



Tender Document

Tender No. MGI/SOH/41/2018-19 dated : 27.02.2020

**Invitation of Tender Bids for Supply,
Installation & Maintenance of Solar Home
Lighting System for Lighting Remote
Hamlets of Karnataka State**

**MAHATMA GANDHI INSTITUTE OF
RURAL ENERGY & DEVELOPMENT**

**(RURAL DEVELOPMENT & PANCHAYAT RAJ DEPT., GoK)
Sri Rampura Cross, Jakkur, Bengaluru – 560 064**

TENDER NOTICE

Established vendors with proven track record and experience in the Supply, Installation & Maintenance of Solar Home Lighting System for Lighting Remote Hamlets of Karnataka State are invited to submit their most competitive bids tentatively **on or before 5 PM, 15.03.2020**. The bids are to be sent in a sealed envelope super-scribing the Tender No. and name of the item clearly on the envelope addressed to:

**The Executive Director,
MGIRED, Srirampura Cross, Jakkur,
Bengaluru – 560 064.**

Or the tenders can be dropped in the drop box kept at MGIRED reception. The tenders both Technical and Commercial (Financial) bids have to be submitted in separate envelopes.

The tender documents can be downloaded from tender's page of MGIRED website: www.mgired.kar.nic.in

Detailed Tender schedule is as below:-

Sl. No.	Tender Schedule	Date	Time
1	Downloading start date from tenders page of MGIRED website : www.mgired.kar.nic.in Contact:080-23626493	27.02.2020	09:00 AM
3	Pre-Bid Meeting	02.03.2020	11:00 AM
2	Last date for submission of tender documents	15.03.2020	05:00 PM
3	Technical Bid Opening in MGIRED Office	16.03.2020	11:00 AM
4	Financial Bid Opening in MGIRED Office	16.03.2020	03:00 PM

Executive Director, MGIRED reserves the right to reject any/all offers without assigning any reasons thereof.

**Executive Director
MGIRED, Bengaluru**

TENDER EVALUATION CRITERIA

Offers of only those parties who are found qualifying based on following Tender Evaluation Criteria will be taken in to further consideration and prices of only those parties qualifying based on these criterion will be opened.

COMMERCIAL

1. Earnest Money Deposit in the prescribed form should be submitted along with the tender.
2. The company should have supplied solar home lighting systems in past three years as per Annexure-2

TECHNICAL

1. The Bidders should submit the list and pictures of the manufacturing and testing facilities and submit an undertaking that if the details provided by the Bidders are in deviation with the provision of the scheme, it will call for disqualification. If considered necessary, a team of MGIRED official may visit the facilities of the Bidders for verification. Companies which are engaged only in assembly of solar power generating systems with above mentioned bought out items will not be eligible for supply of systems under this scheme.
2. The Bidders should have valid test certificates as per required specifications for supply under tender and submit the copy of test reports.
3. Details of similar work done in last three years along with copies of the orders and certificates from the user agencies should be submitted along with the Technical Offer as per Annexure-2 of the Offer Document.
4. The party should have sufficient technically qualified and well-experienced manpower for Manufacturing, Marketing, and Installation and after sales service of the systems. Brief bio-data of the key personnel to be enclosed with the offers as per Annexure-3 of the Document.
5. The Bidders must pre-visit the site before the pre bid meeting.

GENERAL

As an acceptance of terms and conditions, the document duly signed and sealed on every page should be submitted along with the offer. Offers not satisfying any of the above mentioned criteria will be liable for rejection.

General Instructions:

- 1) Tender processing fee Rs 1000/- must be paid in the form of DD only in the name of 'Executive Director, MGIRED'.
- 2) EMD of Rs.24,000/- in the form of DD in the name of "**Executive Director, MGIRED**" specified in tender document only shall be accepted.
- 3) Tenders without tender processing fees and earnest money deposit (EMD) and which do not fulfill all or any of the condition or submitted incomplete in any respect will be rejected. Incase of EMD Exemption the Tenderer submit the relevant document alongwith the Technical Bid.
- 4) Conditional tender shall not be accepted.
- 5) Validity of the offer: The Offer shall be valid for 90 days from the date of opening of the offer.

Tender document shall be duly filled and page numbered, with an index, specifying the document attached and its page number(s). All the pages have to be sealed and signed in this list as well.

Qualification Criteria:

Sl. No.	Description	Vendor to Specify details
1	Bidder should be a registered company by Gol/GoK, having design, manufacturing facilities in India. (Copy to be submitted)	
2	Bidder must be an Indian Manufacturing company or Dealer of Indian Manufacturing company with a reputation.	
3	Bidder should have valid GST No. (enclose evidence)	
4	Bidder may furnish reference list of customers, with full contact details to whom Solar Photovoltaic Home lighting system have been supplied in the past. (Last 2 years at least)	
5	Performance certificate from the customer for satisfactory performance of the Solar photovoltaic system supplied to them.	
6	Details of Technical staff available (Brief Bio-data key Personnel be given) as per Annexure – 3 of the tender document.	
7	Bidder should be in core business of manufacturing Solar photovoltaic module/ battery/charge controller/DC LED luminaries with substantial annual turnover. Copy of audited financial statements for last three years to be	

enclosed in the prescribed proforma. <p style="text-align: center;">OR</p> An authorized dealer with appropriate documentation fulfilling the above can also submit the bid.	
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Specifications for solar home lighting system:

Sl. No.	Specifications- Solar Photovoltaic Module		
1.	Electrical	Open circuit voltage V_{oc}	22.0V
		Short Circuit Current I_{sc}	4.50A
		Maximum Voltage V_{mp}	18.3 V
		Maximum Current I_{mp}	4.25A
		Maximum Power @STC	75Wp
		Output tolerance	±5%
2.	Materials	Cell /Module	36
		Cells Type	Poly Crystalline silicon
		Front Cover	Toughened Textured Glass
		Encapsulation	Ethylene Vinyl Acetate (EVA)
		Back Cover	PV Back sheet
		Junction Box	With IP 65
		Bypass Diodes	Minimum of 1 bypass diode to be present
3.	Thermal	Operating temperature	-40°C to +85°C
4.	Warranty	Performance warranty	90% upto 10 years and 80% upto 25 years

Sl. No.	Specifications- Solar lead acid Battery	
1	Type	Lead acid Tubular low maintenance – C10 solar battery
2	Nominal Voltage	2.0 V/ cell
3	End cell voltage	1.3 V-1.8V/ cell (27 Deg C)
4	Battery capacity	12V, 60Ah (at C/10 discharge rate)
6	Battery Capacities	Measured at 27 Deg C
7	Marking	+ ve & - ve terminal shall be marked boldly on the terminals along with color indication Black- negative Red – positive
8	Terminals	1 No. of positive 1 No. of negative
9	Warranty	3 years

Sl. No.	Specifications- Solar charge controller
1.	Type : 12V/10A PWM charge controller with USB for Mobile charging application for home lighting system
2	Connection details of battery, panel and load to be clearly mentioned on terminals of the charge controller
3	The system should have protection against battery overcharge and deep discharge conditions.
4	Adequate protection should be provided against battery reverse polarity.
5	A fuse should be provided to protect against short circuit conditions.
6	Protection for reverse flow of current through the PV module should be provided.
7	The system should have three indicators. One indicator should indicate the charging under progress and should glow only when the charging is taking place. It should stop glowing when the battery is fully charged.
8	Second indicator should indicate the battery "low battery" condition.
9	Third indicator to indicate "LOAD ON" condition.
10	Option to connect a DC mobile charger.
11	Warranty 1 year

Sl. No.	Specifications- DC LED bulbs	
1	Nominal power in Watts	Number of bulbs
	3W	1 No.
	5W	2 Nos.
	9W	1 No.
2	Voltage	12 V
3	Life span	Minimum 30,000 hours
4	Luminous flux	Not less than 80 lm/W
5	Body colour	White/grey
6	Colour of light	White
7	Casing	plastic +PC or Aluminium
8	Warranty	1 year

Sl. No.	Specifications- DC Fan	
1	Type	Pedestal fan with 3 blades
2	Voltage	12 V
3	Power	18W
4	Multi speed level switch should be provided.	
5	Warranty for 1 year	

Sl. No.	Specifications- holders, switches & cables and PVC conduit pipes
1	DC wiring to be done as per requirement with good quality cables with test certificates.

Scope of work

Scope of work involves the following:

- 1) Selected bidder agrees to Supply and Install & Maintain Solar Home lighting systems- 27 Nos. with the following components:
 - Solar module 75Wp (Multi crystalline silicon)
 - Lead acid Tubular low maintenance – 60 Ah C10 solar battery
 - Charge controller- 10 A with option to charge mobile
 - DC luminaries - 3W -1 No, 5W-2Nos, and 9W- 1 No
 - DC fan- 18 W
 - Cables from module, loads and battery to charge controller; holders, switches & PVC conduit pipes.
- 2) After successful installation of 27 home lighting system and authentication by MGIRE, the bidder should maintain the system for a period of 3 years which includes repair and replacement of any components even after the warranty period without any extra cost.
- 3) Tenderer shall bear whole project costs such as cost of engineering, procurement, installation, administrative, maintenance cost for 3 year, logistic cost etc.
- 4) Tenderer shall bear all risks of loss and damage to any part of the solar home lighting system due to conditions not on account of MGIRE.

Instructions To Bidders:

- 1 Bids shall be submitted in two parts. Bid shall comprise of technical, commercial terms and conditions, documents as requisitioned / applicable along with the bid guarantee bond specified in the enquiry and comprise of price schedule as per prescribed proforma to be filled up by the bidders
- 2 The bidder shall be deemed to have carefully examined the specification in its complete form and to have fully informed and satisfied himself as to

the details, nature, character and quantities of the work to be carried out, site conditions and other pertinent matters and details.

3 Bidder shall carefully study all sections of this specification and deviations if any shall be brought out in the pre bid meeting. The bidders must attend pre bid meeting.

4 The specification documents shall be attached in the final contract or purchase order for supply of materials, equipment and services.

5 The prices quoted shall be for supply, including all packing, forwarding, freight, transit insurance, storage insurance charges, unloading at site, sales tax, excise duty, installation and maintenance cost for 3 years.

6 Bidder has also to give split up price for the said work.

7 Bidder shall clearly indicate in his bid that the quoted prices are firm. No price variation shall be applicable

8 Tender Evaluation

The Bidder shall comply with parameters as specified in the bid specification. No credit will be given during tender evaluation if parameters better than those specified are offered by the Bidder.

9 Submission of Certificates:

All the warranty certificates mentioned in the Specifications of the system to be enclosed with the technical bid .

10 Commercial deviations

No commercial deviations are acceptable and all commercial conditions shall be as per our specification. Any commercial deviation taken will not be considered for tender evaluation.

11 Mode of Payment

Payment for installation will be made after installation and observing the system and satisfactory performance for a period of 15 days. Annual Maintenance Charges (AMC) will be paid at the end of each annual maintenance period.

Annexure -1

Check List

To ensure that your offer submitted to MGIRED is complete in all respects, please go through the following checklist and tick mark for the enclosures attached with your offer:

Sl. No.	Description	Attached YES/ NO	Page No.
1)	Earnest Money Deposit in the prescribed form		
2)	The original document duly signed and sealed on every page, as a confirmation of acceptance of the terms and conditions of the document.		
3)	A copy GST Number, Permanent Account Number (PAN)		
4)	Relevant certificates for the Solar home lighting system		
5)	Details of similar work done in last three years alongwith copies of the orders and certificates from the customers, as per the Offer Evaluation Criteria as per Annexure – 2 of the tender document		
6)	Details of Technical staff available (Brief key Personnel be given) as per Annexure – 3 of the tender document		
7)	Name and address of dealers/distributors/ service stations in Karnataka along with copy of agreements.		
8)	Deviation, if any, from the specifications, terms and conditions etc. (Annexure – 4)		
9)	For Turnover & profit of company for last 3 2016-2017, 2017-18, 2018-19 practicing CA/CS Certificate attached.		
10)	All the pages of tender documents/ attachments numbered		

Annexure 2: Details of similar work experience ONLY in last three years
(Information to be attached with the Technical Offer)

Year	Name of the Company with full address, phone, fax and name of contact person	Work Description (solar steam cooking systems)	Ref. and date of the order	Work Order Value, <u>segregated</u> <u>Year-wise ONLY</u> <u>for past 3 years</u>	Details of order and its configuration (Quantity in nos. and capacity in terms of steam output)
2016-17					
2017-18					
2018-19					

- Copies of Work orders along with Work completion certificates should be attached with this information.
- If necessary, separate sheet may be used to submit the information.

Annexure 3: Details of Technical Staff available with the company for execution of work

(Information to be attached with the Technical Offer)

Sl. No.	Name	Qualification Certificate	Additional qualification if any	Total no. of years	Remarks
1)					
2)					
3)					

- Copies of Resumes and appropriate certifications should be attached with this information.
- If necessary, separate sheet may be used to submit the information.

Annexure- A Technical Bid

Guaranteed technical particulars of Solar Home Lighting System

Sl. No.	Item	Description
1	Solar module	
2	Lead acid Tubular low maintenance solar battery	
3	DC luminaries	
4	DC fan	
5	Charge controller with option to charge mobile phone	
6	Holders, switches , cables & PVC conduit pipes	

Signature of the Bidder with seal

**Annexure-B
Financial Bid**

Sl. No.	Item	Quantity	Project site	Scheduled installation dates	Rate for Installation (INR)	AMC for every year	Total amount (INR)
1.	Solar home lighting system supply, installation & maintenance	27 Nos.	Villages in Mundgod Taluk, Uttara Kannada District, Karnataka Or Any other Site in Karnataka State				

The bidders are required to follow the details of the technical specification while quoting rates.

Signature of the Bidder with seal