

### SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING & TECHNOLOGY, VISHNUPURI NANDED-431606

File No. SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant /Camp. Electrical /2024-25

#### 2<sup>nd</sup> extension III Call on Date: 03.01.2025

Refer our e-tender id. 2024 DTEDM 1118982 1 e-Tender notice published on institute web <u>www.sggs.ac.in</u> and Portal https://mahatenders.gov.in on **29.11.2024**, Due to insufficient response to tender notice, the last date of purchase of e-tender for supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant is 16.01.2025. on portal web site The tender is available **e**xtend up to Institute https://mahatenders.gov.in well as as http://sggs.ac.in.

Sd/DIRECTOR

# SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING & TECHNOLOGY, VISHNUPURI, NANDED - 431 606



#### e -TENDER DOCUMENTS

#### For

Supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant

## For Campus Electrification

#### e-Tender Notice No.

SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant /Camp. Elect./2024-25

Date 29/11/2024

#### e-Tenders available on

Web sites <a href="https://mahatenders.gov.in">https://mahatenders.gov.in</a>
Institute web site <a href="http://www.sggs.ac.in">http://www.sggs.ac.in</a>

Price of e-Tender Document Rs. 3,000/-

#### SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING & TECHNOLOGY, VISHNUPURI, NANDED. 431 606

File No. SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant /Camp. Electrical /2024-25

Date: 29/11/2024

#### NOTICE FOR INVITATION OF e-TENDER

- 1. The institute invites online tenders/quotations for *supply*, *installation*, *testing* & *commissioning* of *interconnecting* DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant at our institute from Manufacturers/Authorised Dealers who have registered under Shop Act, CGST/SGST Registration Certificate as manufacturer / authorised dealers, suppliers of the same material/equipment and Electrical Contractors; details as per the e-tender notice published in newspaper. (Press note enclosed here with).
- 2. The Terms and conditions, which shall govern the contract made on behalf of the institute, are also enclosed.
- **3.** The Tenderers are requested to read the instructions, Terms and conditions in the e-Tender carefully before quoting the rates in quotations / Tender Schedule and comply with the same.
- **4.** The Tenderer should satisfy & comply all the Terms & conditions and instructions, which are mentioned in the e-Tender Notice and in this e-Tender document and there after amendments made if any.
- 5. The institute reserves the right to delete any item or items or to increase or to decrease the quantity of any item or items from the e-Tender Schedule.
- **6.** All the rights to increase or decrease the quantity of the required item is reserved, the right to cancel any item or items is reserved with the director of the institute.
- 7. The right to amend the tender documents before the deadline of sale of tender is reserved with the director of the institute, by issuing addenda/corrigendum.
- 8. The right to accept or reject any / or all the tenders/quotations from any or all parties without assigning any reason is reserved.

SD DIRECTOR Shri Guru Gobind Singhji Institute of Engg. & Tech. Vishnupuri, Nanded.



# Press note SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, VISHNUPURI, NANDED 431 606

File No. SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant /Camp. Electrical /2024-25

Date: 29/11/2024

#### e-TENDER NOTICE

Online Tenders / quotations are invited for *Supply, Installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant* of this institute from manufacturers / Authorised Dealers, Electrical Contractors those who have registered under Shop Act, CGST/SGST Registration Certificate for required goods. The e-Tender documents containing all detailed **specification of the** Equipments & Tender's **Terms and conditions** will be available on the web sites <a href="https://mahatenders.gov.in">https://mahatenders.gov.in</a> & <a href="https://www.sggs.ac.in">https://www.sggs.ac.in</a>. Vendors can download and submit their tenders online only from <a href="https://mahatenders.gov.in">https://mahatenders.gov.in</a>. e-tender fees Rs. 3,000/-.

EMD is Rs. 45,000=00

The tender EMD and Tender Fees should be paid online using given payment options on mahatenders.gov.in

All tenders should be submitted on or before **online key schedule** & technical bids will be opened on **as per key schedule**.

The right to accept or reject any or all the quotations / tenders from any or all parties without assigning any reason is reserved.

SD Director

File No. SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant /Camp. Electrical /2024-25

Date: 29/11/2024

**Tender Schedule: (Key Dates)** 

Sr.	Particular Particular	Date	Time
No.			
1	Tender Publishing	29-11-2024	04.00 PM
2	Bid Submission Start	29-11-2024	04.00 PM
3	Bid Submission End	16-12-2024	04.00 PM
4	Technical Bid Opening	19-12-2024	04.00 PM
5	Financial Bid Opening	After preparation of technical summary C	04.00 PM

#### e-TENDERING PROCEDURE

#### **Tender Information:**

Tender Forms can be available on the e-Tendering Portal Maharashtra Government i.e. https://mahatenders.gov.in.

All vendor/bidder are cautioned that tenders containing any deviation from the contractual terms and conditions, specifications or other requirements and conditional tenders will be treated as nonresponsive. The tenderer should clearly mention in the forwarding letter that his offer (in envelope No. 1& 2) does not contain any conditions, deviations from terms and conditions stipulated in the tender.

Vendor/bidder should have valid Class II / III Digital Signature Certificate (DSC) obtained from any Certifying Authorities. In case of requirement of DSC, interested Bidders should go to http://maharashtra.etenders.in/mah/DigitalCerti.asp and follow the procedure mentioned in the document 'Procedure for application of Digital Certificate'.

Vendor/bidder should install the Mandatory Components available on the Home Page of <a href="https://mahatenders.gov.in">https://mahatenders.gov.in</a> under the section 'Mandatory Components' and make the necessary Browser Settings provided under section 'Internet Explorer Settings'

Guidelines to Bidders on the operations of Electronic Tendering System on <a href="https://mahatenders.gov.in">https://mahatenders.gov.in</a>

## SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING & TECHNOLOGY, VISHNUPURI, NANDED. 431 606

File No. SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant/Camp. Electrical/2024-25

Date: 29/11/2024

#### INSTRUCTIONS TO TENDERERS/BIDDERS

- 1. The Tenderer should submit quotations / Tenders in online sealed envelope. Please note **No EMD** exemption will be considered, and all interested bidders must pay **EMD Rs. 45,000=00** by online payment gateway
- 2. The quoted goods/material & accessories/allied components should be strictly as per our specifications and should be given with detailed specifications in writing on your letter head along with catalogue.
- **3.** It should be noted that the Technical Bids will be opened and scrutinized online as per key dates, technically qualified vendor price bid will be opened as per online schedule.
- 4. The Tenders / quotations should be strictly as per the G.R. of Maharashtra Govt. (ਮੀਲਿਸ-2014/ਪੈ. Ţ.82/ਮੀਯ-III/ਰੋB) ਯ-4 date: 01/12/2016) for two Bid systems, bidder should quote rate as per the specification provided by Tender calling authority.
- 5. Bidder should note that they will have to submit as per online envelops
  - A) ENVELOPE No. 1 [TECHNICAL BID]: The first Envelope is T1 i.e. "ENVELOPE No. 1" for Supply, Installation, Testing & Commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant." shall be consisting of the following documents. All attached copies should be the attested.
    - **a.** The attested copies of the Registrations under Shop Act.
    - **b.** CGST/SGST Registration Certificate.
    - c. Registered Electrical Contractor Certificate. [OEM] Original Equipment Manufacturer certificate OR Authorised Dealership Certificate from manufacturer.
    - **d.** Income Tax Returns of last three financial year.
    - **e.** GST Clearance/ challan copy for last four quarters.
    - **f.** The technical literature of the *Laying, stringing of 290-meter 300sq.mm, 3.5core poly cab cable and its installation* to be supplied.
    - **g.** Acceptance of terms and conditions. [Page no.6,7,8,9,10]
    - **h.** Annexure "A" [See page no.17]
    - i. Format 1 [See page no. 18]

#### B) ENVELOPE No. 2 [Commercial Bid / envelope for Rates]: -

It is available with tender document in excel format i.e. BOQ. Tenderer should fill and upload online only given BOQ

The pricing of each item in INR should be quoted separately.

- 6. The bidder should note that in case Envelope No. 1 does not full fill any requirement like tender fees, EMD, registration of Shop under Shop Act and CGST/SGST Registration No., Authorisation from Manufacturer or any documents required as per technical bid the Envelope No. 2 will not be opened and the offered quotation will be liable for rejection.
- 7. The tenderer should quote the rates on quotation/our enclosed Tender schedule duly signed online with valid digital certificate. Vendors should not quote the rates anywhere directly or indirectly in Envelope No. 1.

- **8.** If there is any correction in quotation, it is allowed at bid preparation stage only, once time for bid preparation is over no corrections will be allowed.
- **9.** Tenderer must follow all instructions, terms and conditions. If he fails to follow any of the conditions, and instructions, his / her Tender / Quotation are to be liable for rejection.
- **10.** Tenderer, whose Offer is found to be the lowest in price as per clause No. 1 & as per our specifications, will be informed about the same, He will have to deposit 5% amount of total quantity as Security Deposit (S.D.); after receipt of S.D. orders will be placed.
- **11.** If the Tenderer is manufacturer or authorised dealer and the item is the PROPRIETARY item, then they should furnish the "PROPRIETARY ITEM CERTIFICATE" along with the quotation/Tender.

SD DIRECTOR SGGSIE&T NANDED

## SHRI GURU GOBIND SHINGHJI INSTITUTE OF ENGINEERING & TECHNOLOGY, VISHNUPURI, NANDED. 431 606

File No. SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant/Camp. Electrical /2024-25

Date: 29/11/2024

#### TERMS AND CONDITIONS

- 1. The rates should be quoted online as F.O.R. Destination at Vishnupuri, Nanded.
- **2.** CGST/SGST, if any tax, Levis, Freight, Packing, Forwarding and Insurance Charges etc. must be incorporated in quoted amount.
- 3. No additional amount will be considered or paid excluding rates quoted by bidder.
- 4. The validity period for the rates offered should be clearly mentioned and it should be minimum 180 days from the date of opening. Items quoted should be confirms our specification. In addition, please furnish your detailed specifications against each item, the relevant catalogue/pamphlet should be necessary to accompany with the quotations; if any deviations in the specifications, then please submit the statement duly signed as mentioned in "Instructions to Tenderer"
- 5. The delivery period should be maximum 5 weeks from the date of issue of purchase order.
  - a) Firm should have to quote the delivery period clearly from the date of receipt of order or confirmed order.
  - b) **Penalty clause:** If supplier fails to supply the ordered material within the scheduled delivery period, for late delivery of goods we will be entitled to recover the liquidated damages as a sum equal to ½ percent of the price of stores delivered late per week.
- **6.** Extension of Delivery period: The delivery period as mentioned in purchase order may be extended.
  - a) If the completion of supply of goods/components/equipments/etc is Delayed due to reasons such as act of God, act of public enemy, Wars, Act of Government, Fires, Floods, Epidemics, Quarantine, Restrictions, Strikes and Freight embargoes the delivery period may be extended.
  - **b)** Supplier will have to give notice within 10 days to this institute in writing of his claim for an extension of the delivery period. After receipt of such notice and verification, if necessary, the delivery period will be extended but without prejudice to other terms and conditions of the purchase order and Tender notice/Tender document's conditions.
  - c) If supplier has delivered material even after expiry of extended delivery period, then we will be entitled to recover the liquidated damages.
- 7. The instructions manual for each equipment/components/machinery/material should be supplied separately with each item/s supplied.
- **8.** Supplier's Technician/Engineer must carry out the demonstration and installation at our site, free of cost
- **9.** The institute reserves the right to accept any/all quotations, reject any/all quotations and to order any of the item/s in any quantity without assigning any reason.
  - a) The institute reserves the right with itself to delete any item/s from Tender Enquiry.
- 10. The items will be checked at the institute and acceptance is subject to the approval of the institute.
- 11. If the supply of goods/equipment's/material or any part thereof is rejected by the institute, the supplier will have to bear all expenses incurred in the matter including all charges for return and replacement of the items. The rejected material/ equipment's/parts of equipment's should be got it back by supplier on their own cost.

#### 12. PAYMENT CONDITION: -

[Send Your Bank Details i. e. name of Bank, IFSC code, mobile number etc]

- \* For equipments and instruments/components etc those items are required to be installed and demonstrated at this institute:
- **I.** 90% payment on demonstration of satisfactory installation and working and peripherals, balance 10% after 30 days. For balance 10% payment firm/supplier must submit separate bill/invoice.
- **13. Inspection of Goods:** The ordered equipment's/goods/instruments will be inspected if required by our representative at your workshop/show room before despatch of goods.
- a) The supplier should inform the date of inspection in advance by 10 days.
- **b)** The supplier will have to provide free lodging and boarding facilities to our representative who would carry out inspection.
- **14.** The equipments should be guaranteed for minimum one year from the date of installation of the goods.
- 15. The repairs within the guarantee period must be carried out at own cost of supplier.
- **16.** If there are any damages in transit, that should be repaired / or equipments should be replaced by the supplier of their own cost.
- 17. The gate pass of excise duty must be supplied in duplicate.
- **18. Demurrage:** If any demurrage will be charged due to any delay any other reasons from supplier; then the same should be beard by supplier or it can be deducted from their final payment.
- **19. Mode of Despatches:-** Equipments/Stores/Components/Machineries should be despatched by Railway or Road Transport as per availability of facilities. The road transporters office / Godown must be available at Nanded City. A copy of the invoice / bill and packing list should invariably be kept inside each of the packages.
- **20.** The package should be marked as follows
  - a) Consignee: Director, S.G.G.S. Institute of Engg. and Tech., VISHNUPURI, NANDED 431 606 (MAHARASHTRA)
  - b) Purchase Order No. \_\_\_\_\_Date \_\_\_\_Department. \_\_\_\_R.R. /L.R. No. \_\_\_\_Number of cases/packages \_\_\_\_\_\_ S.G.G.S. Institute of Engineering and Technology, VISHNUPURI, NANDED (M.S.) Destination: Nanded.
- **21.** Cancellation of purchase orders:- institute reserves the right to cancel the purchase orders on following grounds.
  - a) If supplier fails to supply the goods/equipments/machinery/components within the delivery period without confirmation of extension of the period from the institute or without obtaining the permission for extension of delivery period.
  - **b)** If the supplier fails to supply the goods within extended delivery period.
  - c) If supplier fails to follow the terms & conditions and instructions as mentioned in the tender documents or conditions mentioned in purchase orders.
  - **d)** If supplier found defaulter.
- 22. The institute has reserves the right to place an order for any party who is ready to supply on lowest rate for the items cancelled the order as above clause 21, and institute has reserves the right to place an order on 2<sup>nd</sup> lowest rate if any supplier not ready to supply on 1<sup>st</sup> lowest rate for items which order cancelled (which was placed on 1<sup>st</sup> lowest but party fails to supply).
- 23. Security Deposit: Successful tenderer will be informed that their quotation/Tender rates are acceptable to us, such Tenderer should deposit the 5% value of the equipments/order value; in form of Demand Draft/Bank Guarantee in favour of Director, S.G.G.S.I.E.& T., Nanded, payable at State Bank of India, Vishnupuri, Nanded or any Nationalised Bank at Nanded. The Security Deposit will be refundable after completion of 3 year from the date of complete payment of ordered items.

- **24.** The Security Deposit is liable to be forfeited in the event of non-fulfilment of terms and conditions by the tenderer.
  - a) If any stores, equipment/all equipments or any parts of equipment Is/are damaged in transit, and not replaced by supplier within stipulated period as notified by institute. We will recover the damages, and applicable expenditure will be deducted from balance payment of supplier or from Security Deposit; or Security Deposit will be forfeited.
- **25.** All the replacement of stores/equipments shall also be guaranteed for a period of 12 month from the date of installation and demonstration.
- **26.** If any short supply is found at the time of verification/inspection of material/checking of material on its receipt, the supplier will have to supply the material within 15 days. Non-compliance of the order will compel institute to recover the cost from balance payment.
- 27. Repeat order: If necessary/any equipment/stores are required in additional number, the repeat order will be placed on previous purchase order. The supplier should have to supply the equipment/s, stores as per the previous rates.
- **28.** Training: If we required training facility to our representative/staffs the supplier should have to provide training facility on free of cost.
- **29.** The origin of stores offered whether Indian or foreign and in the case of the former State in which it is manufactured should be clearly stated against each article/equipment.

#### 30. IMPORTED EQUIPMENTS: -

- a) If any tenderer is going to quote the imported equipment's, he should quote the rates in Indian currency (Rupees), and he should note that, if the item finalised to purchase, they should supply at our door delivery and payment will be made in Rupees only.
- b) If such equipment's are in foreign currency and agent/or manufacturer/dealer has quoted the equipment's. The Tenderer should have to quote the rates, all charges, Freight, Insurance clearly. F.O.R. VISHNUPURI site; If finalised to purchase the imported equipment's, he should do all Import formalities; and must be followed all other conditions of Tender Notice/documents and purchase orders; and the tenderer must supply at our site.
- **31. Disputes: -** If any disputes or differences, questions whatsoever arise the same subject to Nanded Jurisdiction.

SD DIRECTOR S.G.G.S.I.E. & T., Nanded.

#### SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING & TECHNOLOGY, VISHNUPURI, NANDED. 431 606

#### e-TENDER SCHEDULE

File No. SGGSIE&T/Stores-3284/supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant/Camp. Electrical /2024-25

Date: 29/11/2024

Name of the Head of Stores: Equipments/Non – Recurring [Dead Stock]/ Recurring

Note: Please read carefully all instructions, required specifications, Terms & conditions before quoting the rates.

Sr.	Name of the Equipment & Technical Specification of the equipment		Rate	Remark/
No.		Qty.		Make
01	File No. SGGSIE&T/Stores-3284/supply, installation, testing &		Your rate	
	commissioning of interconnecting DG power supply arrangement	work	quote in our	
	for uninterrupted operation of 500 kWp solar PV plant		BOQ file.	

Please find the specification/scope of work for supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant.

#### 1. General Information:-

**Project title:** Supply and installation of DG Electrical panels and Associated LV cables for IT block, Admin block, and Additional buildings with integration of solar power system.

**Scope of work:** The scope of work includes the supply, installation, testing and commissioning of electrical panels, LV cables, changeover switches and solar power systems. The work shall be carried out in compliance with the detailed description provided in this document.

**Location:** Various buildings within the campus, including the IT block, Admin block, Girls hostel, Textile building and Electronics & Instrumentation building.

#### **Technical Specifications:**

This document outlines the technical specifications for the electrical panels and cables required for DG systems and the integration of solar power panels with the existing electrical infrastructure.

#### 2. Detailed scope of work:-

#### 2.1 DG system for Admin block (DG 1)-01 no. 250KVA (Koel mk)

#### 2.1.1 Electrical Panel (DG panel 1):

- ➤ Indoor metal enclosure compartmentalized panel (IP 42), AC distribution box with.
  - 3 incomers (100A, 100A, 200A MCCB, 4P) for instrumentation, COE building, Admin & Girls hostel.
  - 1 outgoing 400A MCCB, 4P, 26KA for 415V, 3 phase, 4 wire, 50Hz, 400A A1 busbar.
  - Floor mounted with appropriate earthing arrangements.
  - Floor mounted with appropriate earthing arrangements.
  - *Indication lamps on all feeders.*
  - *Cable entry from the bottom.*

#### 2.1.2 Low voltage (LV) cables:

- DG panel 1 to Admin building: 3.5 core, 50 sq.mm A2XFY.
- DG panel 1 to Girls hostel: 3.5 core, 50 sq.mm A2XFY.

- DG panel 1 to Instrumentation/Center of Excellence (CoE)/Electrical Building: 3.5 core, 150 sq.mm A2XFY.
- *DG 1 to DG panel 1: 3.5 core, 300 sq.mm A2XFY.*

#### 2.1.3 Changeover switch:

- 200A Two-in one-out changeover switch.
- 100A Two-in one-out changeover switch.

#### 2.1.4 Other requirements:

• Cable termination, civil work and any additional necessary arrangements.

#### 2.2 DG system for I.T. Building (DG 2)-01 no. 250 KVA (Cummins mk)

#### 2.2.1 Electrical Panel (DG panel 1):

- Indoor metal enclosure compartmentalized panel (IP 42), AC distribution box with.
- 2 incomers (100A, 250A, MCCB, 4P) for I.T. Building and Textile Building.
- 1 outgoing 400A MCCB, 4P, 26 KA for 415V, 3 phase, 4 wire, 50Hz, 400A A1 busbar.
- Floor mounted with appropriate earthing arrangements.
- Indication lamps on all feeders.
- *Cable entry from the bottom.*

#### 2.2.2 Low voltage (LV) cables:

- DG panel 2 to I.T.Building: 3.5 core, 150 sq.mm A2XFY.
- DG panel 2 to Textile Building: 3.5 core, 50 sq.mm A2XFY.
- DG 2 to DG panel 2: 3.5 core, 350 sq.mm A2XFY.

#### 2.2.3 Changeover switch:

- 200A Two-in one-out changeover switch.
- 100A Two-in one-out changeover switch.

#### 2.2.4 Other requirements:

• Cable termination, civil work and any additional necessary arrangements.

#### 3. Solar Power Integration

- > The solar power system shall be integrated into the existing electrical infrastructure, ensuring the following operational principles:
  - *Grid-Solar Operation:* Solar panels generate DC power which will be converted to grid-compliant AC by inverters. Solar PV power will operate in parallel with the grid to reduce utility consumption.
  - Solar-DG Interlock: Solar PV and DG systems will not operate in parallel. During grid outages where DG systems are operational, solar inverters will disconnect automatically.

#### 3.1 Infrastructure setup:

- Establish a separate infrastructure for DG and MSEB supplies for each building.
- Solar power will be connected to the changeover switch in each building, ensuring MSEB and DG power supplies operate independently of each other.
- Solar PV will always operate in conjunction with MSEB supply and not DB supply.

#### 3.2 Solar power system specifications:

- *Solar PV panels mounted to generate DC power.*
- Inverters to convert DC to AC for direct consumption or export to the grid.
- System will auto-disconnect if grid parameters are out of range to prevent islanding.

#### 4. Terms and conditions:

#### 4.1 Delivery and Installation:

- The contractor shall be responsible for the supply, installation, testing and commissioning of all equipment at the specified locations.
- Delivery must be made within the time frame agreed upon at the time of the contract signing.

#### 4.2 Warranty:

• A warranty period of a minimum of 24 months from the date of commissioning shall be provided for all supplied equipment.

#### 4.3 Compliance with standards:

• All equipment and installations must comply with relevant national and international standards.

#### 4.4 Testing and Commissioning:

• The contractor must carry out all necessary tests and obtain approval from the client before the final handover.

#### 5. Quantity, Units and Load:

Sr.no.	Description	Qty.	Unit
I. For DG 1			
1	Electrical panel: Three incomer & one outgoing (DG panel 1) (Indoor metal enclosure box, Compartmentalised Ip 42 AC distribution box with 3 no. (100A, 100A, 200 A) 4P with MCCB, incomer, suitable for 3 in 1 out arrangement & outgoing of 400A MCCB 4P, 26kA suitable for 415V, 3Ph 4 wire, 50 Hz, 400 A A1 busbar with floor mounting and earthing arrangement with indication lamp on all feeder, cable entry from bottom)	1	Nos.
2	DG panel 1 to Admin building (3.5C X 50 SQ.MM A2XFY)-Incomer	100	Mtrs.
3	DG panel 1 to Girls Hostel (3.5C X 50 SQ.MM A2XFY)-Incomer	260	Mtrs.
4	DG panel 1 to Instru/CoE/Electrical (3.5C X 150 SQ.MM A2XFY)-Incomer	210	Mtrs.
5	DG 1 to DG panel 1 (3.5C X 300 SQ.MM A2XFY)- Outgoing	15	Mtrs.
C. Changeover Switch (Two in one out)			
1	200 A	1	No.
2	100 A	2	Nos.

Sr.no	Description		
D. Termination, Civil Work & others			
1	Termination, Civil Work & Others	1	Lot
II. For DG 2			
1	Electrical panel: Two incomer & one outgoing (DG panel 2) (Indoor metal enclosure box, Compartmentalised Ip 42 AC distribution box with 2 no. (100A, 250 A) 4P with MCCB, incomer, suitable for 2 in 1 out arrangement & outgoing of 400A MCCB 4P, 26kA suitable for 415V, 3Ph 4 wire, 50 Hz, 400 A A1 busbar with floor mounting and earthing arrangement with indication lamp on all feeder, cable entry from bottom)	1	No.
2	DG panel 2 to I.T. building (3.5C X 50 SQ.MM A2XFY)-Incomer	225	Mtrs.
3	DG panel 2 to Textile Building (3.5C X 50 SQ.MM A2XFY)- Incomer	90	Mtrs.
4	DG 2 to DG panel 2 (3.5C X 300 SQ.MM A2XFY)-Outgoing	15	Mtrs.
C. Changeover Switch (Two in one out)	250 A	1	No.
2	100 A	1	No.
D. Termination, Civil Work & Others	Termination, Civil Work & Others	1	Lot

#### Cable sizes and feeder rating are considered as per loads provided below:

Name of Building	Load (KW)	
Electronics & Instrumentation Engg.	90	
Admin	40	
Girls Hostel	30	
Incomer DG 1	200	
Information Technology (I.T.)	100	
Textile Technology	40	
Incomer DG 2	200	

#### Plan of work: Cable laying and associated civil works

The contractor shall be responsible for the following task as part of the scope of work:

#### 1. Site survey and preparation:

- Conduct a detailed site survey to confirm the cable route and identify any obstructions, road crossing, or areas requiring special handling.
- Mark the cable route and provide cable route markers as per BIS standards.

#### 2. Excavation and trenching:

- Excavate trenches along the designated cable route, maintaining specified depths and widths as per project requirements.
- Provide safety measures during excavation, particularly for road crossings and other critical areas.

#### 3. Cable laying:

- Lay cables in trenches or along wall, following BIS standards.
- Install cables in conduit pipes for protection, especially at road crossings and exposed areas.
- Ensure proper alignment and secure cables with saddles, jointing, and bending as required.

#### 4. Crossing of roads and other obstacles:

- Route cables safely across roads and other obstacles using appropriate methods such as drilling, punching, or breaking through walls and barriers.
- Ensure road crossings and other critical areas are reinforced with protective conduits.

#### 5. Backfilling and restoration:

- Backfill all excavated trenches after cable installation, compacting the material as specified to ensure stability.
- Restore the site to its original condition or as specified (e.g., repaving roads, restoring walls, or reapplying plaster).

#### 6. Jointing and termination:

- Perform cable jointing where required, using approved jointing kits.
- Ensure proper termination of cables at distribution points or panels, as per technical requirements.

#### 7. Mounting and termination:

- Install and secure cables along walls or structures using saddles, clamps, and other fasteners.
- Align and tighten cables to ensure a neat and secure installation.

#### 8. Painting and finishing:

- Apply anti-corrosion paint to all metallic support structures or fasteners used for securing the cables.
- Refinish any disturbed surfaces with appropriate plastering and painting as needed.

#### 9. Final testing:

- Conduct electrical testing of the installed cables to ensure proper functionality and compliance with project specifications.
- Address any issues identified during testing to meet the required standards.

#### 10. Documentation:

- Provide complete as-built drawings and detailed documentation of the cable route, including joint locations and road crossings.
- Submit all inspection and testing reports as part of the project handover.

#### **General Requirement:-**

- All work shall comply with relevant BIS standards, industry best practices, and safety regulations.
- The contractor shall provide all necessary tools, materials and equipment required for completing the works.
- The work shall include any civil works required for breaking, drilling, excavation and backfilling, as well as restoration of the disturbed areas to their original condition.

I / we agree to the all above terms and conditions of Tender documents and required specification of the items as per above tender schedule of the e-Tender Notice No. SGGSIE&T/Stores-3284/ supply, installation, testing & commissioning of interconnecting DG power supply arrangement for uninterrupted operation of 500 kWp solar PV plant/Camp. Elect. /2024-25

Name of the firm: -		
Seal of the firm:		
	Signature of Tenderer:	
	Quotation no.:	
	D .	

SD DIRECTOR S.G.G.S.I.E. & T., Nanded

#### Annexure - A

#### DECLARATION REGARDING BLACKLISTING / DEBARRING FOR TAKING PART IN TENDER.

(To be executed & attes by the Tenderer)	ted by Public Notary / Exec	utive M	agistrate	on Rs.10	/- non jud	icial Stamp paper
I / We	(Tenderer)	hereby	declare	that th	e firm /	agency namely
past by Union / State Governot have any litigation in a	ernment or organization from any of the labour court(s).	ı taking	part in G	overnmer	nt tenders is	n India and should
	Oı	r				
I / We	(Tenderer)	hereby	declare	that the	Firm /	agency namely
M/s					was	blacklisted o
debarred by Union / State	e Government or any Organ years w.e.f.	nization	from taki	ing part i	n Governn	
and no	ow the firm/company is entitle	ed to tak	te part in	Governm	ent tenders	
	ation found false I / we are GSIE&T Nanded, and EMD	•			r/ contract	will be rejected /
In addition to the above completed / partially comp	Director, SGGSIE&T Nand oleted work.	ded, wil	l not be	responsit	ole to pay	the bills for any
						DEPONENT
				Name	<u>}</u>	
Attested:						
(Public Notary / Executiv	e Magistrate)					

<u>FORMAT - 1</u>	
	No.
	Date: -
DECLARATION	
То	
The Director	
SGGS Institute of Engineering & Technology,	
(SGGSIE&T) Nanded.	
I, the undersigned for and behalf of M/Saccept and agree with the Fall clause, penalty clause and Risk purchase /ET- Due onas published in the Manual of the office Government departments of the Government of Maharashtra.	clause for the tender No 11/DTE/ STATE
For an	d on behalf of
Seal of	f the Bidder