Punjab Engineering College (Deemed to be University) Chandigarh



E-TENDER DOCUMENT

FOR

Distribution Static Compensator (DSTATCOM)

in

Electrical Engineering department

at

Punjab Engineering College (Deemed to be University) Chandigarh **Cost of Tender:** Rs. 1,00,000/- (Payable through Demand draft/ Banker Cheque/ FD/ PBG in favor of Director, Punjab Engineering College, Chandigarh. To be submitted at time of participation in pre-bid meeting).

Description

Section	Terms and condition of contract					
I	Invitation for E-Tender: Distribution Static Compensator (DSTATCOM) in					
	Electrical Engineering Department at Punjab Engineering College (Deemed to					
	be University), Chandigarh.					
II	Tender document (Technical Bid)					
III	Technical Specification and details					
IV	Schedule of requirements (Technical Bid)					
V	Price Schedule (Financial Bid)					
VI	General Terms and Conditions					
VII	Contract form (Agreement) and other forms					

SECTION-I

Invitation for E-Tender

For Distribution Static Compensator (DSTATCOM) in Electrical Engineering Department at Punjab Engineering College (Deemed to be University) Chandigarh.

- 1. Director, Punjab Engineering College (Deemed to be University), Chandigarh invites ebids from eligible bidders for the supply and installation of Distribution Static Compensator (DSTATCOM) in Electrical Engineering Department at Punjab Engineering College (Deemed to be University), Chandigarh.
- 2. Interested eligible Bidders may obtain further information from Electrical Engineering Department, Punjab Engineering College (Deemed to be University), Sector 12, Chandigarh 160012, India.
- 3. The bidding document is downloadable from institute website http://www.pec.ac.in.
- 4. All bids must be accompanied by a bid security as specified in the https://etenders.chd.nic.in and must be delivered to the office address mentioned below by the date and time indicated below.
- 5. Bids will be opened in the presence of Bidders' or their representatives who authorized to attend on the specified date and time.

TABLE – 1 EMD (Earnest Money Deposit)

S No.	Name of the Work	EMD Security	Performance/Security
1.	Distribution Static Compensator	Rs.100,000 (One Lakh only)	5% of Tender value
	(DSTATCOM) in Electrical Engineering	Payable through Demand	
	Department at Punjab Engineering College	draft/ Banker Cheque/ FD/	
	(Deemed to be University)	PBG in favor of Director PEC	

NOTE:

1. Financial bids and Earnest Money Deposit (EMD) is to be submitted for the equipment.

TABLE - 2 Time Schedule

I	Date of publication	13.01.2020
II	Downloading of e-tender document	14.01.2020
V	Last date of submission of e-tender	29.01.2020 (05:00 PM)
VI	Physical submission of EMD and other necessary pre-qualification documents (scanned copies)	29.01.2020 (05:00 PM)
VII	Opening of Technical Bid (online) and meeting for scrutiny of technical bid and declaring eligible bidders.	30.01.2020 (11:00 AM)
VII	Opening of Financial Bid of only eligible technically qualified bidder as determined by the Committee.	To be informed after checking eligibility of Bidders
	Place of opening of bids	Electrical Engineering Department Punjab Engineering College (Deemed to be University) Sector 12, Chandigarh 160012

Important Notes:

I.	Bidders shall have to submit their bids on-line in Electronic Format with Digital Signatures.
II.	All terms and conditions, instructions to bidder regarding e-tendering process etc. may kindly be seen from
	the Detailed Notice Inviting Tender (DNIT) available on the Punjab Engineering College (Deemed to be
	University) institute website (www.pec.ac.in).
III.	The bidder has to submit the original documents in physical form such as EMD, eligibility documents and
	other desired documents on the date fixed for the same as above. The failure to submit will entail summarily
	rejection of its tender.
IV.	The Director reserves the rights to reject or accept any or all tenders without assigning any reasons.

CHECKLIST FOR TENDER DOCUMENT

S. No.	Checklist Tick	(Yes/No)
1.	Whether name of the firm/organization & address and	Yes/No
	telephone/mobile number/fax number on letter pad of the	
	company/firm have been mentioned	
2.	Whether EMD as mentioned in Table-1 of Section I in the shape of	Yes/No
	Demand draft/ Banker Cheque/ FD/ PBG in favour of Director, PEC University of	
	Technology, payable at Chandigarh has been attached? If yes, DD/B.C	
	Nodatedand	
2	name of the Bank)	X7 (X7
3.	Whether Income tax return (Self attested) of the last two assessment	Yes/No
4	years attached?	XZ /NI .
4.	Whether Document showing experience of providing similar items in	Yes/No
	reputed institutes/Departments/College/ research labs etc. in INDIA in last three years and providing satisfactory performance certificate	
	from such institutes/Departments/College/ research labs etc. is	
	attached (Annexure 2.3 of SECTION II).	
5.	Whether Document showing current details of similar	Yes/No
5.	equipment's being rendered which will be available for inspection by	165/110
	our officials.(Annexure 2.4 of SECTION II)	
6.	Do you agree to provide 90 days validity of tender as per point 4 of	Yes/No
0.	Section-VI?	103/110
7.	Whether attested photocopy of PAN/TAN Card is attached?	Yes/No
8.	Whether name, address, contact number, designation/capacity of	Yes/No
	person signing tender document is attached?	
9.	Do you comply the specification and details given in SECTION IV	Yes/No
10.	Whether attested photocopy of Registration Certificate attached?	Yes/No
11.	Whether Affidavit of not being Black Listed has been attached?	Yes/No
	(Annexure 2.2 of SECTION II)	
12.	Covering letter (Annexure 2.1 of SECTION II) is attached	Yes/No
13	Do you agree to provide the equipment in 50 days from the date of	Yes/No
	supply order?	
14.	Do you agree that no advance payment will be made by the PEC	Yes/No
	in view of condition No. 7 of SECTION-VI?	
	Do you agree to provide the items F.O.R. Punjab Engineering College (Deemed to	
15	be University) Sector-12, Chandigarh?	Yes/No
16	The Annual turnover of the company for the last three years is Rs. 1 Crore?	Yes/No
17	Rate Reasonability Certificate for the current FY attached?	Yes/No
18	Proprietary Certificate (if applicable) is attached?	Yes/No
19	Authorization Certificate (if applicable) is attached?	Yes/No

Place:	Signature of Tenderer
Dated:	_ Full Name of the Tenderer
Address:	

SECTION II

Terms and Conditions of Contract

- 1. Tenderers are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender document or submission of a bid not substantially responsive to the Tender document in every respect will be at the tenderers risk and may result in the *rejection* of the bid.
- 2. The tenderers should give their quote in Indian currency only keeping in mind that our institute (i.e. Punjab Engineering College (Deemed to be University) is exempted from the payment of GST, custom and excise duty. If foreign make equipment is quoted in Indian currency, no sales tax will be payable.
- 3. The Bidders shall have to submit their Bids online in Electronic Format with Digital Signatures. For participation in the e-tendering process, the Bidders need to register themselves on http://etenders.chd.nic.in. On registration, they will be provided with a user ID and a system generated password enabling them to submit their Bids online using Digital System Certificates (DSC).
- 4. Tenders without digital signatures will not be accepted by the Electronic Tendering System. No Tender will be accepted in physical form and in case, it has been submitted in the physical form only, it shall be rejected out rightly.
- Bids will be opened online as per time schedule mentioned in e-tender notice (SECTION I Table 2).
- 6. Before submission of online Bids, Bidders must ensure that self-attested scanned copies of all the necessary documents as mentioned in SECTION III "Technical Bid" and SECTION V" Financial Bid" of this tender document have been uploaded with the Bid, failing which their bids may be out-rightly rejected and will not be considered.
- 7. The Director, Punjab Engineering College (Deemed to be University) Chandigarh will not be responsible for any delay in online submission of the Bids due to any reason whatsoever.
- 8. It will be mandatory for all the Bidders to upload all the documents mentioned under Tender document.
- 9. Bidder are required to upload scanned copy of EMD as specified in the tender documents and send original along with other hard copies of desired documents to be sent in technical bid envelope.
- 10. The details of EMD specified in the Tender Documents should be the same as submitted online (scanned copies) otherwise tender will be rejected.

- 11. The conditional bids shall not be considered and may be rejected out rightly in very first instance.
- 12. The Financial Bids through e-tendering of only those bidders shall be opened who will qualify in the pre-qualifying criteria.
- 13. An affidavit as per specimen enclosed as **Annexure 2.2 of SECTION II** should accompany the tender. The tenderer who has been black-listed or his/her tenders have even been cancelled or any legal proceedings have ever been initiated/pending or any penalty has ever been levied on account of delay or non-completion of supply order by any State/UT/Central Government, his/her tender will be out rightly rejected.
- 14.EARNEST MONEY DEPOSIT (EMD): The Tender should be accompanied with Earnest Money as mentioned in the **Table-1 of SECTION- I** to be paid in the shape of Demand draft/ Banker Cheque/ FD/ PBG from any Scheduled Bank in favour of the Director, Punjab Engineering College (Deemed to be University), Chandigarh which shall be valid for three months. No firm/ tenderer will be exempted from submission of EMD. The EMD deposited by the tenderer in respect of another similar tender will not be considered against this tender. Apart from submission of original EMD in physical form, scanned copy of EMD duly attested and countersigned by the firms shall also be uploaded. The EMD of unsuccessful bidders will be refunded immediately after finalization/allotment of tender. No interest will be payable on the EMD. The EMD will be forfeited, if the tenderer withdraws his/her bid after submission of the Tender. Expression of Interest without the EMD shall not be considered. If EMD is not submitted / received as detailed above, tender will be rejected.
- 15. Separate financial bids and EMD is to be submitted for Equipment as per Table-1.
- 16. **TECHNICAL BID:** The tenderer should submit scanned copy of documentary proof of his/her eligibility as mentioned in SECTION III "**Technical Bid**" of this tender document.
- 17. Financial bid will be opened of only those bidders who qualify the technical bid criterion through e-tendering process as mentioned in SECTION III.
- 18. **FINANCIAL BID:** The Financial Bid (**SECTION V**) shall be quoted by the bidder through etendering. The Financial Bid should contain rates taxes if applicable. The rates should be mentioned both in figures as well as in words. Any change in rate quoted by the tenderer afterwards will entail forfeiture of Earnest Money Deposit, cancellation of tender and blacklisting of the firm.
- 19. The award of supply order, when issued to the successful bidder, constitutes the contract with collateral support from terms and conditions of the tender invitation notices as well as formal agreement on non-judicial stamp paper, all of which finally form contractual obligations to be adhered to /performed by the bidder and the non-performance of any of such obligations make the bidder liable for consequential effects i.e. EMD and Performance security forfeiting,

- blacklisting etc. The bid should not contain corrections or over writing.
- 20. The Successful bidder shall have to execute an agreement as per the timelines fixed by PEC, with the Director, Punjab Engineering College (Deemed to be University), on a non-judicial stamp paper of Rs.100/-(Rupees One Hundred only) and provide the equipment(s) as per the specification of tender document and in case they fail to do so, the PEC shall be at liberty to forfeit the performance security deposit and/or EMD, and get the Equipment Provider black-listed.
- 21. Performance Security Deposit: The successful tenderer will have to deposit performance security 5% of the total value of tender item awarded (**Table -1 of SECTION I**) within 15 days of issuance of letter of intent by the competent authority to be paid in the shape of Bank guaranty, Demand draft/ Banker Cheque/ FD/ PBG from any Scheduled Bank in favor of the Director, Punjab Engineering College (Deemed to be University), Chandigarh and the security deposited in connection with any other similar tender will not be considered against this tender. Thereafter, the supply order will be issued. If successful tenderer fails to submit the requisite performance security deposit within prescribed 15 days, Earnest Money Deposit (EMD) deposited by the tenderer will be forfeited and Punjab Engineering College (Deemed to be University) shall be at liberty to declare the equipment(s) provider black listed.
 - The performance security should remain valid for a period of 60 days beyond the date of completion of all obligations of the supplier including warranty obligations.
- 22. Tender received through e-tendering shall be opened online by the Committee duly constituted by the authorities of Punjab Engineering College (Deemed to be University), as per schedule given in Tender Notice in the Computer Centre, Punjab Engineering College (Deemed to be University), Chandigarh. In the event of date of opening of Tender being declared a holiday, the due date of opening of the Tender will be the next working day at the same hours.
- 23. Tender is non-transferable.
- 24. The bidder shall submit the hard copy of e-tender along with forwarding letter (**Annexure-2.1** of **SECTION II**) duly signed by the authorized signatory.
- 25. The bidder must have an experience of providing similar equipments in reputed institutes/Departments/Colleges/ research labs etc. in India during last 3 years from the publication of this tender.
- 26. Downloading and submission of Tender will be done by E-tendering process through the websites of Chandigarh Administration and Punjab Engineering College (Deemed to be University) http://etenders.chd.nic.in or www.pec.ac.in

From			
 To			
	The Director Punjab Engineering Colleg Sector-12, Chandigarh	ge (Deemed to be University)	
Subject:		the Distribution Static Compe Punjab Engineering College (D	
Dear Sir,			
With refere Distribution		I notice inviting e-tender, I/We ATCOM) in Electrical Engine (ersity), Chandigarh.	
tender docu	ment. I/We shall be responsi	d faithfully as set forth in the te ble for all complaints as regards shall be final and binding on me	s to the quality of product
A Demand	Draft NoDated	drawn on	intended for the
prescribed a	amount of Ks	(Rupees(Deemed to be University),	only) in favor of Chandigarh navable at
	is enclosed as earnest money		Chandigarn, payable at
_	•	f earnest money prescribed again	nst this tender in the event
of my/our n		t, provided such contract is impl	
I/We further supply of each during the prescription along with attestation at by me/us (if avorable control of the supplement of the suppl	er understand that my/our ear quipments/service/violation of period of validity. My/Our ten ibed for submission of the te- terms and conditions with rel and with each page of the tende in the capacity of sole owner/sonsideration.	nest money shall stand forfeited any term, or if I/We withdraw a der shall remain valid for a perion nder against the above-mention evant columns and annexure du er paper including the enclosed te general or special attorney attack	my/our tender at any stage od of 90 days from the last ed notice. My/Our tender ally filled in under my/our terms and conditions signed med) is submitted for your
absolute and Contract A	d unqualified acceptance. My ct, 1872 and is open to an ac	carefully and have signed the self-constitutes a firm of ceptance in whole/my/our offertute a legal binding of Contract A	fer under the Indian r, if accepted on the
Thanking y	ou,		
			Yours faithfully,
Place			
			Signatures
			Date with stamp
			& Full Address

ANNEXURE - 2.2

(To be furnished on non-judicial stamp paper duly attested by the 1st Class Magistrate) AFFIDAVIT

I/We/M/s	are registered Compar	ny/Ltd Company etc.
as per Registration Certificate No	issued by	having
registered office at		and
manufacturing/supply base at	do hereby declare and solen	nnly affirm that I/We
have not been Black-listed , nor mine/ou	r Tenders have ever been cancelled by a	ny State/UT/Central
Government or any partner or sharehold	der either directly or indirectly connect	ed with or has any
subsisting interest in the business of	my/our firm nor any legal proceeding	gs have ever been
initiated/pending or any penalty has	ever been levied due to delay of	non-completion of
work/service/supply order by any State/U	T/Central Government or by any authority	y.
Place:	DEP	ONENT
Dated:		
Verification		
I/We do hereby solemnly declare and affi	irm that the above declarations are true ar	nd correct to the best
of my knowledge and beliefs. No part of i	t is false and nothing has been concealed	therein.
Place:	DEPO	NENT
Dated:		

ANNEXURE - 2.3

Details of previous similar equipments installed in India

(Attach self-attested photocopies of the work order and original certificate of satisfactory performance):

S	Type of	Date of	Name and Address of	Value of the	Name of the
No.	Equipment	Installation	the Organization with	Equipment (In Rs.)	contact person
			reference letters		& Mobile No
1					
2					
3					
4					

Place:	SIGNATURE OF THE TENDERER
Date:	with stamp

ANNEXURE - 2.4

Details of previous similar equipment(s) (Last three years) installed in India by you and which will be available for inspection by our officials (Attach self-attested photocopies of the work order and original certificate of satisfactory performance):

S	Type of	Date of	Name and	Value of	Name of	Remarks
No.	Equipment	Installation	Address	the	the	
			of the	Equipment	contact	
			Organization	(In Rs.)	person &	
			with		Mobile No.	
			reference			
			letters			
1						
2						
3						
4						

Place:	SIGNATURE OF THE TENDERER
Date:	with stamp

SECTION III

TECHNICAL BID SCHEDULE OF REQUIREMENT

Table -3 Schedule of requirement

S.No	Item	()mantity	Delivery Schedule	Bid Security
1.	Distribution Static Compensator (DSTATCOM)	01	50 days	Rs. 1,00,000/-

PRE-QUALIFING CRITERIA

Offer will be accepted/uploaded in two covers under Details containing:

FIRST COVER TITLED as "Technical Bid" should contain the Self-attested scanned copies of following with consecutive Sr. No.:-

- 1. Name of the firm/organization & address and telephone/ Mob. No. / Fax. No. on letter pad of the company/firm.
- 2. Earnest money deposit (EMD) as mentioned in Point 14 of SECTION II of this tender document.
- 3. Self-attested copies of Income tax returns of last three years assessments.
- 4. Document showing experience of providing similar equipment(s) to reputed Institutes/Departments/Colleges/ research labs etc. in last three years and satisfactory performance certificate from such Institutions/Departments/College/ etc. (Annexure 2.3 SECTION II).
- 5. Details of previous equipments (Last three years) installed by you and will be available for inspection by our officials. (Annexure 2.4 SECTION II)
- 6. Self-attested copies of PAN/TAN Card/ GST.
- 7. Name, address, contact number, designation/capacity of person signing tender document.
- 8. Registration Certificate of the company issued by the competent authority
- 9. Affidavit of not being Black Listed (Affidavit as per Annexure 2.2 of SECTION II)
- 10. Individual signing the bid or other documents connected with the contract shall submit the proof of signing authority as under:
 - i. A sole proprietor of the firm or constituted attorney of the proprietor as per registration certificate.
- 11. The financial bid of only those bidders will be opened who qualify in a technical bid.
- 12. Covering letter (Annexure 2.1 of SECTION II)
- 13. Annual Turnover for the last three years having an annual turnover of Rs. 1 Crore.
- 14. Manufacturer's authorization certificate

- 15. Proprietary Certificate (if applicable)
- 16. Rate reasonability certificate

NOTE: All the above mentioned documents should be duly in order and are essential to qualify at Technical Bid Stage.

Punjab Engineering College (Deemed to be University) CHANDIGARH

SECTION IV

TECHNICAL SPECIFICATIONS AND DETAILS

I. Name of Equipment: Distribution Static Compensator (DSTATCOM)

Quantity: 01 Nos.

EMD Amount: Rs. 1,00,000/-

Specifications

STATCOM MODULE

- 1. Inverter details: Three phase IGBT based Inverter details
 - I/P AC Voltage:- 415 Volt
 - DC Voltage:- 600 Volt
 - O/P AC Voltage:- 415 Volt
 - O/P AC Current 30 Amp
 - Switching Frequency 20 kHz
 - Fundamental Frequency 50 Hz
 - Type of Cooling:- Forced Air
 - Ambient Temp:- 40 Deg
 - Duty Class:- Class I
 - Cooling Method: Forced Air Cooled.

2. IGBT Details

- V-IGBT=6. Generation Trench V-IGBT
- CAL4= Soft switching 4 Generation CAL-diode.
- Isolated copper baseplate using DCB technology (Direct Copper Bonding).
- Increased power cycling capability.
- With integrated gate resistor.
- Low switching losses at high di/dt.

3. Gate Driver

It should interface and isolate the Control Unit/Primary Circuit from the secondary which is directly connected to the high power. Gate Driver controls the IGBT's dynamic behavior and its short circuit protection. Input signal level is 0/15V. Interlocking time between the input signals is 3µs. It monitors the errors: power supply under-voltage

(below 13 V), short-circuit between Collector and Emitter. The error reset time is typically 9µs. On detection of error/fault, the Gate Driver switches off the IGBT. The IGBT switching speed may be adjusted by the resistors RGON and RGOFF. The two parameters (Rce, Cce) define the values and time delays for the comparison of an internal reference with the monitored value of Vce(sat).

4. Kit Details:

The dc output is given to the input of the IGBT based inverter. DC capacitor bank is connected in between the rectifier and inverter as source to the inverter. 3 phase 415 V ac Output is achieved from the inverter and is provided for the Motor Interface. Driver is the interface unit between the power module and controller. Each Driver drives 2 switches in a Module. +15V/0V supply is given to Vs and GND. Alternate ON/OFF pulses of +15V are given to Vin1 and Vin2. Vin1 corresponds to TOP IGBT and Vin2 corresponds to BOTTOM IGBT. ERROR is triggered when Vs falls below 13.9 V and Short circuit of IGBT. ERROR output is taken to the controller for turning off the system during occurrence of the error.

5. Capacitor & Snubber

Rectified DC input is given to electrolytic filtering capacitors. Each capacitor is 4700 μF / 450 V. 2 capacitors are connected in series to have equivalent capacitance of 2350 μF / 900 V. Resistors of value 27 k / 20 W are connected across each capacitor for voltage balancing. Snubber Capacitors of 0.22 μF / 1500 Vdc (4 nos) are connected across the dc link for voltage overshoot protection. The snubbers limit the over-voltages during commutations and as a consequence reduce the losses. They are kept very close to the device to reduce the inductance between the switches and the capacitors.

6. Cooling

Teaching kit stack assembly is provided with forced air cooling. IGBT modules are mounted on 250 mm heat sink (extruded type). Forced air-cooling is provided by Hi cool Fan. 230VAC 1ph. should be applied to the Fan input terminals provided on the unit. Flow of air is 3 m/s. Input to the fan is $1-\Phi$ 230 V Supply

7. Thermal Protection

Normally Closed Thermal contact switch is used for protection against thermal runaway. The position of the thermal switch normally closed when its temperature is below the threshold temperature (80 deg C) & it changes to normally open above 80 deg C. After cooling down, it again retains it normally closed position. Thermal switch is placed at the warmest point on the heat sink.

8. Interacting Software

- Real time capturing and plotting of voltage & current analog signals.
- 32 virtual input/output for control and monitoring of digital controller signals.
- 32 Digital probes for real time capturing and plotting of signals.
- Real time storage of data for post analysis and data exporting provision to CSV file format.
- Gigabyte Ethernet communication with the board for programming, controlling, monitoring and capturing at high data R/W rate.

 Direct link to Matlab Simulink software. Capability to make the algorithm schematically in Simulink environment using the System generator tool box in Simulink and transfer the code to the controller for hardware implementation.

9. Interacting Controller Details

WAVECT - FPGA based RCP System: It must be having a Xilinx FPGA based controller with Dual ARM® CortexTM-A9 MPCoreTM Which have capability Up to 667 MHz operation along with NEONTM Processing / FPU Engines.

Memory allocation in the board: 1GB/512 MB DDR3 and 256 Mb Quad-SPI Flash with Full size Isolated Voltage(8) and current(8) sensors for feedback

Voltage +/- 0-1000V AC/DC measurement and output is instantaneous

Current Sensor 0-25 AC/DC measurement and output is instantaneous

Dual, 200 KSPS-1MSPS 16 bit 4x2 channel Simultaneous sampling for ADC 15 V, 12X2 PWM Out.

10. Additional Apparatus

- LAN card.
- Connection cables from the application end
- Xilinx vivado 14.4 system edition
- 1 Nos. 3 phase Autotransformer
- 11. **Provision of connecting any type of load:** There must be provision given in the DSTATCOM panel to connect any load (generally non-linear) so that the performance of DSTATCOM is examined.
- 12. **Non-linear load:** An additional Non-linear load should be supplied along with the equipment.

(Additional Technical Specifications)

A) Following Essential accessories should be provided with trainer:

- i. Shrouded patch chord/connecting leads should be supplied.
- ii. Well written student's workbook explaining different experiments with instructor guide.- 01 No.
- iii. A DEMO CD to help student to work by themselves -1 No.
- iv. The equipment must be handy and easily attachable and detachable with the help of screw less couplings.

- v. There should not be any foundation requirements for the setup.
- vi. The setup should have real-time interfacing with PC for real-time recording and storage requirements.
- vii. All the units must be embedded in a single frame structure having wiring diagrams drawn on it.
- viii. A detailed manual of all the equipments must be provided along with system.

Punjab Engineering College (Deemed to be University) CHANDIGARH

SECTION V

FINANCIAL BID

SECOND COVER TITLED AS "FINANCIAL BID" CONSISTS OF

Financial (Price) Bid for Distribution Static Compensator (DSTATCOM) to be supplied by the bidder in the Punjab Engineering College (Deemed to be University), Sector 12, and Chandigarh is as follows:

Tender Inviting Authority: Director, Punjab Engineering College (Deemed to be University), Chandigarh 160012

Equipment Name:

Contract No: PEC/CED/

Bidder Name:

Table -4 Cost of requirement for Distribution Static Compensator (DSTATCOM)

S.No	Description of Work	Qty	Unit	Total Price excluding Taxes
1				

- 1. Rates should be quoted in INR excluding taxes.
- 2. The institute is registered with the dept. of Scientific and Industrial Research (DSIR) for purpose of availing custom duty exemption in terms of Government Notification No. 51/96-Customs Dated 23 July 1996, Notification No. 47/2017- Integrated Tax (Rate) 14/11/17, Notification No. 45/2017- Central Tax (Rate) dated 14/11/17, Notification No. 45/2017- U.T. Tax (Rate) dated 14/11/17 as amended from time to time.

Rs. In figures	
Rs. In words	only)

SECTION VI

GENERAL TERMS AND CONDITIONS

- 1. Clarification of Bidding Documents; A prospective Bidder requiring any clarification of the bidding documents may notify the Purchaser in writing or by telex or cable or fax at the Purchaser's mailing address indicated in the Invitation for Bids. The Purchaser will respond in writing to any request for clarification of the bidding documents which it receives no later than 15 days prior to the deadline for submission of bids prescribed by the Purchaser.
- 2. Amendment of Bidding Documents; 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. In order to allow prospective bidders reasonable time in 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.
- 3. 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. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the translation shall govern.
- 4. Period of Validity of Bids; Bids shall remain valid for 90 days after the deadline for submission of bids prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.
- Opening of Bids by the Purchaser; The Purchaser will open all bids, in the presence of Bidders' representatives who choose to attend, at the time and date as mentioned in *Table2 Time Schedule-* in the following location:

Electrical Engineering Department,
Punjab Engineering College (Deemed to be University)
Sector 12 Chandigarh 160012

The Bidders' representatives/bidders who are present shall sign a register evidencing their attendance.

In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the same time and location on the next working day.

6.	Warranty: The Supplier warrants that the Goods supplied under this Contract are new, unused, of the
	most recent or current models and those 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
	(except when the design and/or material is required by the Purchaser's Specifications) or from any
	act or omission of the Supplier, that may develop under normal use of the supplied Goods in the
	conditions prevailing in the country of final destination.
	☐ The warranty period shall be 36 months from date of acceptance of equipment(s)/machines, mountings, accessories and fittings and any other related spare/parts and equipments. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract.
	The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. "Upon receipt of such notice, the Supplier shall, within the period of 30 days and with all reasonable efforts, repair or replace the defective goods/equipment(s) or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter.
	 □ In the event of any correction of defects or replacement of defective material/part(s) during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 36 months. □ The period of correction of defects in the warranty period is 3 days.
7.	Payment: Payment for Goods and Services shall be made in Indian Rupees only as follows:
	I. On Final Acceptance II. Payment shall be paid on the successful Installation, Training and Satisfactory Performance and on Final Acceptance by the Purchase committee.
	☐ 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 and upon fulfillment of other obligations stipulated in the contract.

	□ Payments shall be made promptly by the Purchaser but in no case later than 120 days after submission of the invoice or claim by the Supplier.				
	☐ Payment shall be made in Indian Rupees only.				
	□ No advance payment will be made. Payment will be released after satisfactory receipt of equipment(s) goods/ material, demonstration/training and installation.				
8.	Documents comprising the Bids; The Bids prepared by the Tenderers shall comprise of following components:				
	☐ Bid to be furnished as per the format for technical specifications.				
	☐ Technical literature for each product/service, covering full technical specifications.				
	☐ Bid prices should be quoted item wise excluding taxes duly signed and complete as per the format.				
	☐ Maximum educational discount as could be offered should be mentioned.				
9.	9. Cost of Tender: The tenderer shall bear all costs associated with the preparation and submission of its Bid, including the cost of presentation for the purpose of clarification of the bid, if so desired by the client and the client will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering Process.				
	Any proprietary terms used in specifications may be quoted with equivalent specifications. Others Terms and Conditions:				
	☐ An EMD/ bid security of equipment should be submitted for each item in form of DD in favour of the Director, Punjab Engineering College (Deemed to be University), Chandigarh. Tender without earnest money shall be considered unresponsive and rejected.				
	☐ A Performance security of 5% of the cost of the equipment will have to be deposited by the successful bidder awarded the supply order in form of Demand draft/ Banker Cheque/ FD/ PBG from a commercial bank which should be valid for 60 days beyond the completion of warranty. Warranty period shall be 3 years from the date of handling over of the equipment to the satisfaction of Director PEC.				
	Performance Security will be forfeited and credited to the institute (PEC University of Technology, Chandigarh) in the event the supplier does not honors the warranty and other terms and conditions of the tender.				
	 □ It must be specified if the packing, insurance will be inclusive of the prices quoted. □ Delivery Period of the equipment shall be less than 60 days from the date of supply order. 				
	☐ Detailed Catalogue should be sent along with supply of equipment(s).				

Indian Laws.
The Director, Punjab Engineering College (Deemed to be University), Chandigarh reserves to himself the right to reject any or all tenders without assigning any reasons.
The firm who has been blacklisted by Centre/State Govt/UT/Boards/Corporations/any Government authority/PEC University of Technology is not eligible for the Tender.
The successful firm is required to deliver successful installation/ commissioning of the equipment within the specified time period mentioned in the P.O. If they fails to do so, the penalty @ 0.5% per week on total amount of the tender will be imposed after expiry of the said period.
All the rates will be FOR, Punjab Engineering College (Deemed to be University), Chandigarh.
The institute being a premier Education and Research Institute funded by Chandigarh Administration, discounts as applicable to Research Institute/Educational Institutes may be provided in the Tender.
The bidders shall not be allowed to change, alter or modify the bids after expiry of the deadlines for the receipts of bids.
The firm is entirely responsible for any damage or losses occurred to the material in the transit. The firm will lodge all complaints regarding the damage occurred in the transit and shall bear all expenses.
If an agent bids on behalf of the Principal/OEM, the same agent shall not bid on behalf of another Principal/OEM in the same tender for the same item/ product.
Situation in which bid security will stand forfeited if a bidder withdraws its bid during the period of bid validity specified by the bidder on the bid form and in case of successful bidder, if the bidder fails to complete the project or to furnish performance security in accordance with the tender.
Bids received after the due date will be rejected.
The tenderer is required to bring their own testing and measurement instruments which are required for the installation, commissioning and testing. These can be taken back after completion of the process.
Form 'D' will not be issued If price is quoted in foreign currency, the equivalent rupee price must also be indicated.
In case, any free gift scheme / cash scheme is launched by the company same will be Offered by the vender to Punjab Engineering College (Deemed to be University), Chandigarh free of cost.

	Generally the bid offer will be received /opened on the day as specified in the time schedule. If the scheduled date is declared as a holiday, then the tender shall be received / opened on the next working day at the same time.
	The agency/supplier shall arrange to provide demonstration/Training to the concerned lab staff regarding operation / maintenance of equipment(s) free of cost.
	The institute has been exempted from custom duty in terms of Government Notification No. 51/96-Customs Dated 23 July 1996, Notification No. 47/2017- Integrated Tax (Rate) 14/11/17, Notification No. 45/2017- Central Tax (Rate) dated 14/11/17, Notification No. 45/2017- U.T. Tax (Rate) dated 14/11/17 as amended from time to time.
	Warranty period shall be 03 year of the equipment(s) installation /Demonstration to Punjab Engineering College (Deemed to be University).
	A technical compliance chart of the quoted product mentioning technical specifications of quoted product verses asked specifications is compulsory. Attach the compliance chart with technical bid.
	List of users of the quoted model in India along with their names, telephone numbers and email addresses should be sent along with the quotation.
	Tender validity should be 90 days from the opening of tender.
the t	erms and Conditions of this tender document are acceptable to me /us.

All

Signature of Bidder

SECTION VII

CONTRACT FORM

(To be executed on Rs 100/- stamp paper)

AGREEMENT FOR the Provision of "Distribution Static Compensator (DSTATCOM)" in
Punjab Engineering College (Deemed to be University), Sector – 12, Chandigarh.
This agreement has been made on this day of 2017 at Punjah
Engineering College (Deemed to be University), Chandigarh between Director, Punjah
Engineering College (Deemed to be University), Chandigarh, and M/s
registered under the companies Act
1956 and having its registered office at
(hereinafte
referred to the supplier and expression shall include his/their respective heirs, executors
administrators and assignees), represented by Shri, S/o Sh.
on the other part. And whereas the Director, Punjab Engineering
College (Deemed to be University) has empanelled some agencies for providing Equipment(s) to
Electrical Engineering Department, as per the terms and conditions, specifications and genera
conditions of the Tender, as attached along with this agreement. And whereas the said terms and
conditions, specifications as well as the scope of work to be done, as set out in the Genera
Conditions of the Tender, have been accepted and signed by the supplier. And whereas the
supplier has agreed to execute, upon and subject to the condition set forth herein, (herein referred
to as the said conditions) the work shown in the General Conditions of the supplier.
And whereas the supplier had deposited a sum of Rs as security in the form of
a Demand draft/ Banker Cheque/ FD/ PBG order Nodated
issued by
in favor of the Director, Punjab Engineering College (Deemed to be
University), Chandigarh as performance security deposit for the said equipment and has agreed
that this be retained by the Director Punjab Engineering College (Deemed to be University)
Chandigarh as security deposit.
Now therefore, it is hereby agreed as follows:
(a) In consideration of the payment to be made to the supplier, as hereinafter provided and
agreed to by both the parties, the supplier shall upon and subject to the said condition execute
and complete the contract.

- (b) Director, Punjab Engineering College (Deemed to be University), Chandigarh, shall pay the supplier such sums as shall become payable hereunder at the time and in the manner specified in the said conditions.
- (c) The quality of performance related to the work is the essence of the contract and in the event of failure to perform as per term and conditions of the contract and to the satisfaction of the; the supplier shall be penalized as per provisions of the contract.
- (d) The scope of work and prices schedule of quantities and conditions of tender shall form the basis of this contract and the decision of the Director, Punjab Engineering College (Deemed to be University) or arbitrator, in reference to all matters of dispute shall be final and binding on both parties.
- (e) The said conditions of tender document and this agreement thereto shall be read and constructed as forming part of this agreement and the parties hereto will respectively abide by and submit themselves to the conditions and perform the agreement on their parts respectively in such conditions contained.
- (f) The several parts of this contract have been read to us and fully understood by us. In witness whereof the parties hereto have set their respective hands the day and the year herein above written.

ARBITRATION

- i). Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement or matter whatsoever, before/after completion or abandonment of work or during extended period, hereafter arises between the parties, as to the meaning, operation or effect of the contract or out of or relating to the contract or breach thereof, shall be referred to a Sole Arbitrator to be appointed by the Director of the Institute (PEC University of Technology) at the time of the dispute. The award given by the arbitrator so appointed shall be binding on the parties. It will not be open to the parties to challenge the jurisdiction of the arbitrator after the award has been made.
- ii). If the arbitrator to whom the matter is originally referred dies or refuses to act or resigns/withdraws for any reason from the position of arbitration, it shall be lawful for the Director of the Institute to appoint another to act as arbitrator in the manner aforesaid. Such person shall be entitled to proceed with reference from the stage at which it was left by his predecessor if both the parties consent to this effect failing which the arbitrator shall be entitled to precede de-novo. iii). It is a term of the contract that the party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration under the clause.
- iv). It is a term of the contract that the cost of arbitration shall be borne by the parties themselves.

- v). Subject to the aforesaid provisions, the Conciliation and Arbitration Act, 1996 and the rules made thereunder and any modification thereof from the time being in force shall be deemed to apply to the arbitration proceedings under this clause.
- vi). All disputes arising out of or in any way connected with this agreement or arbitration shall be deemed to have arisen in Chandigarh and only courts in Chandigarh shall have jurisdiction to determine the same.

The Director,						
Punjab Engineering College (Deemed to be Universit	y)	Shri				
Chandigarh		M/S				
-	(FOR	&	ON	BEHALF	OF	THE
	Contra	actor)			
	In the p	reser	ice of:			
	1.			2.		
	(Witne	ess)		C	Witne	ss)

PERFORMANCE SECURITY FORM

10: (Name of Purc.	haser)
WHEREAS(Name	of Supplier)
Herein after called "the Supplier" has under taken, in pursuan	nce of Contract (Notification of Award)
Nodated,20 to supply	(Description
of Goods/equipment and Services) hereinafter called "the	Contract". AND WHEREAS it has been
stipulated by you in the said Contract that the Supplier shall	furnish you with a Bank Guarantee by
a recognized bank for the sum specified therein as security	for compliance with the Supplier's
performance obligations in accordance with the Contract.	AND WHEREAS we have agreed to give
the Supplier a Guarantee:	
THEREFORE WE hereby affirm that we are Guarantors a	and responsible to you, on behalf of the
Supplier, up to a total of	(Amount of the
Guarantee in Words and Figures) and we undertake to pay	you, upon your first written demand
declaring the Supplier to be in default under the Contract and	l without cavil or argument, any sum
or sums within the limit of(Amount of	of Guarantee) as aforesaid, without your
needing to prove or to show grounds or reasons for your d	emand or
the sum specified therein. This guarantee is valid until the	day of20
	Signature and Seal of Guarantors
	Date20
	Address:

PERFORMANCE STATEMENT

Please attach "Performa for Performance Statement"