

CENTRAL ELECTRONICS LIMITED
(A Public Sector Enterprise)



TENDER DOCUMENT

For

**“Design, Survey, Supply, Installation, Testing, Commissioning
& 5 Years Comprehensive Maintenance of Distributed Grid
Connected Solar PV Systems for Solarization of Grid
Connected Agriculture Consumers under “Kusum Scheme –
Component C (LOT-5)”**

Tender No.C-2(b)/RC/0700/4625/2020 dated 04.09.2020

Assistant General Manager
Materials Management Division
Central Electronics Limited,
4, Industrial Area, Saur Urja Marg, Sahibabad–201010(UP) INDIA
Tel.No.0091-120-2895144 FaxNo.0091-120-2895148
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TENDER NOTICE

Tender No.C-2(b)/RC/0700/4625/2020

Date: 04.09.2020

Central Electronics Limited invites **ONLINE** bids (Technical & Price) from eligible bidders which are valid for a minimum period of 180 days from the date of opening for **“Design, Survey, Supply, Installation, Testing, Commissioning & 5 Years Comprehensive Maintenance of Distributed Grid Connected Solar PV Systems for Solarization of Grid Connected Agriculture Consumers under “Kusum Scheme – Component C (LOT-5)”**.

Scope of Tender	Design, Survey, Supply, Installation, Testing, Commissioning & 5 Years Comprehensive Maintenance of Distributed Grid Connected Solar PV Systems for Solarization of Grid Connected Agriculture Consumers under “Kusum Scheme – Component C (LOT-5)”
Earnest Money Deposit	Rs. 10,00,000/- (Rupees Ten Lakhs Only)

Interested parties may view and download the tender document containing the detailed terms & conditions, free of cost from the website www.etenders.gov.in or www.celindia.co.in.

Bids are to be submitted **ONLINE** Only.

Please see document control Sheet at Annexure-A.

FOR CENTRAL ELECTRONICS LIMITED

Sd-

**Assistant General Manager
Materials Management Division**

TENDER DOCUMENT for Tender No. **C-2(b)/RC/0700/4625/2020** dated **04.09.2020****Important Instructions: -**

1. The following documents/Annexures are part of tender document:

a. Tender notice		
b. Document Control Sheet -		Annexure-1
c. BOQ Format		Annexure-2
d. Eligibility Requirement	}	
e. Scope of Work		
f. Special Conditions of Contract		
g. Detailed Scope of Work and Technical Specifications		Annexure-A
h. Price bid format		
i. Commercial terms & conditions		Annexure-B
j. Format for submission of Vendor Data		Annexure-C
k. Tender acceptance letter		Annexure-D

2. Quotations shall be liable to be rejected if there is/are any deviation(s) from the specifications.
3. Escalation in price (except where price variation clause is applicable), deviation from delivery schedule, terms and conditions will not be permitted in your quotation. Statutory Taxes & Duties should be shown separately from the price.
4. Catalogue, literature, specification details should accompany the quotation. Incomplete quotations are liable to be rejected.
5. **Any deviations whether technical or commercial stated anywhere in the bid shall not be taken into account and may render the bid non-responsible and liable to be rejected.**
6. Vendor Data should be submitted in the **Format for submission of Vendor Data** as per **Annexure C**.
7. Quotation should be submitted in **Two Packet System**.
8. Bids should be submitted in ONLINE only. Following are to be submitted in your bid:

a) Technical Bid:

- I. Earnest Money Deposit RTGS/NEFT acknowledgement or the documents for exemption from submission of EMD.
- II. Documents required as per eligibility criteria given in the tender.
- III. Filled up Format for Submission of Vendor Data as per format at **Annexure-C**.
- IV. Tender acceptance letter as per format at **Annexure-D**.

b) Price Bid: Prices to be filled ONLINE in the separate BOQ file only.

Document Control Sheet & Important dates

Tender Reference No.	C-2(b)/RC/0700/4624/2020
Name of Organization	Central Electronics Limited
Tender Type (Open/Limited/EOI/Auction/Single)	Open
No. of Packets	Two Packet
Tender Category (Services/Goods/Works)	Goods
Type/Form of Contract (Work/Supply/Auction/Service/Buy/Empanelment/Sell)	Supply
Payment Mode (Online/Offline)	Online

Date of Issue/Publishing	04/09/2020 (15:00 Hrs)
Document Download/Sale Start Date	04/09/2020 (15:00 Hrs)
Document Download/Sale End Date	19/09/2020 (14:30 Hrs)
Bid submission Start Date	04/09/2020 (15:00 Hrs)
Last Date and Time for Submission of Bids	19/09/2020 (14:30 Hrs)
Date and Time of Opening of Bids	19/09/2020 (15:00 Hrs)

THIS IS AN OPEN TENDER.

BIDS ARE TO BE SUBMITTED ONLINE ONLY.

Validate Print Help

Item Rate BoQ

Tender Inviting Authority: ASSISTANT GENERAL MANAGER, MATERIALS MANAGEMENT DIVISION, CENTRAL ELECTRONICS LIMITED, SAHIBABAD

Name of Work: Tender for Design, Survey, Supply, Installation, Testing, Commissioning & 5 Years Comprehensive Maintenance of Distributed Grid Connected Solar PV Systems for Solarization of Grid Connected Agriculture Consumers under *Kusum Scheme - Component C (LOT-4)

Tender No: C-2(b)/RC/0700/4625/2020

Name of the Bidder/ Bidding Firm / Company :									
Price-Bid (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected. Bidder. Bidders are allowed to enter the Bidder Name and Values only)									
Sl. No.	Item Description	Quantity	Units	Basic Price To be entered by the Bidder Rs. P	GST Percentage	HSN SAC Code	TOTAL AMOUNT Without GST In Rs. P	TOTAL AMOUNT WITHOUT GST In Words	
1	Supply of BOS for 4.5 KWp Solar Power generating system as per tender documents	5	Sets		30	31	0.00	INR Zero Only	
2	Design, Survey, Installation, Testing, Commissioning, & 5 years comprehensive maintenance for 4.5 KWp Solar Power generating system as per tender documents	5	Sets				0.00	INR Zero Only	
3	Supply of BOS for 7.5 KWp Solar Power generating system as per tender documents	770	Sets				0.00	INR Zero Only	
4	Design, Survey, Installation, Testing, Commissioning, & 5 years comprehensive maintenance for 7.5 KWp Solar Power generating system as per tender documents	770	Sets				0.00	INR Zero Only	
5	Supply of BOS for 11.25 KWp Solar Power generating system as per tender documents	56	Sets				0.00	INR Zero Only	
6	Design, Survey, Installation, Testing, Commissioning, & 5 years comprehensive maintenance for 11.25 KWp Solar Power generating system as per tender documents	56	Sets				0.00	INR Zero Only	
Total In Figures							0.00	INR Zero Only	
Quoted Rate In Words									

Tender for Design, Survey, Supply, Installation, Testing, Commissioning & 5 Years Comprehensive Maintenance of Distributed Grid Connected Solar PV Systems for Solarization Of Grid Connected Agriculture Consumers Under “Kusum Scheme – Component C (LOT-5)”

Eligibility Requirement

The detail of eligibility requirements is provided in the table below. The bidders are required to furnish the required supporting documents along with the Technical Bid.

S. No.	Criteria	Documents Required
1.	Bidder can be sole/single bidder or consortium of upto 2 members with one of the member as lead member as per format of consortium agreement.	Duly notarized copy of consortium agreement as per attached format in Appendix-1 must be submitted.
2.	<p>The Bidder should have any of the following legal status:</p> <p>a) Body incorporated in India under the Companies Act, 2013 including any amendment thereto; OR</p> <p>b) Body incorporated in India under the Limited Liability Partnership (LLP) Act, 2008 including any amendment thereto; OR</p> <p>c) Firm registered under Partnership Act, 1932 in India; OR</p> <p>d) Sole Proprietor</p> <p>In consortium, all members must fulfill the requirement and submit the documents as per the tender document.</p>	<p>a) In case of Company – Copy of Registration/Incorporation Certificate</p> <p>b) In case of LLP – Copy of Deed of Partnership</p> <p>c) In case of Partnership – Copy of Deed of Partnership</p> <p>d) In case of Sole Proprietor – Duly notarized Undertaking from Sole proprietor</p>
3.	The Bidder must have the required GST Registration In case of consortium, all the members must fulfill this requirement.	Copy of GST registration certificate with legible GSTIN.
4.	The bidder must be company registered under GST in the state of Rajasthan. All compliance of GST is to made by bidder. Copy of the certificate to be enclosed. In case, bidder doesn't have the GST registration in the state of Rajasthan, bidder shall submit the undertaking that GST registration certificate of Rajasthan state will be provided within 15 days from the date of purchase order. In consortium, lead bidder must fulfill the requirement and submit the documents as per the tender document.	Copy of valid GST registration certificate/undertaking
5.	Contractor has to submit the undertaking on stamp paper that the contractor shall arrange a valid electrical contractor license of Class "A"/"B" in the name of CEL issued by Govt. of Rajasthan within 20 days of PO. In consortium, lead bidder must fulfill the requirement and submit the documents as per the tender document.	The bidder shall provide an Undertaking
6.	The firm must not have been debarred / blacklisted / defaulted by any Govt. Dept., agency, PSUs	The bidder shall provide an Undertaking as per format in

	<p>/institution / agencies / autonomous organizations. As proof of the same the bidder shall submit duly notarized self-certificate by an authorized person of the bidder's company/firm.</p> <p>In consortium, both members must fulfill the requirement and submit the documents as per the tender document.</p>	Appendix-2.
7.	<p>Bidder shall have experience of execution of supply, installation and maintenance of grid connected / off-grid Solar Photovoltaic Systems (SPV) (SPV Pumps / Rooftop SPV / Ground mounted SPV / Mini-grid/home lighting) during last Five years [i.e. 2015-16 to 1st July, 2020]. The works shall have been executed for any government department/ PSU/NGO/ NSE-BSE Listed company/ Regd. Co-operative society with a value of not less than 6.7 Crores.</p> <p>In consortium, both parties shall jointly meet the eligibility criteria.</p>	<p>The details of projects executed during the mentioned period should be listed as per attached format. Copy of each work order and completion certificates must be submitted.</p> <p>Work experience certificate having value of completed work in the name of bidder duly certified by Chartered Accountant as per the attached format in Appendix-3.</p>
8.	<p>The Bidder should have positive net worth for each of the last three Financial Years (FY16-17, FY17-18, and FY18-19). In case of consortium, all the partners of consortium shall meet individually this qualification.</p>	<p>Certificate fulfilling required financial criteria in the name of Bidder duly certified by Practicing Chartered Accountant as per attached format in Appendix-4.</p>
9.	<p>Minimum Average Annual Turnover (MAAT) during any 3 best out of last five financial years (FY15-16, FY16-17, FY17-18, FY18-19 and FY19-20) of the bidder shall not be less than 6.7 Crores.</p> <p>In consortium, both parties shall jointly meet the eligibility criteria.</p>	<p>Copies of the audited balance sheet, ITRs and profit & loss account must be submitted along with the technical bid.</p>
10.	<p>Certificate from Banker</p>	<p>A certificate as per the attached format from banker indicating various fund based/non fund based limits sanctioned to the bidder and the extent of utilization as on date as per the attached format in Appendix-5. Such certificate shall have been issued not earlier than three months prior to the date of bid opening. Wherever necessary, CEL may make queries with the Bidders' bankers.</p> <p>In case of Bid Submitted in consortium, the certificate from Bank for all the consortium partners be furnished.</p>

Note:

- a) Firms who are debarred/ blacklisted anywhere in India will not be considered.
- b) The purchaser reserves the right for verification of any original documents submitted with the bids.

INTRODUCTION

In February 2019, Government of India launched Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM scheme) with the objective of financial and water security to farmers.

Individual farmers having grid connected agriculture pump will be supported to solarise pumps. The farmer will be able to use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOM.

It will help DISCOMS to reduce the subsidy burden as well as meet their RPO targets

The Ministry of New & Renewable Energy, Government of India vide OM F. No. 32/645/2017-SPV Division dated 22.07.2019 issued operational guidelines for implementation of Pradhan Mantri Kisan Urja Suraksha Evam Uttan Mahabhiyan Scheme (KUSUM). Under Component C, solarisation of grid connected agriculture pumps of individual pump capacity is targeted across India.

Modality to be adopted for KUSUM Component C implementation shall be based on Net-metering arrangement, where the agriculture pump will continue to run at rated capacity taking power from solar panels and balance power from grid, if required, and in case solar power generation is higher than required by pump, the additional solar power would be fed to the grid. **In case of non-availability of power from grid, the pump should be able to run taking power from solar panels while avoiding any power supply to the grid (suitable arrangement is to be made by the contractor in this regard).**

Key benefits of KUSUM scheme:

- a) DISCOM will save on recurring deficit by low agriculture tariff.
- b) Farmers will receive reliable day time power.
- c) Farmers can sell excess power to Grid and increase their income
- d) Farmers will be incentivised to conserve energy as well as ground water.
- e) No additional Electric load on the grid for Agriculture Pumps.

Scope of work

Scope of work is design, survey, supply, installation, testing, commissioning & 5 years comprehensive maintenance of distributed grid connected solar PV systems for solarization of grid connected agriculture consumers under “KUSUM Scheme – Component C” in Jaipur Discom on selected agriculture feeders (as per technical specifications as prescribed).

The list of agriculture consumers where such solar systems are to be installed will be made available to the bidders after award of contract.

Mode of Execution of Programme:

The basis of evaluation of the bids shall be the cost/rate quoted in the Price Schedule (without GST). To further clarify, all the costs including applicable taxes, duties, etc. (without GST) pertaining to design, survey, supply, installation, testing, commissioning & 5 (five) years comprehensive maintenance of the said complete SPV systems shall be inclusive in the Price Bid quoted by Bidders for the purpose of comparison and evaluation. Bidders are required to quote rate / cost on firm basis and no price variation on any account shall be considered.

The work is to be carried out on a ‘Turn Key Basis’.

The contractor shall be provided the list of agriculture connections/ beneficiaries covered under the scope of work under this tender.

The contractor shall also be required to set up their repair and maintenance centres for providing effective repair/maintenance services to the beneficiaries and meet conditions detailed in tender documents.

KEY DEFINITIONS

Definitions

1.	“JVVNL” / “Jaipur Discom”	Jaipur Vidyut Vitran Nigam Limited, Jaipur
2.	Rajasthan Discoms	Discoms in Rajasthan namely: JVVNL
3.	SPV System:	<p>“SPV System” shall mean the grid-connected Solar PV system as per Tender Document that shall be supplied, installed, commissioned and maintained with all other ancillary required by the Contractor for satisfactory operation of the SPV System.</p> <p>It shall mean the Grid-tie Solar Photo-Voltaic (PV) system including the grid-tie inverter(s), SPV controller, module mounting structure(s), cables and connectors, safety and earthing equipment, interconnection equipment, and inverter with remote monitoring with other components for Solarization of Agriculture pump sets of Agriculture Consumers that shall be supplied, installed, commissioned and maintained by the Contractor.</p>
4.	CMC:	Comprehensive Maintenance Contract
5.	Beneficiary:	“Agriculture Consumer” / Owner of Agriculture Connection which is going to be solarized under this tender.
6.	Scheme:	KUSUM Scheme – Component C launched by MNRE, GoI
7.	Project:	Work of design, survey, supply, installation, testing, commissioning & 5 years comprehensive maintenance of distributed grid connected solar PV systems for solarization of grid connected agriculture consumers under “KUSUM Scheme – Component C” in Jaipur Discom
8.	“Solarization”	“Solarization” shall mean to connect the existing grid-connected Agriculture Consumer pump-sets of farmer to the distributed, renewable energy source of Solar by installing Grid connected SPV system of the required capacity in the farmer’s premises (i.e. farm) as per the Tender Document terms and condition.
9.	Guaranteed CUF	<p>Shall be 15% calculated with respect to the AC capacity of the PV plant.</p> <p>CUF in a Year shall mean the ratio of the output of the SPV Power Plant in a Year versus installed Project capacity x 365 x 24. (CUF = Cumulative Project output in kWh / (installed Project capacity in kWp x 24 x 365))</p>

1.	+	Plus (Addition)
2.	AC	Alternating Current
3.	ACP	Aluminium Composite Panel
4.	Ag.	Agriculture
5.	AM	Air Mass
6.	ASTM	American Society for Testing and Materials
7.	BOQ	Bill of Quantity
8.	BOS	Balance-of-System
9.	CEA	Central Electricity Authority
10.	CEIG	Chief Electrical Inspector of Rajasthan
11.	CERC	Central Electricity Regulatory Commission
12.	CMC	Comprehensive maintenance Contract
13.	DC	Direct Current
14.	DCR certificate	Domestic Content Requirement certificate
15.	DTR	Distribution Transformer
16.	DWC	Double Walled corrugated
17.	FF	Fill Factor
18.	HFL	High Flood Level
19.	HP	Horse Power
20.	IEC	International Electro-technical Commission
21.	IEEE	Institute of Electrical and Electronics Engineers
22.	IoT	Internet of Things
23.	IP	Internet Protocol /Ingress Protection
24.	IPR	Intellectual Property Right
25.	IS	Indian Standard
26.	Isc	Short Circuit Current
27.	IST	Indian Standard Time
28.	kV	Kilo Volt
29.	kW	Kilo Watts
30.	kWp	Kilo Watt peak
31.	LoI	Letter of Intent
32.	LT	Low Tension
33.	MCB	Miniature Circuit Breaker
34.	MDAS	Meter Data Acquisition System
35.	MIS	Management Information System
36.	MMS	Module Mounting Structure
37.	MNRE	Ministry of New & Renewable Energy, Government of India
38.	MPPT	Maximum Power Point Tracker
39.	MW	Mega Watt
40.	NEC	National Electric Code
41.	NIT	Notice Inviting EOI Document
42.	NOCT	Normal Operating Cell Temperature
43.	OS	Operating System for Computer/server
44.	OEM	Original Equipment Manufacturer
45.	PAN	Permanent Account Number