



## Request for Quotation/Offer for Supply, installation, modification and commissioning of synchronization panels for DGs at CeNSE, IISc

- The GEECI (Gallium Nitride Ecosystem Enabling Centre and Incubator) at SID-Indian Institute of Science is seeking bids from qualified agencies for Supply, installation, modification and commissioning of synchronization panels for DGs at CeNSE, IISc
- Companies need to submit two bids, a technical bid and a commercial bid, in two separate sealed envelopes. The bids should be submitted no later than 21 days from the date of posting of this tender, as listed on the website date/time stamp, and by 5 pm on the 21st day or next weekday in case the 21st day falls on a weekend or a national holiday.
- Both technical and commercial bids should be addressed to “The Chief Executive, SID, IISc, Bangalore 560012.”
- The envelopes should be addressed to “Prof. Srinivasan Raghavan, CeNSE, IISc, Bangalore, 560012” and submitted to the office at CeNSE, IISc in Room No. GF 15 between 9 am and 5 pm.
- All questions regarding this tender should be addressed to Mr.Raghupathy at the email address [raghupathyn@iisc.ac.in](mailto:raghupathyn@iisc.ac.in)
- Post such submission all vendors should send an email to [sraghavan@iisc.ac.in](mailto:sraghavan@iisc.ac.in) with the subject line: “GEECI\_Bidder’s name system/Tool Name” to intimate him of the submission within one day.
- Deviations from the technical specifications requested are allowed. Such deviations must be highlighted and justified. Their acceptance or rejection will be left to the discretion of the technical committee.
- The equipment sought will be placed at the Centre for Nano Science and Engineering (CeNSE), Indian Institute of Science (IISc). IISc is India’s No. 1 institution on higher learning and the Center for Nano Science and Engineering is home to one of the best academic fabs in the world.
- The technical response, corresponding to the system being offered, should be in the form of a compliance table with at least 5 columns.

Serial number in column 1. Each of the numbered technical items below should be addressed in a separate row of the table in column 2. Compliance to this requirement, in Yes/No, deviation from it and justification should be provided in the neighboring columns 3-5. Post the opening of a hard copy of the technical bid the committee will request for a soft copy of the files for further processing. Companies should NOT mail soft copies of the files unless specifically requested for.

- Please find the Annexure below :-

Annexure 1	Technical Requirements.
Annexure 2	Proposed SLD
Annexure 3	Responsibility

- Detailed technical specifications of the system/equipment being offered should be included.
- Any additional capabilities or technical details, that you would like to bring to the attention of the purchase committee, can be listed at the end of the technical table.
- If multiple systems can fulfill the requirements, vendors can submit multiple bids.
- Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.



- The commercial bid should be broken up to the maximum extent possible into separate items with a cost against each to enable better comparison of price for various configurations across the bidders. As an option, please provide itemized cost for any suggested accessories/addons that may enhance the usability, capability, accuracy or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their System/Equipment portfolio permits.

The quotes should be split into a line item indicating the base price and then each optional item should be listed separately with its pricing.

### Procedure

- Only vendors who are compliant with the technical requirements will be considered for commercial comparison. The bid is awarded to the lowest cost vendors (referred as L1).
- The vendors must do the thorough site survey for equipment locations, routing of cables, pipe line etc. And submit the SLD and electrical drawings with the technical bid.
- The commercial comparison is made as per Government of India rules, specifically GFR 2017. Note that GFR has recently been amended. As per recent edits to the GFR, there are three classes of vendors distinguished by their “local content”. In the cover letter, vendors must mention which applies to them:
  - Class 1 supplier: Goods and services have a local content of equal to or more than 50%.
  - Class 2 supplier: Goods and services have a local content more than 20% but less than 50%
  - Non-local supplier: Goods and services have a local content of equal to or less than 20%
- This tender will only apply entertain Class 1 or Class 2 suppliers. Vendors must provide a self-declaration of what Class they belong to.
- In the commercial bid, please provide an itemized cost of the system and required accessories, such as ducting, cabling, panel, piping etc.,
- As an option, please provide itemized cost for any suggested accessories/add-ons that may enhance the usability, capability, accuracy or reliability of the system. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits.
- The quotations should be in INR only and must include transportation cost.
- Mention GST separately. IISc will be taxed at 5%. IISc will provide the GST exemption certificate against invoice.
- Please indicate the warranty provided with the Equipment/System. Warranty of 3 years or more is required. Any exclusions or consumables must be specified in annexure.
- As an option, provide itemized cost for required spares and consumables for 2 years of operation from the time of installation.
- Clarify if periodic (preventive) maintenance be done by a trained on-site engineer or requires a specialist from the OEM.
- If maintenance requires OEM, as an additional option, provide cost of an annual maintenance contract (AMC) for 3 years, post-warranty. The AMC must cover 4 scheduled and 12 emergency visit per year. The AMC cost must also include an itemized list of spares that are essential for the scheduled visits.
- The technical proposal must include references from 5 previous installations in India. Please provide the names and contact addresses of the referees so that the committee can contact them independently.

**Annexure-1**  
**Technical Requirements**

Sl. No.	Description	Qty.
1	Supply of DG Incomer cum Synchronizing Panel for 1x500KVA DG & 1x750KVA DG set with Bus-coupler Panel.  (Comprising of 03No's. ACB, MFM, ELR, Auto Sync Relay – Woodward Easygen 2000, charger, relays, contactors, suitable rating Al. bus-bar, Meters, Indicating lamps with all necessary wiring etc.)  <b>Current Rating to be matched as per attached SLD Drawing</b>	01 No.
2	Supply of Auto Changeover cum O/G ACB Panel  (Comprising of 02No's. ACB, MFM, LVM, charger, relays, contactors, suitable rating bus-bar, Meters, Indicating lamps with all necessary wiring etc...)  <b>Current Rating to be matched as per attached SLD Drawing</b>	01 No.
3	Transportation, Unloading, Installation, T & C of new Panels	01
4	Supply of Q D CT, e-governor & AVR suitable for DG Set synchronizing.	01
5	Fixing, T & C of QDCT, e-governor & AVR on DG Set	01
6	Supply of Power Cables -	
a.	<b>KVA</b>	
b.	DG to Brkr Pnl – Aluminum Cable – 1R x 3.5C x 300sqmm	70 Mts.
	Brkr Pnl to O/G ACB Panel – Copper Cable 5R x 1C x 120 sqmm	250 Mts.
	Copper Cable 3R x 1C x 120 sqmm	150 Mts.
	<b>750KVA</b>	
c.	DG to Brkr Pnl – Aluminum Cable – 3R x 3.5C x 300sqmm	70 Mts.
	Brkr Pnl to O/G ACB Panel – Copper Cable 5R x 1C x 120 sqmm	250 Mts.

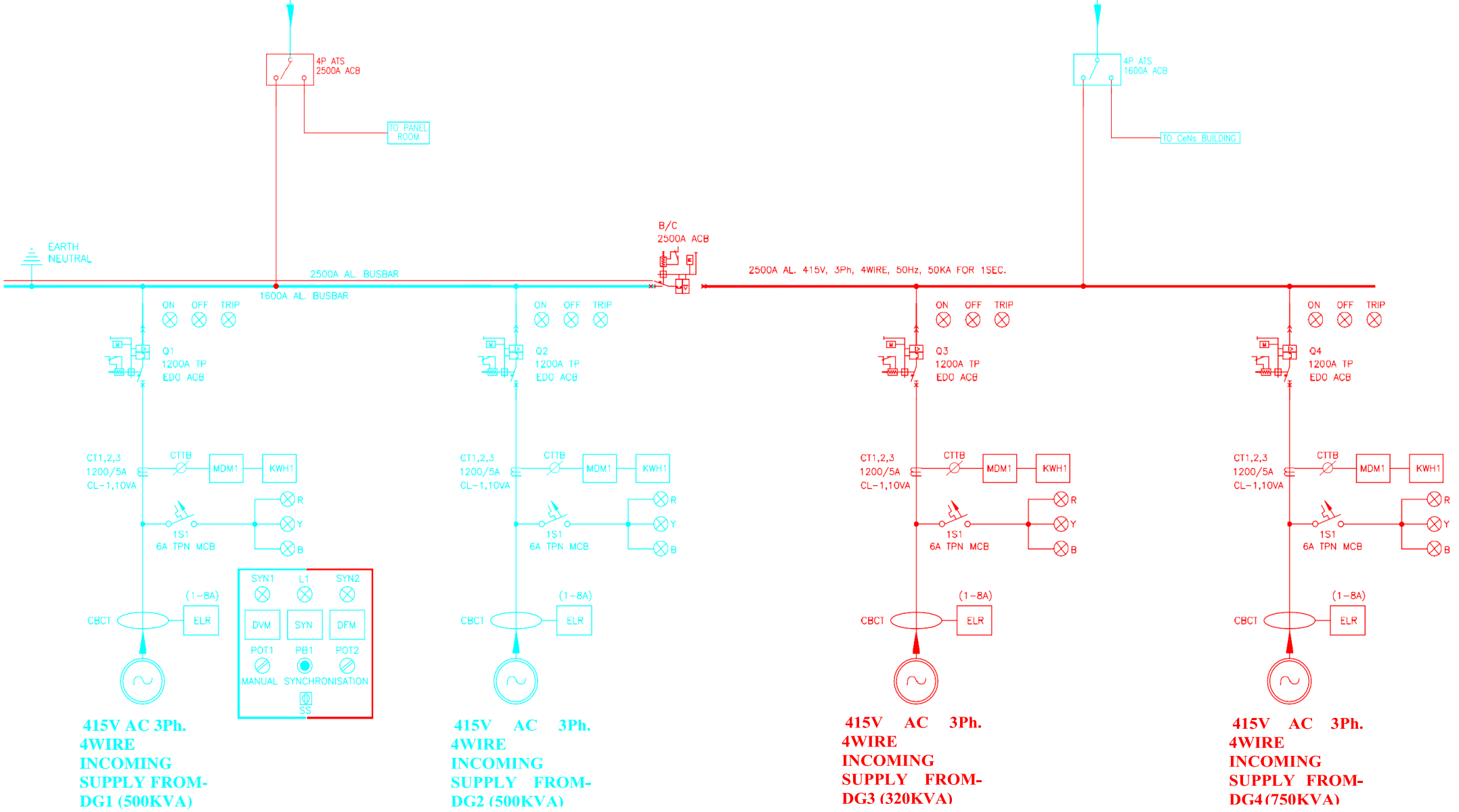
	Copper Cable 3R x 1C x 120 sqmm	150 Mts.
7	Supply of Copper Control Cable	150 Mts.
8	Supply of tinned copper lugs.	<b>1 lot</b>
9	Chemical earthing for grounding of equipment's which is non-corrosive, thermally conductive, superior fault conduction capacity, non toxic, weather resistant, Using 6ft. Copper bonded rod with backfill compound.	05 No's.
10	Copper Plate	05 No's.
11	Copper Strip (25x6)	60 Mts.
12	Copper Strip (50x6)	35 Mts.
13	Digging of trench, Laying of cables in trench / duct, Earth Pit excavation, Earthing, chamber construction, Removing & shifting of existing cables, panels, termination & connection etc...	01 lot
14	Modification of existing Sync Panel by upgrading / adding additional bus-bar to the existing system to meet the proposed current rating as per attached SLD Drawing with all Technical Specs	01 lot
15	Modifications of distribution panel in utility building with appropriate breakers, isolators and panels	<b>01 lot</b>

**415V AC 3Ph. 4WIRE  
INCOMING SUPPLY  
FROM-1600KVA  
TRANSFORMER-2**

**Proposed SLD**

**415V AC 3Ph. 4WIRE INCOMING  
SUPPLY FROM-  
1600KVA  
TRANSFORMER-2**

**Existing**  
**Proposed**



**415V AC 3Ph. 4WIRE  
INCOMING  
SUPPLY FROM-  
DG1 (500KVA)**

**415V AC 3Ph. 4WIRE  
INCOMING  
SUPPLY FROM-  
DG2 (500KVA)**

**415V AC 3Ph. 4WIRE  
INCOMING  
SUPPLY FROM-  
DG3 (320KVA)**

**415V AC 3Ph. 4WIRE  
INCOMING  
SUPPLY FROM-  
DG4 (750KVA)**

### Annexure- 3 Vendor Responsibility

1.	Any type of Civil / Structural works such as foundation for equipment and making of openings for the passage of ducts, pipes, cables, framework for grills/diffusers etc.
2.	Any deviation in quantities will be provided by Vendor. IISc will pay separately any extra items against actuals. Any leftover item will be retained by SID/CeNSE, IISc.
3.	<p><b>Safety:</b></p> <p>a) The installation technician should follow all site safety terms.</p> <p>b) Mandatory PPE: Safety helmet with face shield, electrical insulated gloves, electrical insulated safety shoes.</p> <p>c) The Installation should be carried out by trained technicians.</p>
4.	The GEECI/NNfC Office, GF-20, CeNSE, IISc must be intimated prior 5 weekdays before start of work. The vendor must obtain explicit permission for any shutdown needed to implement the project. The request for shutdown must be escalated at least 10 weekdays prior.
5.	A series of tests will be done on the HVAC system after installation to validate the system.

### IISc Responsibility

1.	Free power supply / water for erection, testing and commissioning of the system will be provided.
2.	Free storage space at site will be provided.
3.	IISc will provide technical help in connecting the HVAC system to the electricity.
4.	Payment will be within 30 days against a tax invoice, after satisfactory implementation of the project.