items as listed in the schedule to this tender hereto/portion thereof as you may specify in the acceptance of Tender at the price given in the said Schedule and agree to hold this offer open for a period of 90 days from the date of opening of the tender.
6. I/we shall be bound by a communication of acceptance issued by you.
7. I/We have understood the Instruction to bidders and Conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.
8. **A proof of payment of Rs..... (Rupees..... only)** as Earnest Money in the aforementioned account of Registrar, IIT (BHU) has been uploaded.
9. The following have been uploaded to form part of this tender.
 - (a) Schedule of requirements, quoting the make only duly signed and stamped. (without indicating price)
 - (b) Scanned copy of PAN Card
 - (c) Copy of last three financial audited balance sheet and P&L account.
 - (d) Copy of Valid GST registration certificate.
 - (e) Copy of same relevant major purchase within last 3 years with order type and value as mentioned in essential pre-bid criteria.
 - (f) Copy of authorization letter from OEM in Case of authorized dealer only.
 - (g) Statement of deviations from financial terms & conditions, if any.
 - (h) Any other enclosure. (Please give details)

10. We undertake to execute all orders which have been placed to meet emergent requirements on priority basis.

11. Certified that the bidder is:

(a) A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor,

Or

(b) A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

Or

(c) A company and the person signing the document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariable be duly attested by the person authorized to sign the bid document).

12. We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof shall constitute a binding contract between us.

13. If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;

14. We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative bids submitted;

15. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption

Name of the Bidder*

Name of the person duly authorized to sign the Bid on behalf of the Bidder**

Title of the person signing the Bid

Signature of the person named above

Date signed day of

* In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

** Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules.

Yours faithfully,

(Signature of bidder)

Dated this day of _____

Address:

Telephone No. : _____

FAX _____

E-mail _____

Company seal

TENDER FORM

(Priced Bid)

(On the letter head of the firm submitting the bid document)

To,

Dr. Soumya Ranjan Mohanty (PI)
Department of Electrical Engineering,
Indian Institute of Technology (Banaras Hindu University)
Varanasi-221005, U.P.

Ref: Tender No.....Dated:

Sir,

Having examined the bidding documents and having submitted the techno commercial unpriced bid for the same, we, the undersigned, hereby submit the priced bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

1. We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of requirement.
2. We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.
3. The prices quoted are inclusive of all charges net F.O.R IIT (BHU) Varanasi. We enclose herewith the complete Price Bid as required by you. This includes:
 - a. Price Schedule (Bill of Quantity-BOQ) in .pdf format and .xls format
 - b. Statement of deviations from financial terms and conditions, if any.
4. We agree to abide by our offer for a period of 90 days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.
5. We have carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviations are only those mentioned in the statement of deviations from financial terms and conditions.
6. We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: **[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]**

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate “none.”)

7. We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and

8. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Certified that the bidder is:

A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of sole proprietor,

Or

A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney,

Or

A company and the person signing the bid document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document.)

We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

Dated this day of _____
Signature of Bidder _____
Details of enclosures _____
Full Address: _____

Telephone No. _____
Mobile No. : _____
Fax No. : _____
E-mail: _____

Company Seal

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date:

To

Dr. Soumya Ranjan Mohanty (PI)
Department of Electrical Engineering,
Indian Institute of Technology (Banaras Hindu University)
Varanasi-221005, U.P.

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No. _____

Name of Tender/ Work: -

Dear Sir,

I/We have downloaded/ **obtained the tender document(s) for the above mentioned 'Tender/Work' from** the web site(s) namely:

as per your advertisement, given in the above-mentioned website(s).

1. I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like section(s), schedules(s) etc.), which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/ clauses contained therein.
2. The corrigendum(s) issued from time to time by your department/ organizations too have also been taken into consideration, while submitting this acceptance letter.
3. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/ corrigendum(s) in its totality/entirety.
4. In case any provisions of this tender are found violated, then your department/organization shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours faithfully,

(Signature of the Bidder, with Official Seal)

FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred)

(TO BE ESTABLISHED THROUGH ANY OF THE NATIONALISED COMMERCIAL BANKS (WHETHER SITUATED AT VARANASI OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT VARANASI)

To,
The Registrar,
Indian Institute of Technology (BHU),
Varanasi-221005

LETTER OF GUARANTEE

WHEREAS Indian Institute of Technology (BHU), Varanasi (Buyer) has invited tender vide Tender No..... dated..... for purchase of AND WHEREAS the said tender document requires that eligible successful bidder (seller)..... wishing to supply the equipment / machinery etc. in response thereto shall establish an irrevocable Performance Bank Guarantee in favour of “ The Registrar, Indian Institute of Technology (BHU), Varanasi” in the form of Bank Guarantee for Rs **(03% of the contract value)** and the Performance Bank Guarantee shall remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the seller, including warranty obligations from the date of issue of Performance Bank Guarantee and the eligible successful bidder (the seller) shall submit the same within 14 (Fourteen) days from the date of Award of Contract.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said bidder (seller) fails to abide by any of the conditions referred to in tender document / Award of Contract / performance of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Technology (BHU), Varanasi on demand and without protest or demur Rs. (Rupees.....).

This Bank further agrees that the decision of Indian Institute of Technology (BHU), Varanasi (Buyer) as to whether the said bidder (Seller) has committed a breach of any of the conditions referred in tender document / Award of Contract shall be final and binding.

We, (name of the Bank & branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the bidder (Seller) and/ or Indian Institute of Technology (BHU), Varanasi (Buyer). **Notwithstanding anything contained herein:**

1. Our liability under this Bank Guarantee shall not exceed Rs.(Indian Rupees only).
2. This Bank Guarantee shall be valid up to(date) and
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT (BHU), Varanasi serve upon us a written claim or demand on or before(date). This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at situated at (Address of local branch).

Yours truly,

Signature and seal of the guarantor:

Name of Bank:

Address:

Date:



(a) Technical Specifications of Feeder Protection Over Current Relay with accessories for protection and control objective.

Sr. No.	Parameter/Feature	Specification
Feeder protection over current relay		
1.	AC Analog Input (Sampling frequency)	AC Voltage and Current Inputs: 32 samples per power system cycle. Protection and Control Processing: Processing interval is 4 times per power system cycle.
2.	Power Supply	125–250 Vdc or 110–240 Vac <ul style="list-style-type: none">Rated Voltage: 125–250 Vdc, 110–240 VacOperational Voltage Range: 85–300 Vdc, 85–264 VacRated Frequency: 50 Hz
3.	AC Voltage Inputs	Three-phase, four-wire (wye) connections should be supported. Rated Continuous Voltage: 300V AC (phase to neutral) 10-Second Thermal: 600 Vac (phase-to-neutral)
4.	AC Current Input (Secondary Circuit)	Continuous Rating: $4 \cdot I_{NOM}$
5.	Definite time overcurrent protection	The relay should have definite time overcurrent protection phase current, residually calculated ground current, neutral current, negative sequence over current with minimum 4 stages of each element.
6.	Inverse definite time overcurrent protection	The relay should have inverse definite time overcurrent protection individual phase current, maximum phase current, residually calculated ground current, neutral current, negative sequence overcurrent element.
7.	Adaptive phase overcurrent element	The relay should incorporate adaptive phase overcurrent elements that perform reliably in the occurrence of current transformer saturation, dc offset, and off-frequency harmonics.
8.	Harmonic blocking	The relay should have 2nd and 5th harmonic blocking feature to detect the transformer energization condition.
9.	Directional feature	The relay should have direction feature based on negative sequences impedance with a priority for polarized components.
10.	Incipient fault protection (Cable)	Relay should have a feature for cable incipient fault detection.
11.	Under voltage protection	The relay should have minimum two stages of definite time phase to neutral and phase to phase undervoltage and minimum two stages of inverse stages of selectable voltage quantity (any of the phase-to-phase voltage, phase to neutral voltage, positive sequence voltage).
12.	Over voltage protection	The relay should have minimum two stages of definite time phase to neutral and phase to phase undervoltage, zero sequence voltage, negative sequence voltage, and minimum two stages of inverse overvoltage stages of selectable voltage quantity (any of

		the phase-to-phase voltage, phase to neutral voltage, positive sequence voltage, negative sequence voltage)
13.	Frequency protection	The relay should have minimum six independently configurable stages for under frequency and over frequency.
14.	Rate of change of frequency Protection	The relay should have rate of change of frequency protection. The relay should have vector shift protection.
15.	Fast-Rate-of-Change-of-Frequency protection	The relay should have fast rate of change of frequency protection.
16.	Loss of Potential Detection (Voltage Supervision)	The relay should have loss of potential detection element.
17.	Thermal overload protection	The relay should have three independent thermal elements conform to the IEC 60255-149 Standard.
18.	Power element	The relay should have as many as two independent three-phase power elements. Each enabled element can be set to detect real power or reactive power.
19.	Power factor element	The relay should have alarm and trip stages for lagging and leading power factor.
20.	Auto recloser	The relay should have reclosing function with at least 4 shots. The relay should have metering accuracy of 1% for measurement of analog quantities.
21.	Accuracy of metering	The relay should have metering accuracy of 1% for measurement of analog quantities. The relay should also have demand metering feature.
22.	Breaker monitoring	The relay should include a breaker wear monitor with user-definable wear curves, operation counters, and accumulated interrupted currents per phase.
23.	Communication options	The relay should provide the following communications options: ASCII, Modbus, Event Messenger, MIRRORED BITS communications, Fast Operate, Simple Network Time Protocol (SNTP), IEEE 1588 firmware-based Precision Time Protocol (PTP), Telnet, FTP, DNP3 serial and LAN/WAN, IEEE C37.118 (synchrophasor data), and IEC 61850 (edition1 and edition2) And the relay should have IEC 61850 test mode support with standard operating modes for easy commissioning.
		The relay should allow inspection of settings, metering reports, self-test status via a guaranteed read-only integrated Ethernet web server.
		The relay should support firmware upgradation via the ethernet port.
		The device should support firmware based PTP IEEE 1588-2008, IRIG-B, SNTP based time synchronization.
		Synchrophasors: The relay should include operation as a phasor measurement unit (PMU) following the IEEE C37.118 Standard for Synchrophasors for Power Systems.

24.	Event recording and reporting	The relay should be capable of automatically recording oscillography record. the voltage, current, and element status information contained in each event report. The relay should store an oscillography record of up to 180 cycles of both filtered as well as unfiltered event. The relay should also include a Sequential Events Recorder (SER), in which as many as 96 elements can be selected.
25.	Load profiling	The relay should support recording of minimum 17 analog quantities at selectable acquisition rate.
26.	Logic Programming	Relay should have facility to develop user programmable logic equations via Laptop. Boolean logic includes AND, OR, NOT, rising-edge detection, and falling-edge detection, as well as latches and counters. Mathematical functions also include add, subtract, multiply, and divide as well as analog compare functions.
27.	Digital input and output	The offered relay should have minimum 6 freely programmable digital inputs. The Relay should have minimum 07 freely configurable binary output relays including at watchdog contact.
28.	PT input voltage rating	The relay PT should support continuous voltage input of 300V (Phase-Neutral) and should support 600Vac (phase-to-neutral) continuously for upto 10-Second.
29.	LED Indicators	The Relay should be provided with LEDs for indicating at least the Protection Trip and Relay Healthy indications. Additional minimum 14 nos of tricolor LEDs, to be provided, and should be freely programmable.
30.	Bay control Function	The relay should include an inbuilt HMI display with custom configurable display information to display status, analog quantities, text, and alarm information. The controlling breaker and disconnectors should be possible from front panel pushbuttons.
31.	Online monitoring	The relay should support online monitoring of following parameters on laptop via suitable software: RMS, Fundamental, Instantaneous values of current and voltage. Positive sequence, negative sequence, zero sequence current and phasor diagrams. Status of relay elements and word bits, Energy measurement, control of relay output contacts.
32.	Standard	The offered relay should comply with the IEC/ANSI standard.
33.	Operating Temperature	The devices should have an operating temperature range of -40° to $+85^{\circ}\text{C}$ (-40° to $+185^{\circ}\text{F}$).
34.	Services and warranty	The device should include no-charge technical support for the life of the product. The offered device should include a ten-year, no-questions-asked warranty for all material and workmanship defects. In addition, the warranty should cover accidental customer-induced damage.

35.	Display	The relay should have touch screen display on the front panel of the relay. The display should be 5-inch, color display, capable to edit settings without laptop, enabling the rotating display and control of a breaker and as many as eight two-position and two three-position disconnects from the Bay Screens application.
Microgrid controller		
1.	Power Supply	Rated Voltage: 125–250 Vdc, 110–240 Vac Operational Voltage Range: 85–300 Vdc,85–264 Vac Rated Frequency: 50 Hz
2.	Control features	The real time MicroGrid controller- should contain control features for interconnection of a renewable facility to the utility grid: Open-loop control of power factor (PF) at the PCC (i.e., passing the PCC set point directly to inverters) <ul style="list-style-type: none"> • Closed-loop proportional plus integral (PI) control of PF at the PCC • Open-loop control of power output limit at the PCC (i.e., simple power limit control) • Closed-loop PI control of power output at the PCC (i.e., advanced power limit control) • Closed-loop PI control of voltage at the PCC • PCC voltage limit override when in PF control mode • PCC PF limit override when in voltage control mode • Integrated control of inverters and capacitor banks to provide aggregate control of the PCC • Support of capacitor banks for additional PF correction and voltage support.
3.	Multi-function capability	The device should support various functions such as protocol gateway, RTU, logic processor, PAC, engineering port server, event processor, and system-wide SER logger/viewer.
4.	Environmental Testing Standard	The device should satisfy IEEE 1613 “Standard Environmental and Testing Requirements for Communications Networking Devices in Electric Power Substations.”
5.	Communication options	The real time automation controller should support the following protocols: Client- DNP3 Serial, DNP3 LAN/WAN, Modbus RTU, Modbus TCP, SEL ASCII, SEL Fast Messaging, LG 8979, IEEE C37.118, IEC 61850 MMS, CP2179, IEC 60870-5-101/104, SNMP, SES-92, CDC Type II, Courier, IEC 60870-5-103, EtherNet/IP Explicit Message Client. Server- DNP3 Serial, DNP3 LAN/WAN, Modbus RTU, Modbus TCP, SEL Fast Messaging, LG 8979, SES-92, IEC 61850 MMS, IEC 60870-5-101/104, IEEE C37.118, FTP, SFTP, CDC Type II, EtherNet/IP Implicit Message Adapter. Peer-to-Peer- IEC 61850 GOOSE, SEL MIRRORRED BITS Communications, Network Global Variables (NGVL), Parallel Redundancy Protocol. Fieldbus- EtherCAT Client Serial Communications Ports- Each port should be software configurable for EIA-232 or EIA-485 communications modes.

		The device should support SEL protocols to be able to communicate with existing SEL device (SEL-421) at IIT BHU.
6.	IEC 61131-3 programming	The IEC 61131-3 programming environment should be integrated in one software package with the communications protocol mapping environment.
7.	Integrated HMI	The offered controller should have an in-built HMI having capability to build custom human-machine interface (HMI) displays quickly and easily without the need for mapping data tags. Should be web-based, no special software should be needed for viewing HMI displays.
8.	Work as PMU	The offered device should have the optional functionality to act as a PMU with the help of addon CT/PT modules over fieldbus communication.
9.	Single-point engineering access	The device should have functionality to gain engineering access to station IEDs through a single serial port, external modem, or high-speed network connection.
10.	Security	<p>Protection Against Malware and Other Cybersecurity Threats- The controller should have advanced cryptographic algorithms to authorize the execution of any program or service on the system. Any tasks not approved by the whitelist should be blocked from operation.</p> <p>User Security- Assign individual user and role-based account authentication and strong passwords. Use Lightweight Directory Access Protocol (LDAP) for central user authentication.</p> <p>Integrated Security Management- Should Comply with NERC/CIP user authentication, logging, and port control requirements.</p>
11.	Ethernet communications port	The Controller should have two or more Ethernet ports that can operate simultaneously on different networks through independent MAC addresses. Ports should be configurable as fiber-optic or copper Ethernet ports.
12.	High-Speed Peer-to-Peer Communication	The controller should be capable to transmit and receive high-speed digital data to/from intelligent electronic devices (IEDs) to create custom protection and control schemes.
13.	Time synchronization	The device Should accept time synchronization on IRIG modulated, IRIG demodulated, NTP and PTP protocols.
14.	Retained memory	The Controller should have nonvolatile memory available for user-programmable retained variables.
15.	Operating temperature	The device should meet IEEE 1613, IEC 61850-3, and IEC 60255 standards, the device should operate within a temperature range of -40° to $+85^{\circ}\text{C}$.
16.	Services and warranty	The device should include no-cost technical support for the life of the product. The offered device should include a minimum of ten-year, no-questions-asked warranty for all material and workmanship defects. In addition, the warranty should cover accidental customer-induced damage.

(b) Phasor data concentrator along with accessories for time synchronization.

The offered Phasor data concentrator should be software based PDC to align and concentrate the phasor data from different PMUs available at IIT BHU.

Sr. No.	Parameter/Features	Specification
Phasor data concentrator		
1.	Real-Time and Historic Trending	Offered PDC/historian/visualization should have Real-Time and Historic Trending available in a web-based client that can be used to monitor PMU data anywhere on the network without the requirement of installing a client software.
2.	Built in Historian	The offered PDC should have Historian capability to store historical data and to retrieve and plot real time graphs instantaneously from the historical data.
3.	Phasor scope	The offered PDC should have a feature of Phasor Scope to plot the angle differences between voltages/current from multiple PMUs.
4.	Data Export	The offered PDC should have a feature of exporting the data from the client web browser interface in CSV and COMTRADE formats for the selected parameters.
5.	Event timeline	The offered PDC should have an Event Timeline feature to displays a chronological display of event information as reported by the numerical relays acting as PMU.
6.	Automatic disturbance detection	The offered PDC should include an Automatic Disturbance Detection having frequency-domain anomaly detector to assist power system operators in the identification of unusual disturbances visible to PMUs.
7.	Input from Multiple PMU and PDC	The offered PDC should be able to connect multiple phasor data concentrator (PDC) and phasor measurement unit (PMU) devices for synchro phasor visualization by using the PDC input capability.
8.	Situational Awareness	The offered PDC should help in improving the situational awareness by visualization of live, sub second, and time-aligned information from multiple PMUs across the power system. Unstable behavior, such as growing oscillations, should be clearly visible through graphical representation of streaming time-synchronized phasor measurements. Helping in understanding the dynamic behavior, enhancing decision making and thus improving system reliability. The offered PDC should be able to identify the root cause of disturbances by searching historical data waveforms, save and share results with colleagues through the use of snapshots.
9.	Angle Difference	The offered PDC should have the feature to visualize angle differences that can provide an early warning of system stress and help with application like generator black-start, microgrid, and island synchronization.
10.	Data Export	The offered PDC should have the functionalities to be used for validating and improve system models. It should be easy to export exactly what is on the screen to COMTRADE or CSV files. Analyze archived system disturbance responses and compare these to modeled responses.
11.	Search and Zoom functionalities	The offered PDC should have functionalities like long-term data, searching, zooming in on points of interest and multiple views to help user gain insight of system behavior for better understanding of root cause.

12.	Web browser interface	The offered PDC should be easy to learn and use with intuitive, easy-to-use web-based user interface having option to share data, views, and results with fellow engineers.
13.		The offered PDC should have easy of access Data on the Network with a web browser from any computer on the network having individual authentication providing secure access for all users.
Satellite synchronized clock with DC power supply		
1.	Required Features	The offered Time synchronization clock should support IRIG-B demodulated output within ± 100 nanoseconds (average) of UTC time.
2.		The offered Time synchronization clock should have an accuracy of ± 0.08 ppm for 20 minutes (over the entire operating temperature range) while the clock is not locked to the GPS satellite reference.
3.		The offered Time synchronization clock should have one demodulated IRIG-B output, and the clock should also provide an ASCII time output on the serial port.
4.		The offered Time synchronization clock's IRIG-B output should be capable of adding the extended control functions specified by IEEE C37.118 to synchronize existing PMUs over demodulated IRIG-B.
5.		The offered Time synchronization clock should have alarm contact to indicate diagnostic self-test failure and be programmable to include loss-of-satellite lock as an alarm condition.
6.		The alarm contact in the offered Time synchronization clock should be capable of a precise alarm clock function having an accuracy within ± 500 microseconds of UTC time, and with a programmable start time and a programmable pulse length.
7.		The settings of offered clock should be accomplished through the use of easily accessible control (DIP) switches.
8.		No proprietary software should be required to communicate with the offered clock.
9.		The offered time synchronization clock should have a power supply with an operating range of 9 to 30 Vdc. A provision for powering the clock from external power source having range of 125/250 Vdc or Vac input should also be provided having a five-year warranty.
10.		The clock should meet and be tested for EMI, RFI, shock, vibration, and environmental compliance per the IEEE C37.90, IEC 60255, IEC 61000, and IEC 60068 standards.
11.		The offered clock should include no-charge technical support for the life of the product.
12.		The clock should have a minimum warranty period of five years.
13.	DC Power Supply	An external 15-volt DC power supply should be supplied along with the equipment to power the clock.
14.	Antenna Cable length	Antenna cable should have length of 75 feet.

IMPORTANT TERMS

Note:

1. Bid should include FOR IIT (BHU), Varanasi.
2. The firm must quote item wise separately. L-1 will be assessed on overall price basis.

OTHER TERMS:

1. Price of the instrument may be quoted in Indian currency.
2. Price should be quoted F.O.R to IIT (BHU), Varanasi.
3. Custom Clearance will be the responsibility of the supplier.
4. **Indian agency commission:** Should be clearly stated in the financial bid in Indian currency.
5. **Penalty:** A penalty of 1% of the order value will be applied for late delivery of the goods for each week thereof subject to a maximum of 10%.
6. **Bank Guarantee (BG):** Successful bidder have to furnish **03%** of the order value as a performance security in the shape of Fixed Deposit Receipt / Bank Guarantee in favour of the Registrar, Indian Institute of Technology (BHU) which will be valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Fixed Deposit Receipt / Bank Guarantee should be issued from a schedule bank in India. Bank guarantee is only applicable for the Supplier who will get the Award of Contract and will submit at the time of installation of the instrument.
7. **Payment:** Payment will be made 100 % on successful installation and submission of PBG after satisfactory installation and submission of PBG@3% of order value valid for period of 60 days beyond all warranty obligations.
8. **User List:** Provide users for last 3 years with contact person name, address, phone, and email IDs.
9. **Manuals/Documents:** 1 set of hard copy and 1 set of soft copy in English (preferred as following).
 - i. Operating manuals
 - ii. Maintenance manual
 - iii. Servicing manual
 - iv. Programming manual
 - v. Manuals of bought out items incorporated in the system
 - vi. Details of any custom made ICs & components & their sources
10. The Tender should be enclosed with proper certifications like **Authorization Certificate and Proprietary Certificate** in case of Proprietary items.
11. Pre-installation site preparation/inspection requirements to be indicated and specified along with the bid.
12. Warranty period to be clearly mentioned and should begin from the date of installation. Annual Maintenance Contract Charges should be clearly mentioned after warranty period. Preferably Two years comprehensive warranty should be included with the offer
13. Submit Electronic copy of the Technical specifications and bids.
14. The vendor to provide compliance statement with respect to each technical specification in the tender document duly supported by the manufacturer's literature. Any other claim will not be accepted and may lead to rejection of the bid.

- 15.** Printed literature in support of compliance to the prescribed specifications is to be submitted.
- 16.** Compliance report needs to be submitted as a part of the technical bid.
- 17.** In case during shipment period newer versions of software/hardware is available with vendor in lieu of the existing one for which Letter of Credit was opened, then improved version should be made available without any extra cost.
- 18.** Institute reserves the right to visit installation in India of similar capabilities the details with to regard to such installation should be given as a part of technical bid.
- 19.** Technical evaluation by the Institute may include demonstration to verify functionalities and capabilities of the system quoted.

Dr. Soumya Ranjan Mohanty (PI)
Department of Electrical Engineering,
Indian Institute of Technology
(Banaras Hindu University)
Varanasi-221005, U.P.

TECHNICAL COMPLIANCE STATEMENT

(To be submitted by bidder duly filled)

(a) Technical Compliance Statement of Feeder Protection Over Current Relay with accessories for protection and control objective.

SL. No.	Technical Requirement	Compliance YES/NO
Feeder protection over current relay		
1.	AC Analog Input (Sampling frequency): AC Voltage and Current Inputs: 32 samples per power system cycle. Protection and Control Processing: Processing interval is 4 times per power system cycle.	
2.	Power Supply: Rated Voltage: 125–250 Vdc, 110–240 Vac Operational Voltage Range: 85–300 Vdc,85–264 Vac Rated Frequency: 50 Hz	
3.	AC Voltage Inputs: Three-phase, four-wire (wye) connections should be supported. Rated Continuous Voltage: 300V AC (phase to neutral) 10-Second Thermal: 600 Vac (phase-to-neutral)	
4.	AC Current Input (Secondary Circuit): Continuous Rating: 4 x INOM	
5.	Definite time overcurrent protection: Whether relay have definite time overcurrent protection phase current, residually calculated ground current, neutral current, negative sequence overcurrent with minimum 4 stages of each element?	
6.	Inverse definite time overcurrent protection: Whether relay have inverse definite time overcurrent protection individual phase current, maximum phase current, residually calculated ground current, neutral current, negative sequence overcurrent element?	
7.	Adaptive phase overcurrent element: Is the relay incorporate adaptive phase overcurrent elements that perform reliably in the occurrence of current transformer saturation, dc offset, and off-frequency harmonics?	
8.	Harmonic blocking: Whether relay have 2nd and 5th harmonic blocking feature to detect the transformer energization condition?	
9.	Directional feature: Whether relay have directional feature based on negative sequences impedance with a priority for polarized components?	
10.	Incipient fault protection (Cable): Is the relay capable for cable incipient fault detection?	
11.	Under voltage protection: Whether relay have minimum two stages of definite time phase to neutral and phase to phase undervoltage and minimum two stages of inverse stages of selectable voltage quantity (any of the phase-to-phase voltage, phase to neutral voltage, positive sequence voltage)?	
12.	Over voltage protection: Whether relay have minimum two stages of definite time phase to neutral and phase to phase undervoltage, zero sequence voltage, negative sequence voltage, and minimum two stages of inverse	

		overvoltage stages of selectable voltage quantity (any of the phase-to-phase voltage, phase to neutral voltage, positive sequence voltage, negative sequence voltage)?	
13.		Frequency protection: Whether relay have minimum six independently configurable stages for under frequency and over frequency?	
14.		Rate of change of frequency Protection: Whether relay have rate of change of frequency protection and vector shift protection features?	
15.		Fast-Rate-of-Change-of-Frequency protection: Whether relay have fast rate of change of frequency protection?	
16.		Loss of Potential Detection (Voltage Supervision): Whether relay have loss of potential detection element?	
17.		Thermal overload protection: Whether relay have three independent thermal elements conform to the IEC 60255-149 Standard?	
18.		Power element: Whether relay have as many as two independent three-phase power elements and whether each enabled element can be set to detect real power or reactive power?	
19.		Power factor element: Whether relay have alarm and trip stages for lagging and leading power factor?	
20.		Auto recloser: Whether relay have reclosing function with at least 4 shots?	
21.		Accuracy of metering: Whether relay have metering accuracy of 1% for measurement of analog quantities and demand metering feature?	
22.		Breaker monitoring: Whether relay include a breaker wear monitor with user-definable wear curves, operation counters, and accumulated interrupted currents per phase?	
23.	Communication options	Whether relay should provide the following communications options? ASCII, Modbus, Event Messenger, MIRRORED BITS communications, Fast Operate, Simple Network Time Protocol (SNTP), IEEE 1588 firmware-based Precision Time Protocol (PTP), Telnet, FTP, DNP3 serial and LAN/WAN, IEEE C37.118 (synchrophasor data), and IEC 61850 (edition1 and edition2) Whether relay have IEC 61850 test mode support with standard operating modes for easy commissioning?	
		Whether relay allow inspection of settings, metering reports, self-test status via a guaranteed read-only integrated Ethernet web server?	
		Whether relay support firmware upgradation via the ethernet port?	
		Whether relay support firmware based PTP IEEE 1588-2008, IRIG-B, SNTP based time synchronization?	
		Synchrophasors: Whether relay include operation as a phasor measurement unit (PMU) following the IEEE C37.118 Standard for Synchrophasors	

		for Power Systems?	
24.	Event recording and reporting: Whether relay is capable of automatically recording oscillography record of the voltage, current, and element status information contained in each event report. Can it store an oscillography record of up to 180 cycles of both filtered as well as unfiltered event? Whether relay include a Sequential Events Recorder (SER), in which as many as 96 elements can be selected?		
	Load profiling: Whether relay support recording of minimum 17 analog quantities at selectable acquisition rate?		
25.	Logic Programming: Whether relay have facility to develop user programmable logic equations via Laptop?		
26.	Digital input and output	Whether relay have minimum 6 freely programmable digital inputs?	
		Whether relay have minimum 07 freely configurable binary output relays including at watchdog contact?	
27.	PT input voltage rating: Whether relay support continuous voltage input of 300V (Phase-Neutral) and should support 600Vac (phase-to-neutral) continuously for up to 10-Second?		
28.	LED Indicators: Whether relay is provided with LEDs for indicating at least the protection trip and relay healthy indications? Minimum 14 nos of freely programmable tricolor LEDs are provided or not?		
29.	Bay control Function: Whether relay include an inbuilt HMI display with custom configurable display information to display status, analog quantities, text, and alarm information? The controlling breaker and disconnectors is possible from front panel pushbuttons or not?		
30.	Online monitoring: Whether relay support online monitoring of following parameters on laptop via suitable software? RMS, Fundamental, Instantaneous values of current and voltage. Positive sequence, negative sequence, zero sequence current and phasor diagrams. Status of relay elements and word bits, Energy measurement, control of relay output contacts.		
31.	Standard: Whether offered relay comply with the IEC/ANSI standard?		
32.	Operating Temperature: Whether relay have an operating temperature range of -40° to $+85^{\circ}\text{C}$?		
33.	Services and warranty	Whether device include no-charge technical support for the life of the product?	
		Is the device include a ten-year, no-questions-asked warranty for all material and workmanship defects even in case of accidental customer-induced damage?	

34.	Display: Whether relay have 5-inch touch screen color display on the front panel of the relay to edit settings without laptop, enabling the rotating display and control of a breaker and as many as eight two-position and two three-position disconnects from the Bay Screens application?	
Microgrid controller		
1.	Power Supply: Rated Voltage: 125–250 Vdc, 110–240 Vac Operational Voltage Range: 85–300 Vdc,85–264 Vac Rated Frequency: 50 Hz	
2.	Control features	<p>Whether device contain following control features for interconnection of a renewable facility to the utility grid?</p> <p>Open-loop control of power factor (PF) at the PCC (i.e., passing the PCC set point directly to inverters)</p> <ul style="list-style-type: none"> • Closed-loop proportional plus integral (PI) control of PF at the PCC • Open-loop control of power output limit at the PCC (i.e., simple power limit control) • Closed-loop PI control of power output at the PCC (i.e., advanced power limit control) • Closed-loop PI control of voltage at the PCC • PCC voltage limit override when in PF control mode • PCC PF limit override when in voltage control mode • Integrated control of inverters and capacitor banks to provide aggregate control of the PCC • Support of capacitor banks for additional PF correction and voltage support.
3.	Multi-function capability	Whether device support various functions such as protocol gateway, RTU, logic processor, PAC, engineering port server, event processor, and system-wide SER logger/viewer?
4.	Environmental Testing Standard	Whether device satisfy IEEE 1613 “Standard Environmental and Testing Requirements for Communications Networking Devices in Electric Power Substations.” ?
5.	Communication options	<p>Whether device support following communication protocol or not?</p> <p>Client-DNP3 Serial, DNP3 LAN/WAN, Modbus RTU, Modbus TCP, SEL ASCII, SEL Fast Messaging, LG 8979, IEEE C37.118, IEC 61850 MMS, CP2179, IEC 60870-5-101/104, SNMP, SES-92, CDC Type II, Courier, IEC 60870-5-103, EtherNet/IP Explicit Message Client.</p> <p>Server-DNP3 Serial, DNP3 LAN/WAN, Modbus RTU, Modbus TCP, SEL Fast Messaging, LG 8979, SES-92, IEC 61850 MMS, IEC 60870-5-101/104, IEEE C37.118, FTP, SFTP, CDC Type II, EtherNet/IP Implicit Message Adapter.</p>

		Peer-to-Peer-IEC 61850 GOOSE, SEL MIRRORED BITS Communications, Network Global Variables (NGVL), Parallel Redundancy Protocol.	
		Fieldbus-EtherCAT Client	
		Serial Communications Ports- Each port should be software configurable for EIA-232 or EIA-485 communications modes.	
		Whether device support SEL protocols to be able to communicate with existing SEL device (SEL- 421) at IIT BHU?	
6.	IEC 61131-3 programming	Whether IEC 61131-3 programming environment is integrated in one software package with the communications protocol mapping environment?	
7.	Integrated HMI	Whether offered controller have an in-built HMI having capability to build custom human-machine interface (HMI) displays quickly and easily without the need for mapping data tags and is web-based, and no special software id required for viewing HMI displays?	
8.	Work as PMU	Whether offered device have the optional functionality to act as a PMU with the help of addon CT/PT modules over fieldbus communication?	
9.	Single-point engineering access	Whether device have functionality to gain engineering access to station IEDs through a single serial port, external modem, or high-speed network connection?	
10.	Security	Whether device have advanced cryptographic algorithms to authorize the execution of any program or service on the system? Device have ability to block any tasks from operation which is/are not approved by the whitelist? User Security feature is available or not? Whether device have Integrated Security Management feature or not?	
11.	Ethernet communications port	Whether device have two or more Ethernet ports that can operate simultaneously on different networks through independent MAC addresses? Ports is configurable as fiber-optic or copper Ethernet ports or not?	
12.	High-Speed Peer- to-Peer Communication	Whether device is capable to transmit and receive high-speed digital data to/from intelligent electronic devices (IEDs) to create custom protection and control schemes?	
13.	Time synchronization	Whether device accept time synchronization on IRIG modulated, IRIG demodulated, NTP and PTP protocols?	

14.	Retained memory	Whether device have non-volatile memory available for user-programmable retained variables?	
15.	Operating temperature	Whether device meet IEEE 1613, IEC 61850-3, and IEC 60255 standards, the device operates within a temperature range of -40° to +85°C?	
16.	Services and warranty	Whether device include no-cost technical support for the life of the product and a minimum of ten-year, no-questions-asked warranty for all material and workmanship defects along with accidental customer-induced damage?	

(b) Technical Compliance Statement of Phasor data concentrator along with accessories for time synchronization.

SI. NO.	Technical Requirement	Specification	Compliance Yes/No
Phasor data concentrator			
1.	Real-Time and Historic Trending	Whether offered PDC have Real-Time and Historic Trending available in a web-based client that can be used to monitor PMU data anywhere on the network without the requirement of installing a client software?	
2.	Built in Historian	Whether offered PDC have Historian capability to store historical data and to retrieve and plot real time graphs instantaneously from the historical data?	
3.	Phasor Scope	Whether offered PDC have a feature of Phasor Scope to plot the angle differences between voltages/current from multiple PMUs?	
4.	Data Export	Whether offered PDC have a feature of exporting the data from the client web browser interface in CSV and COMTRADE formats for the selected parameters?	
5.	Event timeline	Whether offered PDC have an Event Timeline feature to displays a chronological display of event information as reported by the numerical relays acting as PMU?	
6.	Automatic disturbance detection	Whether offered PDC include an Automatic Disturbance Detection, having frequency-domain anomaly detector to assist power system operators in the identification of unusual disturbances visible to PMUs?	
7.	Input from Multiple PMU and PDC	Whether offered PDC is able to connect multiple phasor data concentrator (PDC) and phasor measurement unit (PMU) devices for synchro phasor visualization by using the PDC input capability?	
8.	Situational Awareness	Whether offered PDC helps in improving the situational awareness by visualization of live, sub second, and time-aligned information from multiple PMUs across the power system? Whether unstable behavior, such as growing oscillations, is clearly visible through graphical representation of streaming time-synchronized phasor	

		measurements? Whether the device is able to identify the root cause of disturbances by searching historical data waveforms, save and share results with colleagues through the use of snapshots?	
9.	Angle Difference	Whether the device have feature to visualize angle differences that can provide an early warning of system stress and help with application like generator black-start, microgrid, and island synchronization?	
10.	Search and Zoom functionalities	Whether the device have functionalities like long-term data, searching, zooming in on points of interest and multiple views to help user gain insight of system behavior for better understanding of root cause?	
11.	Web browser interface	Whether it is easy to learn and use with intuitive, easy-to-use web-based user interface having option to share data, views, and results with fellow engineers, and have ease of accessing data on the Network with a web browser from any computer on the network having individual authentication providing secure access for all users?	
Satellite synchronized clock with DC power supply			
1.	Required Features	Whether the offered Time synchronization clock support IRIG-B demodulated output within ± 100 nanoseconds (average) of UTC time?	
2.		Whether offered Time synchronization clock have an accuracy of ± 0.08 ppm for 20 minutes (over the entire operating temperature range) while the clock is not locked to the GPS satellite reference?	
3.		Whether the device have one demodulated IRIG-B output, and the clock should also provide an ASCII time output on the serial port?	
4.		Offered Time synchronization clock's IRIG-B output is capable of adding the extended control functions specified by IEEE C37.118 to synchronize existing PMUs over demodulated IRIG-B or not?	
5.		Whether the offered Time synchronization clock have alarm contact to indicate diagnostic self-test failure and be programmable to include loss-of-satellite lock as an alarm condition?	
6.		The alarm contact in the offered Time synchronization clock is capable of a precise alarm clock function having an accuracy within ± 500 microseconds of UTC time, and with a programmable start time and a programmable pulse length or not?	
7.		Whether easily accessible control (DIP) switches are available for settings of offered clock or not?	
8.		Any proprietary software is required to communicate with the offered clock?	
9.		Whether the offered device have a power supply with an operating range of 9 to 30 Vdc, along with a provision for powering the clock from external power source having range of 125/250 Vdc or Vac	

		input having a ten- year warranty?	
10.		Whether device is tested for EMI, RFI, shock, vibration, and environmental compliance per the IEEE C37.90, IEC 60255, IEC 61000, and IEC 60068 standards?	
11.		Whether the offered clock includes no-charge technical support for the life of the product along with a minimum warranty period of ten years?	
12.			
13.	Power supply	An external 15-volt DC power supply will be supplied along with the equipment to power the clock or not?	
14.	Cable for Antenna	Antenna cable have length of 75 feet will be provided or not?	

**Signature of the Authorized
Official with Seal**

PREVIOUS SAME ORDER EXECUTED

Please quote best minimum prices applicable for a premier Educational and Research Institution. The party must give details of purchase orders identical or same equipment supplied to any IITs/NITs/University/CFTIs as per below Format in last Three years (to be uploaded in Cover 1) along with the final price paid, these details are mandatory.

Name of the Firm _____

Order placed by (Full address of Purchaser)	Order No. and Date	Description and quantity of ordered equipment	Value of Order	Date of completion as per contract	Has the Equipment being installed satisfactorily (Attach a Certificate from the Purchaser/ Consigner)	Contact Person along with Telephone No., Fax No. and e-mail address.

(Kindly enclose the scan copy of aforementioned purchase orders)

Details of Technical Expert

Name of application specialist/Service Engineer who have the technical competency to handle and support the quoted product during the warranty period.		
Name of the organization	Name of Contact Person	Contact No.

Signature and Seal of the Manufacturer / Bidder _____

Place: _____

Date: _____

BID SUBMISSION**Online Bid Submission:**

The Online bids (complete in all respect) must be uploaded online in **two** covers as explained below:

Cover – 1			
(Following documents to be provided as .pdf file)			
Sl. No.	Document	Content	File Types
1.	Technical Bid	Technical Compliance Sheet, Bidder information form	.PDF
2.		Organization Declaration Sheet, Compliance sheets for Essential Pre Bid Criteria	.PDF
3.		Checklist given in Section 5, Tender Acceptance, Tender Form, etc.	.PDF
4.		List of organizations/clients where the same products have been supplied (in last two years) along with their contact number(s). (Annexure-3)	.PDF
5.		Technical supporting documents in support of all claims made at Annexure-1	.PDF
6.		EMD and Tender fee submission proof	.PDF
7.		Brochure of quoted product and other documents, if any	.PDF
Cover – 2			
Sl. No.	Document	Content	
1	Price Bid	Duly filled and signed Tender form (Price Bid)	.PDF
2.		Duly signed BOQ in .pdf format	.PDF
3.		BOQ in .xls Format	.XLS

(Letterhead of the bidder)

Bid Securing Declaration Form

To

(insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with IIT(BHU), Varanasi for a period of two years from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity or its extended period, if any; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
 - (i) fail or reuse to execute the contract, if required, or
 - (ii) fail or refuse to furnish the Performance Bank Guarantee, in accordance with the Instructions to Bidders.
- c) If the bidder is found indulging in any corrupt, fraudulent or other malpractice in respect of the bid; or
- d) If there is a discrepancy between words and figures quoted by the bidder then in that case the amount quoted in words will be treated as final.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: _____

(Insert signature of person whose name and capacity are shown in Bid Securing Declaration)

Name: _____

(insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of *(insert complete name of Bidder)*

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a consortium, the Bid Securing Declaration must be in the name of all partners to the consortium that submit the bid)