

**CENTRAL ELECTRONICS LIMITED (CEL)**

**INVITES**

**EXPRESSION OF INTEREST (EOI)**

**FOR**

**EMPANELMENT OF VENDORS / SUPPLIERS**

**FOR**

**SUPPLY OF SOLAR BALANCE OF SYSTEM (BOS) FOR SMALL SIZE  
SOLAR POWER PACKS RANGING FROM 1 KWp TO 5 KWp CAPACITY.**

**&**

**INSTALLATION & COMMISSIONING (I&C) OF SMALL SIZE SOLAR  
POWER PLANTS RANGING FROM 1 KWp TO 5 KWp CAPACITY.**

**AT**

**IN AND AROUND CHENNAI, PUNE, DELHI NCR AND SAHIBABAD (UP)**

**1. About Central Electronics Limited:**

Central Electronics Limited (CEL) is a Central Public Sector Enterprise (CPSE) under the Department of Scientific & Industrial Research (DSIR), Ministry of Science & Technology, (Government of India) which has been working in a number of high Technology & Strategic Areas including Defense Electronics, Integrated Security & Surveillance Systems, Solar Photovoltaic and Railway Signaling Equipment.

**2. Scope of EOI:**

Central Electronics Limited (CEL) invites Expression of Interest from eligible Business entities for their empanelment for supply of compact model consisting Solar BOS (Balance of Systems) and/or I&C (Installation and Commissioning) of Solar Power Packs ranging from 1 KWp to 5 KWp at four location i.e. in and around Pune , Chennai, Delhi NCR & Sahibabad.

To facilitate the retail customers of CEL to supply & install small standard size solar power plants for 1KWp, 2KWp, 3KWp, 4KWp and 5KWp at their locations, CEL envisage selling these standard size power packs to retail customers from our four retail offices/counters located at Sahibabad (UP), Delhi, Pune (Maharashtra) & Chennai (Tamilnadu) under this EOI, in the following manner:

- (1) Supply of Complete solar power packs as do-it-yourself type of kits or Supply of one or more items of the power pack short of full kit as off-the-shelf items.

And/or

- (2) I&C of the solar plant using our power pack items or not (in case customer chooses only I&C) at any customer location within India, for which the customer places order at the retail counter.

These power packs and I&C will have the warranty as mentioned in clause no.7.

The solar modules of CEL make will have to be mandatorily used for any order for I&C under this EOI.

The Power pack will consist of the following items

- a) Solar PV Module (CEL Make)
- b) Grid tied Inverter (IEC Standard)
- c) PCU (IEC Standard)
- d) Battery (VRLA/Li-ion) (IS Standard)

Detailed BOQ/configuration and specifications for the power pack items are given in Annexure 5 & 6.

The interested firms can bid for empanelment in three modes:

Either as (1) Supplier of one or more items of the power pack

or as (2) Supplier of one or more items of the power pack and I&C vendor

or as (3) I&C vendor only

The successful firms who bid for supply or supply+ I&C will have to submit 4 units of their products at CEL retail Counter for demonstration purpose. The scope of the empanelled vendors (as per clause No. 5) and other terms are explained in the below clauses.

### 3. Definitions:

In this document the following abbreviations and expressions have the meaning hereby assigned to them as follows:

- a) **CEL:** means CENTRAL ELECTRONICS LIMITED, 4, INDUSTRIAL AREA, SAHIBABAD and its offices at Delhi, Pune & Chennai.
- b) **BIDDER/PARTY:** means the individual, proprietary firm, firm in partnership, limited company private or public or corporation.
- c) **EOI:** means Expression of interest (EOI) for the empanelment of vendor/supplier for Solar BoS (Balance of Systems) and/or I&C to be used for Solar Power Packs for 1 kWp to 5kWp
- d) **Products:** means the products (Inverter, PCU, Battery, Module Mounting Structure& Junction Boxes) offered by the eligible Business entities for their empanelment in this EOI and accepted by CEL.
- e) **I&C:** means Installation & commissioning of power packs/plant which include the civil, mechanical & electrical work for mounting of structures, mounting of modules, wiring/cabling for connections, testing & commissioning along with net metering of plant and necessary permission for net metering from local authorities.

### 4. Method of Selection:

The proposal submitted against this EOI will be further put to the Committee members for the evaluation. The successful party will be issued a Letter of Empanelment by CEL informing them about the acceptance of their proposal.

- 4.1 Multiple vendor/supplier may be empanelled for each product.  
OEMs/Authorized Dealers will be empanelled for each product on first come first serve basis and the EOI shall be closed thereafter without any intimation/notice.
- 4.2 Maximum two authorized distributor/ dealer/ reseller shall be empanelled for each OEM on first come first serve basis.
- 4.3 One vendor can apply for the empanelment of one brand in each product category.
- 4.4 In case, if OEM of any brand get empanelled then their authorized distributor/ dealer/ reseller shall not be allowed to get empanelled.

### 5. Mode of Operation

Empanelled vendor may be asked to keep at least 2 or 3 numbers of their products at CEL retail counter for demonstration/sale purposes so that the customer can be serviced immediately. On the receipt of order from the customer for the power pack solution, CEL will further issue PO to the respective empanelled vendor whose product is selected by the Customer.

5.1. CEL may empanel the vendor/supplier of BOS for the following product categories-

- a) Solar PV Module (CEL Make)
- b) Inverter (IEC Standard)
- c) PCU (IEC Standard)
- d) Battery (VRLA/Li-ion) (IS Standard)

The product offered under this category should be either MNRE approved or approved by IS/IEC standard.

5.2. The successful empanelled firms will be responsible for

- a) Arranging the demonstration product (at CEL Retail Counter/Office)
- b) Providing the Price & technical Brochures/booklets and other documents as asked by CEL.
- c) Delivery of Product on the basis of FOR Site and delivery of product within stipulated time period.
- d) Installation & commissioning of respective products at Site.
- e) Providing the on-site after sale services to the customer for 5 years.

5.3. **Mode of Billing:** On the sale of the product (Inverter, PCU & Battery) of respective empanelled vendor, they will submit their invoice to CEL and CEL will further invoice the same material to the customer with not less than 5% margins on their invoice. CEL will raise the invoice for the complete system i.e. power pack of respective 1kWp to 5 kWp size.

5.4. In case the samples remain unsold for 3 months, the same shall be returned to the respective empanelled vendor. Upon an intimation received from CEL, vendor shall be required to remove the unsold samples at its own cost within 3 days and CEL shall bear no responsibility of any loss or damage for such samples.

5.5. BOQ for Solar Power Packages (01 KWp to 5 KWp): **As per Annexure 05**

6. **Eligibility Criteria Conditions for Bidders:** **As per Annexure 01**

7. **Warranty:** The product offered under this EOI for empanelment should have a warranty as given below. During the warranty period all services to the CEL customer are to be provided on-site.

S L No.	Product	Warranty
1	Power Conditioning Unit(Inverter + Charge Controller)	05 Years
2	Battery Bank	05 Years
3	Grid tied inverter	05 Years
4	I&C work	05 Years

8. **Processing Fee:** EOI processing fee of Rs.1000 (One Thousand only) + GST @18% (Total Rs.1180/-) will be charged. The applicant needs to submit that fee along with its proposal in form of DD or online digital payment or NEFT. The details of CEL's account are as below:

**Beneficiary Name:** Central Electronics Limited, **Payable at:** Sahibabad

**Current Account No.**87761250000014 **IFSC:** SYNB0008776

Syndicate Bank, Site-4 Industrial Area Sahibabad (Ghaziabad),UP.

9. **Cost of Bidding:** The Bidder shall be responsible for all the costs associated with the preparation of its Proposal and its participation in the bidding process. CEL will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of bidding. CEL shall have no liability in this regard if it decides to terminate the process of short-listing for any reason whatsoever.

**10. Clarification of Bid Documents:**

- 10.1. A prospective bidder, requiring any clarification on the Bid Documents shall notify the CEL
- 10.2. The bidders are required to keep a watch on the CEL website w.r.t. any amendment in the EOI document or to clarification to the queries raised by the bidders till a day prior to the opening of the bid. CEL reserves the right for rejection of bids if the bids are submitted without taking into account these amendments/clarifications. Further bidder will be fully responsible for downloading of the EOI document and amendments for their completeness.
- 10.3. All correspondence/ enquiries should be submitted to the following in writing by post/courier/e-mail: ATTN. OF: General Manager (P&S), Address: 4, Industrial Area, Sahibabad, Uttar Pradesh 201010 E-mail id: [anilmahajan@celindia.co.in](mailto:anilmahajan@celindia.co.in).

The right to suspend the short –listing process or part of the process to accept or reject any or all applications at any stage of the process and/ or to modify the process or any part thereof at any time without assigning any reason is reserved by CEL without any obligation or liability whatsoever.

**11. Authorization:** Authorization letter issued in favor of the signing authority on behalf of the bidder.

- a. Power of Attorney/Board Resolution/Authorization by partner on letter head of company in favor of the person authorized to sign and submitting the EOI document
- b. In case of company memorandum of association and article of association along with a board resolution authorizing the concern person to sign and submit the tender shall be annexed with this tender
- c. In case of partnership copy of partnership deed along with certificate of registration issued by registrar of firms will be required to be submitted along with the tender/EOI signed by one of the partner. In case the EOI/Tender is signed by the authorized signatory i.e. other than the partner of the firm/ director of the company an authorization given by all the partner of the firm needed to be enclosed additionally
- d. In case of Sole proprietor, the undertaking from the proprietor would be needed (self-declaration)

**12. Format and Signing of Bid:**

- a. EOI form should be clearly filled in ink/duly typed giving full name and address of the party and in English Language only. All correspondences and other documents pertaining to the contract, which are exchanged between the parties, shall be written in the English
- b. The bid submitted shall be sealed properly

**13. Sealing and Marking Of Bids:**

- a. Bidders shall submit their Proposals by registered post or by hand at the following office address on or before the last date and time for receipt of proposals mentioned in the EOI documents. The envelope shall be addressed to:

**General Manager (P&S)  
Central Electronics Ltd  
Site 4, Industrial Area,  
Sahibabad, UP (201010).**

**14. Bidder's Responsibility:**

The following is the sole responsibility of the bidder:

- a. The Bidder is expected to examine carefully the contents of all the documents provided. Failure to comply with the requirements of EOI Document will be Bidder's own responsibility
- b. All other matters that might affect the Bidder's performance under the terms of this EOI Document.
- c. CEL shall not be liable for any mistake or error or neglect by the Bidder in respect of the above

**15. Other Terms & Conditions:**

- a. This EOI does not constitute any form of commitment on part of CEL for any purchase order/work order. Furthermore, this EOI confers neither the right nor an expectation on any company to participate in the proposed Service. CEL reserves the right to not to consider any or all the applications (bids) received or stop the process of EOI at any stage, if it is required to meet its business objectives. The partner shall bear all costs associated with the preparation and submission of the EOI. The CEL will not be responsible or liable for any costs, regardless of the conduct or outcome of the bidding process.
- b. CEL reserves the right to restrict the list of pre-qualified parties/applicants up to any numbers. CEL has the sole discretion to accept/reject one/all EOI without assigning any reason whatsoever.
- c. CEL also reserves the rights to accept/reject any offer at any stage of the process and/or modify the process or any part thereof or to vary terms at any time without giving any reason.
- d. This advertisement does not constitute and will not be deemed to constitute any commitment on part of CEL for any purchase / work-order nor any expectation on any party to participate in the future proposed tenders.

**16. Final decision making authority:** CEL reserves right to accept or reject any application and finalize the pre-qualification process and reject all application at any time, without assigning any reason whatsoever and shall not be held liable for any such action.

**17.** CEL is not responsible for non-receipt of EOIs within the specified date and time due to any reason including postal delays or holidays in between.

**18.** Bidders shall be deemed to have:

- 18.1. Examined the Request for EOI document and its subsequent changes, if any for the purpose of responding to it.
- 18.2. Examined all circumstances and contingencies, having an effect on their EOI application and which is obtainable by the making of reasonable enquiries.

**19. Jurisdiction and Applicable Law :**

All matter connected with the EOI, shall be governed by the law of India (both substantive and procedural) for the time being in force and shall be subject to exclusive Jurisdiction of the courts at Delhi.

**20. Submission of EOI:**

The bidders can submit the proposal for any one or more items in sealed envelope superscribing the category applying for EOI no., Name of the EOI and Due Date.

**21.** All future communication/changes/additional information w.r.t. this website advertisement shall be notified through this website only.

**22. Process before submission of EOIs:-**

Raising of queries/clarifications on Request for EOI document: The applicants requiring any clarification on this document should submit their written queries with EOI details to the following email: [anilmahajanl@celindia.co.in](mailto:anilmahajanl@celindia.co.in)

- a) **Modification in Request for EOI document:** At any time prior to the deadline for submission of EOIs, CEL may modify any part of this document. Such change(s) if any may be in the form of an addendum/corrigendum and will be uploaded in CEL's website <https://www.celindia.co.in>. All such change(s) will automatically become part of this EOI and binding on all applicants. Interested applicants are advised to regularly refer the CEL's URLs referred above.
- b) **Submission of EOI:** The applicants may submit the EOI as per EOI Schedule. The CEL may ask applicants for clarifications or additional documents/ credentials at its discretion. Clarifications (if any) will be e-mailed to the applicants.
- c) All pages of the EOI should be signed by only the authorized person(s) of the company/firm. Any interlineations, erases or overwriting shall be valid only if the person(s) signing the EOI authenticates them. The EOI should bear the rubber stamp of the applicant on each page except for the un- amendable printed literature.

**23. Particulars**

- a) This should not be treated as a commercial tender document and parties are advised not to offer their prices or include any financial aspect with the response to EOI.
- b) Even though BIDDERS may satisfy the above requirement, he would be liable to disqualification if it has:-  
Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the EOI pre-qualification document.

**24. Scope of work for I&C Vendor:**

The broad scope of the work of I&C vendors includes supply of all essential items like module mounting structures (GI) , Junction boxes, suitable sized cables for inter- connection of complete system (batteries/ PCU/ Inverter / AC mains / net metering etc) , Connectors, Chemical Earthing, Lightening Arrestor, Conduit pipes Nut Bolts etc. required for installation & commissioning of a power plant except supply of Solar Modules, Inverter/PCU and Battery which shall be provided to the vendor from our sales office at Pune (Maharashtra)/Chennai (Tamilnadu) / Delhi/ Sahibabad (UP).

- a. Bidders shall conduct site survey and finalize array layout design.
- b. Bidder must start the work at site within 07 days from the date of issue of purchase order.

- c. To arrange for pre-dispatch inspection of material before delivery of material at site to be used for I&C.
- d. Contractor shall make his own arrangement for safe storage of their as well as CEL's material (Which will be supplied by CEL).
- e. To co-ordinate with CEL officials for verification of completed works along with all the required documentation and collection of payments from the customer.
- f. Materials, wherever supplied, shall be provided with fresh quality. Workman ship shall be neat & clean without any blemish. In case of any observation by CEL official regarding materials & workmanship, the same have to replaced and/or repaired to the satisfaction of CEL.
- g. No transportation charges shall be paid during the period of contract.
- h. No escalation shall be applicable on the prices.
- i. In case of any losses, theft or damage of material, the contractor shall alone be responsible to make alternate arrangement for completion of the project within contractual delivery, commissioning and handing over to Customer within quoted price. The purchaser shall in no way, whatsoever, responsible to compensate the contractor in this account.
- j. Contractor shall arrange all the utilities required to complete the work. No payment on this account shall be paid by CEL.
- k. Contractor shall ensure 24X7 availability of their I&C teams at each of our four sales office.
- l. Any other work as required on the site for completion of the project.
- m. All work related to assisting the customer in obtaining Net metering permission from the local authorities.

**25. Validity of EOI:**

- a) The EOI shall be perpetually opened. However, shall be valid up to 30.09.2020.
- b) CEL has the right to close it at any point of time without any prior intimation.
- c) The response of EOI shall periodically be reviewed by CEL preferably on monthly basis.



**Annexure-1****Eligibility Criteria Conditions For Bidders**

<b>SL No.</b>	<b>Eligibility Criteria</b>	<b>Document to be Submitted</b>
<b>General Eligibility Criteria</b>		
1.	Company/firm/proprietorship registration. The firm must have been registered for more than 02 Years.	1. Company Registration Certificate 2. Company Profile 3. Memorandum and Article of Association (company/firm) / other relevant document. In case of Proprietors indicating details of Directors/ Partners/ Proprietors. 4. other registration certificate, if any required
2.	OEM or Dealer / Distributor / Reseller a) The OEM or its authorized dealer / distributor / Reseller may apply for the empanelment for the BOS as mentioned in the EOI. b) In case OEM is applying directly for the empanelment, its authorized dealer / distributor / Reseller may not be able to apply for the empanelment for that product. c) One OEM may authorize maximum two dealers / distributors / resellers for its Products.	<b>In Case of OEM,</b> a) Product Manufacturing certificate <b>In Case of Dealer/Distributor,</b> a) Authorization letter from the OEM, stating full techno-commercial support (including post sale services) to its dealer / distributor for which they are authorizing.  Note: One OEM can authorize maximum two Dealers / Distributors / resellers for the empanelment. Either OEM or its authorized Dealer / Distributor can apply for the empanelment; both of them can not apply for empanelment.
3.	The product offered under this category should be either MNRE approved or approved by ISI/IEC standard	a) Declaration of company letterhead b) Certificates, as required.
4.	All Annexure of this EOI, duly filled and stamped	All the annexure enclosed with this EOI should be submitted duly signed and stamped.
<b>Financial Eligibility Criteria</b>		
5.	Copy of PAN card and GST registration	Duly Signed and stamped Copy.
6.	Company Balance Sheet and Profit and Loss statement	Audited P/L account and balance sheets for any one financial year in the last two Financial years.
<b>Experience criteria for installation &amp; commissioning</b>		
	<b>I&amp;C of 10 nos of solar system of minimum capacity 3KWp in last 3 financial years</b>	<b>Copy of the WO and their completion certificates</b>
<b>Note:</b> All the documents submitted by you should be duly signed and stamped by the authorized Person		

**Annexure-2**

**Vendor Data Format**

- 1. Name of Firm / Company:**
- 2. Address**
- 3. Name of contact Person**
- 4. Contact /Mobile Number**
- 5. Email address**
- 6. PAN of Firm/Company**
- 7. GST of Firm/Company**
- 8. Banks Details**
  - a. Account Number**
  - b. Nature of account**
  - c. IFSC Number**
  - d. Bank Name &Branch**
  - e. Account Holder Name**

Correspondence with respect to this tender may be addressed to Mr / Ms at Email id.....and mobile no.....  
I/We accept that CEL may send SMS and/or email regarding this tender/any other tender, award of contract, purchase order(s) and/or any other information on any/all mobile nos. mentioned in this vendor data sheet. I/We certify that the information given herein is correct to the best of my knowledge and belief.

Signature of Proprietor/CEO/Chairman

Seal of the company/concern

**Annexure-3**

**TO WHOM SO EVER IT MAY CONCERN**  
**(On Company's Letter Head)**

1. M/s\_\_\_\_\_undertake that we will comply with all the terms and condition of the Purchases Order issued by CEL.
2. We undertake to provide the full after sales support for the offered products.
3. We undertake to deliver the product ontime.
4. We undertake to provide the genuine & fresh products only.
5. We undertake to provide the products which meet this EOI criteria.
6. We undertake to provide onsite service during warranty period as mentioned in this Eol.

Signature of the Authorized signatory

Name & Designation

Date:

Place:

**Annexure-4**

Contact detail of the authorized signatory and an authorized contact person on behalf of the applicant is to be provided asunder:-

<b>Particulars</b>	<b>Authorized signatory for signing the EOI</b>	<b>Authority authorizing</b>
Name		
Designation		
Email Id		
Landline		
Mobile No.		
Address		

**Annexure-5**

SL No.	Solar Power Plant Capacity (in kWp)	Approx Roof/ Ground Area Required (in SqMtrs.)	Solar PV Modules	Connection	Power Conditioning Unit/Inverter + Charge Controller (IEC Standard)	Battery Bank (IS Standard)	Module Mounting Structure(Type GI) (IS Standard)
1.	1 kWp	10	335 Wp (03 Nos.)	1 Series x 2 Parallel	24 V, 1 KVA	24 V, 350 AH	3 Module Structure (1 No.)
2.	2 kWp	20	335 Wp (06 Nos.)	2 Series x 3 Parallel	48 V, 2 KVA	48 V, 300 AH	3 Module Structure (2 Nos.)
3.	3 kWp	30	335 Wp (10 Nos.)	2 Series x 5 Parallel	48 V, 3 KVA	48 V, 450 AH	5 Module Structure (2 Nos.)
4.	4 kWp	40	335 Wp (12 Nos.)	4 Series x 3 Parallel	96 V, 4 KVA	96 V, 300 AH	4 Module Structure (3 Nos.)
5.	5 kWp	50	335 Wp (16 Nos.)	4 Series x 4 Parallel	96 V, 5 KVA	96 V, 400 AH	4 Module Structure (4 Nos.)

**Annexure-6**

Sr. No.	Item	Min. specification
1	Module Mounting Structure	MS hot dipped galvanized, GI thickness>120μm, Corrosion proof
		C section design with 4 legs
		Necessary hardware and installation kit (SS nut-bolts, J-bolts, bracing .etc.)
		Designed withstand wind speed $\geq 150$ KPH
		min. clearance of the structure from roof/ground level $\geq 300$ mm
		max. load of the structure when installed with PV module $\leq 60$ kg/m <sup>2</sup>
2	Battery Bank	Working temp. range = 0 to 60 °C, RH $\geq 90\%$
		Battery Warranty = 5 years
		Cycle Life (Full charge to full discharge @ 25 deg C before capacity of battery falls below 75%) $\geq 1500$
		Battery charge/discharge at C/10 or better
3	PCU	Pure sine wave, Single phase, MPPT based.
		operating voltage = 230V $\pm 15\%$
		peak efficiency $\geq 95\%$ , THD $\leq 5\%$
		Working temp. range = 0 to 60 °C, RH $\geq 90\%$
		General Protection from ingress of dust and vermin (min. IP31 protection) and maintenance free.
		Overvoltage/under voltage/overload - automatic shutdown and recovery
		Protection against short circuit, over temperature, battery and PV reverse polarity
		inbuilt type-2 SPD protection
		LCD/LED type display with following Display parameters- Insulation Resistance, faults, fault logs, relevant parameters (voltage, power, current) of PV side, battery side and load side. The display should also show the following current and cumulative values- PV power generation, power supplied to load and power absorbed from grid.
4	Grid-tied Inverter	provided with galvanic isolation or RCD
		In addition to the above specifications for PCU, the inverter should have sufficient no. of protected MC4 DC input connections with suitable rating and preferably DC input isolation switch to obviate the need for DCDB box.
		It should be wall mountable or table top.

**Note:**

(1) The bidder must show compliance of its item for each of the solar plant capacity as per the configuration shown in Annexure-05 of the EOI.

(2) All the products will be either MNRE approved or as per IS/IEC standard.

**Annexure-7****CHECKLIST**

<b>S L No.</b>	<b>Documents</b>	<b>Enclosed (Yes/No)</b>
<b>1.</b>	EOI document & its corrigendum(if any), duly filled and stamped	
<b>2.</b>	Company Registration Certificate (Annexure -01, Eligibility Criteria S L No.1)	
<b>3.</b>	Memorandum and Article of Association (company/firm)/ other relevant document. In case of Proprietors indicating details of Directors/ Partners/ Proprietors. (Annexure -01, Eligibility Criteria S L No.1)	
<b>4.</b>	Company Profile (Annexure -01, Eligibility Criteria S L No.1)	
<b>5.</b>	OEM Authorization/Certificate (Annexure -01, Eligibility Criteria S L No.2)	
<b>6.</b>	Declaration/Certificate (Annexure -01, Eligibility Criteria S L No.3)	
<b>7.</b>	All Annexure of this EOI, duly filled and stamped (Annexure -01, Eligibility Criteria S L No.4)	
<b>8.</b>	Copy of PAN card and GST registration (Annexure -01, Eligibility Criteria S L No.5)	
<b>9.</b>	Company Balance Sheet and Profit and Loss statement (Annexure -01, Eligibility Criteria S L No.6)	
<b>10.</b>	Processing Fee DD ( As per Clause 8 of this EOI)	
<b>11.</b>	Authorization Letter ( As per Clause 11 of this EOI)	
<b>12.</b>	Any other information considered necessary but not included above.	