



**Indian Institute of Science (IISc)
Bangalore - 560012**

Department of Computational and Data Sciences (CDS)
IISc

Notice Inviting Tender (NIT) under
Two-Cover Bid System

for

**Supply and Installation of UPS Panels,
Cables and accessories, and Cable Trays in SERC
[Local Tender]**

**Enquiry or Tender No: [IISc/Purchase/SERC/2024/Panels_and_Cables/1](#)
Date: [January 17, 2024](#)**

Chair

Supercomputer Education and Research Centre (SERC)
Indian Institute of Science (IISc)
Bangalore – 560012, India
Email: tender.serc@iisc.ac.in

Contents

| | |
|--|----|
| 1. Preamble and Schedule of Requirements..... | 2 |
| 2. Bidder's Eligibility Criteria | 2 |
| 3. Technical Details | 3 |
| 4. Technical Details to be submitted with Technical Bid | 7 |
| 5. Acceptance Criteria..... | 8 |
| 6. Organization of the Technical Bid | 8 |
| 7. General Terms and Conditions..... | 8 |
| 8. Technical Bid – Terms and Conditions | 9 |
| 9. Commercial Bid – Terms and Conditions..... | 9 |
| 10. Payment Terms | 10 |
| 11. Important Dates..... | 10 |
| 12. Annexure A - Undertaking..... | 12 |
| 13. Annexure B – Certificate from Bidder related to Make in India Orders | 13 |

1. Preamble and Schedule of Requirements

The Supercomputer Education and Research Centre (SERC) in Indian Institute of Science (IISc) is a leading supercomputing centre in the country, possessing state-of-the art computing facilities, catering to the ever-increasing demands of high performance computing for scientific and engineering research. The supercomputer systems in SERC are used for large-scale simulations in various scientific domains.

A data center is being setup in the first floor of centre for hosting computer clusters. This tender calls for UPS power panels (2 Nos.) to be mounted in the first floor, cabling along with terminations to connect UPS power source from the basement to these UPS panels, cabling along with terminations to connect raw power source from the basement to the existing raw power panels provided by IISc that will be mounted in the first floor, and cable tray for drawing the cables from the first floor to the data centre.

2. Bidder's Eligibility Criteria

1. The bidder must have installed and commissioned power panels in at least three sites during the period January 1, 2021 – December 31, 2023. **Supporting Document Needed:** A copy of the P.O. or payment proof.
2. The bidder must comply with the provisions of Office Memorandum F/No/6/18/2019-PPD dated 23rd July 2020, issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, GoI.
3. The solution offered must comply with the provisions of Public Procurement (Preference to Make in India) Order No P-45021/2/2017-PP (BE-II) dated 15th June 2017 (PPP MII Order) and further revised vide Order dated 28th May 2018, 29th May 2019, 04th June 2020 and 16th

September 2020 issued by Public Procurement Section, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI. The minimum local content, the margin of purchase preference and the procedure for preference to Make in India for this tender are as per the mentioned Public Procurement (Preference to Make in India) Order.

3. Technical Details

The following items are required for the tender.

| SNo | Items | Unit | Quantity |
|-----|---|-------|----------|
| 1 | SITC of UPS output panels | Set | 2 |
| 2 | SITC of 3R x 4C x 300 sqmm Al. Armored, XLPE Cable | RM | 570 |
| 3 | SITC of 1R x 4C x 120 sqmm Al. Armored, XLPE Cable | RM | 160 |
| 4 | SITC of 3R x 4C x 300 sqmm Al. Armored Cable terminations | Nos. | 12 |
| 5 | SITC of 1R x 4C x 120 sqmm Al. Armored Cable terminations | Nos. | 2 |
| 6 | Cable tray, perforated of dimensions 600 mm x 50 mm with 2 mm thickness | Metre | 60 |

- For item 1 (UPS panels), the maximum dimension of each panel should be (H X W X D) = 1900 mm x 1700 mm x 500 mm, and should not exceed these dimensions. The UPS panels shall be coated with epoxy coating on the exposed surface and have an infill of light- weight cementitious material and insulated against heat and noise.
- Cables (items 2, 3) should of single length cables without joints. The makes of these cables should be Polycab/KEI/Havells.
- For cable terminations (items 4, 5) – For glands, the make should be Comet, and for Lux, the make should be Dowells
- For cable termination for 300 sqmm cable (item 4): DC gland should be 12 Nos., and Copper lux should be 48 Nos.
- For cable tray (item 6) – Make should be BEC/MEM/ProFab.

UPS Panels (Item 1)

Each of the UPS panels should be of the following specifications.

| S.No. | Description | Make | Qty. |
|----------|---|---|------|
| A | INCOMER | | |
| 1 | 800Amps TP+2 N MCCB (36kA) TM BASED RELEASE WITH S/C & O/C PROTECTION | ABB | 1 |
| 2 | EXTENDED ROTARY OPERATING MECHANISM | ABB | 1 |
| 3 | R,Y,B INDICATING LIGHT 220VAC | Any make | 1 |
| 4 | AUXILARY CONTACT FOR ON/OFF | ABB | 2 |
| 5 | TVSS | Any make | 1 |
| 6 | ON/OFF/TRIP INDICATING LIGHT 230V AC | Any make | 3 |
| 7 | MULTIFUNCTION METER EM6400 | SCHNEIDER 6400 series compatible with RS485 | 1 |
| 8 | 800/5A CURRENT TRANSFORMER | Any make | 3 |
| 9 | 63A FP MCB 10kA 'C CURVE' FOR TVSS | ABB | 1 |
| 10 | 6A SP MCB 10kA 'C CURVE' | ABB | 4 |
| B | OUTGOINGS | | |

| | | | |
|---|--|----------|---|
| 1 | 400Amps TP+2N MCCB (36kA) TM BASED RELEASE WITH S/C & O/C PROTECTION | ABB | 2 |
| 2 | SPREADER LINK | ABB | 2 |
| 3 | EXTENDED ROTARY OPERATING MECHANISM | ABB | 2 |
| 4 | AUXILARY CONTACT FOR ON/OFF | ABB | 4 |
| 5 | ON/OFF/TRIP INDICATING LIGHT 230V AC | Any make | 6 |
| 6 | 6A SP MCB 10kA 'C CURVE' | ABB | 2 |

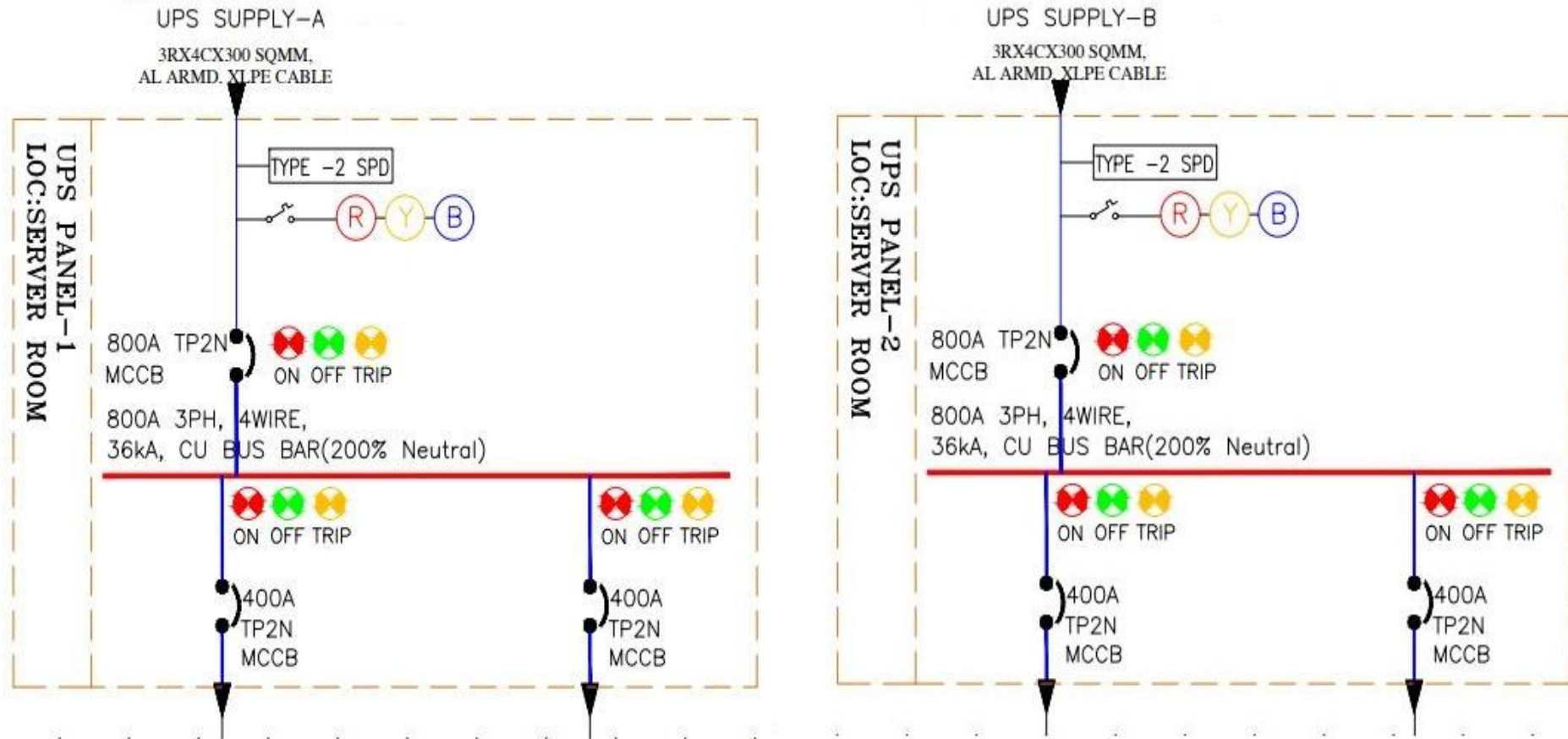
Important note: Item 1 of the UPS panel, 800 Amps TP+2 N MCCB (4 pole) of ABB make for the incomer are already available with IISc and will be provided by IISc for both the UPS panels, and hence **should not be included in the panels provided by the bidder**. The dismantling of these 800 Amps TP+2 N MCCB (4 pole) (2 Nos.) from our existing panels in IISc and integrating with the panels to be provided by the bidder will be in the scope of the bidder. The dimensions of the 800 Amps TP+2 N MCCB (4 pole) available with IISc are as follows: (H X W X D) = 280 mm x 270 mm x 100 mm. The rotary handle projection from breaker has the following dimensions: (H X W X D) = 140 mm x 140 mm x 40 mm. The bidder should take into account these dimensions of the existing breakers while manufacturing the panels to accommodate these 800 Amps breakers along with the rotary handles.

The panels should be installed in the first floor of SERC department, IISc. The cables must be drawn from the basement to the first floor. Cable tray must be installed in the first floor as per the requirements of IISc and directions by the experts of IISc. The raw power cables must be drawn from the basement and terminated at the existing raw power panel that will be provided by IISc in the first floor.

The bidder must visit the site, and have discussions with the personnel in the site to ensure complete understanding of the project including the compatibility of the existing 800 Amps TP+2 N MCCB (4 pole) with the panels that the bidder will be providing.

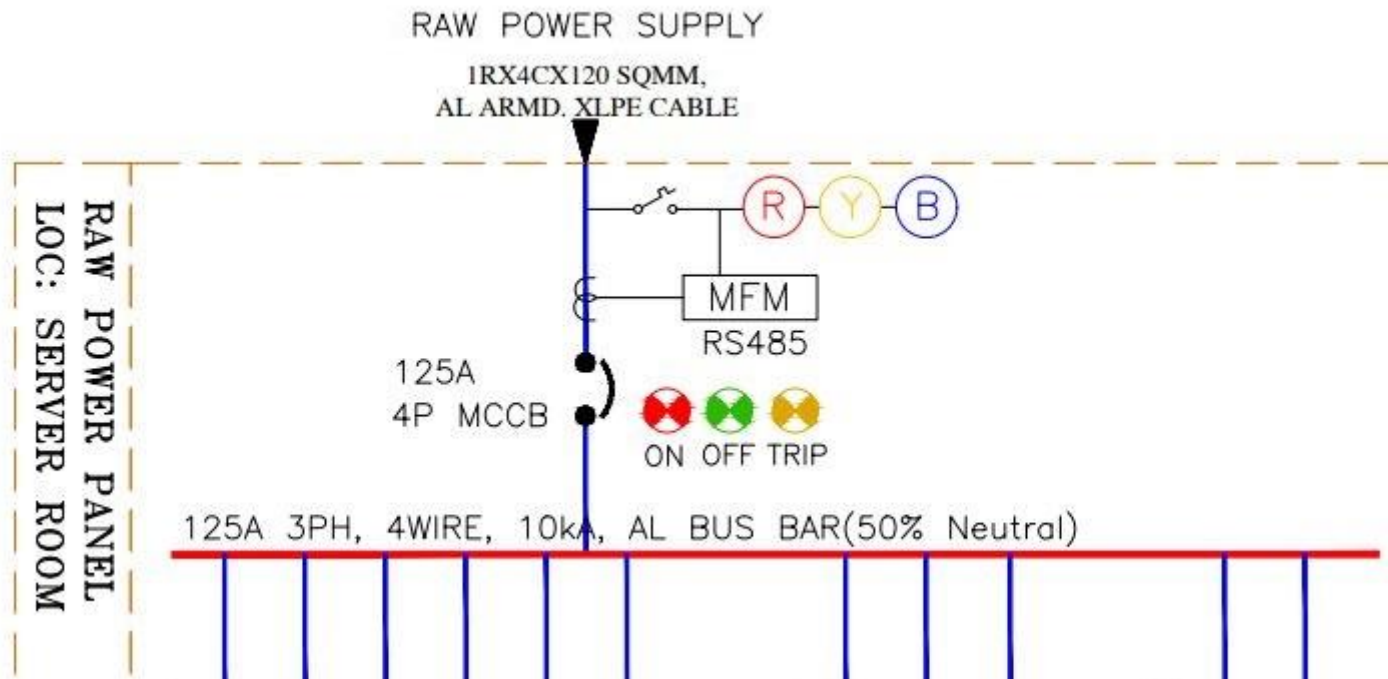
The SLDs of the UPS power panels (to be provided by the bidder) and the existing raw power panel (to be provided by IISc) is shown in the subsequent page.

SLD of the UPS Power Panels to be provided by the bidder



Note: As per SLD, Busbar should be 800A,3PH, 4WIRE,36kA, CU BUS BAR (200% NEUTRAL)

SLD of the Existing Raw Power Panels to be provided by IISc



4. Technical Details to be submitted with Technical Bid

The following technical details are required for the tender.

Fill the Quantity and Make columns in the below table.

| SNo | Items | Unit | Quantity | Make |
|-----|---|-------|----------|------|
| 1 | SITC of UPS output panels | Set | | |
| 2 | SITC of 3R x 4C x 300 sqmm Al. Armored, XLPE Cable | RM | | |
| 3 | SITC of 1R x 4C x 120 sqmm Al. Armored, XLPE Cable | RM | | |
| 4 | SITC of 3R x 4C x 300 sqmm Al. Armored Cable terminations | Nos. | | |
| 5 | SITC of 1R x 4C x 120 sqmm Al. Armored Cable terminations | Nos. | | |
| 6 | Cable tray, perforated of dimensions 600 mm x 50 mm with 2 mm thickness | Metre | | |

- For UPS panels, Specify (H X W X D) dimension in mm: _____
- For cable termination for 300 sqmm cable (item 4): Specify
 - the number of DC glands: _____
 - the number of Copper lux: _____

For item 1, fill “Make” and “Qty” columns below.

| S.No. | Description | Make | Qty. |
|----------|--|------|------|
| A | INCOMER | | |
| 2 | EXTENDED ROTARY OPERATING MECHANISM | | |
| 3 | R,Y,B INDICATING LIGHT 220VAC | | |
| 4 | AUXILARY CONTACT FOR ON/OFF | | |
| 5 | TVSS | | |
| 6 | ON/OFF/TRIP INDICATING LIGHT 230V AC | | |
| 7 | MULTIFUNCTION METER EM6400 | | |
| 8 | 800/5A CURRENT TRANSFORMER | | |
| 9 | 63A FP MCB 10kA 'C CURVE' FOR TVSS | | |
| 10 | 6A SP MCB 10kA 'C CURVE' | | |
| B | OUTGOINGS | | |
| 1 | 400Amps TP+2N MCCB (36kA) TM BASED RELEASE WITH S/C & O/C PROTECTION | | |
| 2 | SPREADER LINK | | |
| 3 | EXTENDED ROTARY OPERATING MECHANISM | | |
| 4 | AUXILARY CONTACT FOR ON/OFF | | |
| 5 | ON/OFF/TRIP INDICATING LIGHT 230V AC | | |
| 6 | 6A SP MCB 10kA 'C CURVE' | | |
| | | | |

Include details containing any other specifications of the panels.

5. Acceptance Criteria

1. The bidder must demonstrate the powering on of the UPS and Raw power panels, and demonstrate stable behaviour for a continuous period of three days after commissioning.
2. It is to be noted that maximum of two weeks will be available (after Installation & Commissioning) to the bidder to conform to this acceptance test criterion set out.
3. The solution will be accepted, and payment cleared only after this acceptance criteria.

6. Organization of the Technical Bid

The technical bid should strictly be organized in the following sequence only.

Note: IISc reserves the right to disqualify any bid that does not provide all the required data and not following the organization given below.

1. A cover letter from the bidder. Among other things, the cover letter should certify that all the requirements of the tender are provided and the offered solutions meet and comply with the technical and other specifications of the tender. The cover letter should certify agreeing to all the terms and conditions mentioned in the tender.
2. The bidder must not be blacklisted by any Central / State Govt. Organizations of India as on date of submission of the bids. A certificate or undertaking to this effect must be submitted.
3. Proofs for Bidder's Eligibility Criteria as given in Section 2 of this tender.
4. Technical details asked in Section 4.
5. A copy of the masked Commercial bid has to be given in the technical offer (unpriced Bill of Material (BoM)).
6. Undertaking as in **Annexure A**.
7. Certificates from bidder, as per format given in **Annexure B**, declaring the country of OEM, country of manufacture, location of local value addition and percentage of local contents for various items provided in the bid, and compliance with the provisions of Public Procurement (Preference to Make in India) order No. P-45021/2/2017-PP (BE-II) dated 15th June 2017 (PPP MII Order) and further revised vide Order dated 28th May 2018, 29th May 2019, 04th June 2020 and 16th September 2020 issued by Public Procurement Section, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI.
8. Any product specification sheet(s) of the components asked in the tender.
9. Terms and conditions of the offer.
10. Appendix
 - a. Company Profile Documents, if desired by the bidder or OEM (Maximum 2 pages each for the bidder and the OEMS).
 - b. Supporting technical materials including brochures.
 - c. Any other information or documents that the bidder/OEMs deem necessary.

7. General Terms and Conditions

1. Local tender purchase preference.
 - a. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.

- b. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
 - c. The quotations should be on FOR-IISc Bangalore basis in INR only.
 - d. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
 - e. Purchase preference as defined by the recent edits to GFR (within the “margin of purchase preference”) will be given to the Class-1 supplier.
 - f. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.
2. Offer must be submitted under TWO-BID system i.e., “Technical bid” and “Price (Financial) bid” as hard copies in two separate sealed envelopes. These two bids must be enclosed in a larger envelope superscribed as “Bid Submission for UPS Panels and Cables” within the stipulated period to the indicated mailing address. In addition, **soft copy of only the technical bid** must be sent by email to tender.serc@iisc.ac.in within the stipulated time.
 3. Delayed and/or incomplete tenders are liable to be rejected.
 4. The Technical Bid and the Commercial Bid should be duly signed by the authorized representative of the bidder.
 5. The bidders are requested to go through the Terms and Conditions detailed in this document, before filling out the tender. Agreeing to the terms and conditions of the tender document (by signing all pages of the copy of a tender document) is a mandatory requirement.
 6. A tender, not complying with any of the above conditions is liable to be rejected.
 7. IISc reserves the right to cancel the tender at any time without assigning any reason whatsoever.

8. Technical Bid – Terms and Conditions

1. The technical bid should contain all the information and should have the organization as given in Section 6. Bids without the specific information and organization as in Section 6 will be automatically disqualified.
2. No price information must be mentioned in the technical bid. Bids which include price information in the technical bids will be automatically disqualified.
3. Technical bids will be opened first. IISc may seek clarifications after opening of technical bids.
4. The technical evaluations will be made only based on the technical bids and the shortfall responses submitted by the bidder.

9. Commercial Bid – Terms and Conditions

1. Price bids of only technically qualified vendors will be considered. Commercial bid shall be opened for the technically qualified bidders after the technical evaluation.
2. The hardcopy commercial bid of the successful bidder, after the commercial bid opening stage, should contain among other things, unit prices, payment terms, installation, commissioning etc. as per requirements of IISc mentioned in the tender document. All such conditions must be in line with the tender. In case of any deviation or conditional offer, the bid may be treated as non-responsive and not be considered for evaluation. The Commercial bid should contain details of the prices for each one of the subsystems of the total offer clearly giving the rate and the quantity. Bundling of the prices is not acceptable.

3. This is a **local tender**. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. Prices should be quoted only in INR (Indian Rupees) and will be with GST only. The order must be on FOR-IISc Bangalore basis.
4. The component of tax, and any other statutory levies should be shown separately and not included in the total amount, to enable IISc to avail any exemption.
5. Proposals should contain the name and contact details, viz., phone, fax, and email of the designated person to whom all future communication will be addressed. The contact details should also be mentioned on the overall envelope.
6. Prices should be quoted in detail, for all the subsystems given in the Technical Specifications part of the tender. Further, bid and **price validity should be for three months** from the date of opening of the technical bids.
7. IISc will place the purchase order only on the successful bidder as per the decision of IISc. In this regard, decision of IISc will be final and binding.

10. Payment Terms

1. The total project cost will consist of Equipment supply and installation.
2. 100% payment shall be released by IISc against delivery, inspection, successful installation, commissioning and acceptance of the equipment at IISc Bangalore in good and functional condition and to the entire satisfaction of the Purchaser (IISc).
3. Payment will be subject to deduction of TDS as per rules / laws and any other deduction as per PO terms.
4. The total solution as per the agreed bill of materials **must be supplied within 3 weeks** after receiving a firm PO from IISc. The installation and acceptance must be completed within 2 weeks after supply of the equipment.
5. Liquidated Damage: As time is of the essence for this procurement, the ordered materials are required to be delivered and installed in all respects within the stipulated period in the purchase order failing which penalty for late delivery and installation will be imposed at the rate of 1% of the total order value per week or part thereof for the delayed period subject to maximum of 10% of the total order value and this liquidated damage will be deducted during the payment of the invoice / bill of the supplier. Earliest / expected delivery period should be clearly indicated in the technical bid.

11. Important Dates

1. Release of tender: January 17, 2024.
2. Last date for sending queries: January 24, 2024, 5 PM IST. Queries may be sent to tender.serc@iisc.ac.in.
3. Release of corrigendum to the tender based on the queries, if necessary: January 25, 2024, 5 PM IST.
4. Start date for submission of the bid: January 26, 2024, 10 AM IST.
5. Last date for submission of the bid: February 8, 2024, 5PM IST.
 - a. Hard copy submission: The bid in the form of an envelope containing the hard copies of both the technical and commercial bids, in two sealed envelopes, should be submitted and reach the below-mentioned mailing address by the same date, 6 PM

IST. Note that the hard copy of the technical bid should exactly match with the soft copy submitted.

- b. Soft copy submission: **Soft copy of only the technical bid** must be sent by email to tender.serc@iisc.ac.in by the above-mentioned time. **No soft copy of commercial bid should be submitted.** Soft copy submission of commercial bid at any stage before the opening of the hard copy commercial bid will lead to disqualification of the bid.

Mailing address:

Chair

Supercomputer Education and Research Centre (SERC)

Indian Institute of Science (IISc)

Bangalore – 560012

India

12. Annexure A - Undertaking

Date:

To:
The Chair
Supercomputer Education and Research Centre
Indian Institute of Science
Bangalore – 560012, India

Subject: Undertaking as per GFR – 2017, Rule 170(iii)

Dear Sir,

We, the undersigned, offer to carry out the project including Products/items, components etc. as per tender at IISc, Bangalore, in response to your Tender No **IISc/Purchase/SERC/2024/Panels_and_Cables/1**. We are hereby submitting our proposal for the same, which includes Technical bid and the Financial Bid. As a part of the eligibility requirement stipulated in the said tender document, we hereby submit a declaration as given below:

1. We will not withdraw or amend or modify or impair or derogate the our bid partly or fully or any condition of it after tender opening, during the period of tender validity (six months from the date of opening of the technical bid),
2. In case, we are declared as successful bidder and an order is placed on us, we will submit the acceptance in writing within 7 days of placement of order on us.
3. In case of failure on our part to deliver/provide the item/installation/service as per the order's terms and conditions within the stipulated period, we are aware that we shall be declared as ineligible for the said tender and /or debarred from any future bidding process of IISc or any Government entity for a period of minimum one year.
4. The undersigned is authorized to sign this undertaking.

Yours sincerely,

Authorized Signatory:

Name and Title of Signatory:

e-mail:

Mobile No:

13. Annexure B – Certificate from Bidder related to Make in India Orders

To:

Prof. Sathish Vadhiyar
Department of Computational and Data Sciences (CDS)
Indian Institute of Science
Bangalore – 560012, India

We hereby certify that the goods being offered by us vide our proposal, comply with the provisions of Public Procurement (Preference to Make in India) Order No P-45021/2/2017-PP (BE-II), dated 15th June 2017 (PPP MII Order) and further revised vide Order dated 28th May 2018, 29th May 2019, 04th June 2020 and 16th September 2020 issued by Public Procurement Section, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI.

We hereby certify the details pertaining to goods offered by us, as given below:

| SNo. | Item Description | Country and Location of Manufacture of Item | Location in India at which local value addition is made, if any. | Percentage of Local Content |
|------|--|---|--|-----------------------------|
| 1 | UPS Panels, Cables, Cable terminations, Cable tray | | | |

Self-certification on Compliance to Make-in-India Order:

1. We hereby declare that

____ (Bidder Name) is a class 1/2 local supplier in accordance and manner as specified in Order No. P45021/2/2017-PP (BE-II) dated : 04th June 2020 and OM No. P-45021/102/2019-BE-II-Part(1) (E-50310) dated 04.03.2021 issued by DIPP, Ministry of Commerce and Industries, GoI.

2. We also certify that the solution offered meets the local content requirement for 'Class-I local supplier'/'Class-II local supplier' [tick one and strike out the other], as per the Public Procurement (Preference to Make in India) Order.

We also certify that, we are not from a country sharing land border with India as defined in order No. F/No/6/18/2019-PPD dated 23 July 2020 issued by Public Procurement Division, Dept. of Expenditure, Ministry of Finance, GoI and the goods offered by us comply with the provisions of said order.

For (Name of bidder)

Authorized Signatory
Name & Designation:
Mobile No: