

Govt. of Jharkhand
Energy Department
Jharkhand Renewable Energy Development Agency (JREDA)
3rd Floor, S.L.D.C. Building, Kusai Colony, Doranda, Ranchi-834002.
Ph.: 0651-2491161, Fax: 0651-2491165,
E-mail: info@jreda.com; Website: www.jreda.com
e-Procurement Notice

Tender reference no.: 13/JREDA/DDG/Stand Alone/2016-17,

Dated 25/06/2016

1	Name of the work	Request for Proposal (RfP) for Rural Electrification Works of 24 Villages in districts of Latehar, West Singhbhum, Sahibganj, Pakur, Hazaribagh & Chatra in Jharkhand through 200Wp Solar Home System (Solar Power Pack) under Decentralized Distributed Generation (DDG) Scheme of Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY).
2	Estimated cost (Rs.)	Rs. 1.18 Crores
3	Time of completion	04 (four) Months
4	Date of publication of NIT on website: http://jharkhandtenders.gov.in	27.06.2016 (Monday)
5	Date & time of Pre-bid meeting	07.07.2016 (Thursday) at 12.30 PM
6	Last date & time for receipt of online bids	19.07.2016 (Tuesday) upto 05:00 PM
7	Submission of original copies of Bid fee & EMD (Offline)	19.07.2016 and 20.07.2016 up to 5.00 P.M.
8	Technical Bid Opening Date	21.07.2016 (Thursday) at 03:00 PM
9	Name & address of office inviting tender	Director, Jharkhand Renewable Energy Development Agency(JREDA) 3 rd Floor, SLDC Building, Kusai, Doranda, Ranchi- 834002 (Jharkhand)
10	Contact no. of procurement officer	0651-2491163/61
11	Helpline no. of e-procurement	0651-2491163/61

Any change can be seen on website: <http://jharkhandtenders.gov.in> & www.jreda.com,

Further details can be seen on website: <http://jharkhandtenders.gov.in> & www.jreda.com

Sd/-

Director,

JREDA, Ranchi

Jharkhand Renewable Energy Development Agency (JREDA)

3rd Floor, S.L.D.C. Building,
Kusai Colony, Doranda,
Ranchi-834002 (Jharkhand)
Tel: 0651-2491161
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**E-mail: info@jreda.com Website: www.jreda.com
<http://jharkhandtenders.gov.in>**

NIT No. 13/JREDA/DDG/Stand Alone/2016-17, Dated 25/06/2016.

Notice Inviting Tender

Jharkhand Renewable Energy Development Agency (JREDA) invites online lowest rate Bid(s) from eligible prospective Bidders, as per eligibility criteria prescribed in this RfP document of JREDA, for Rural Electrification Works of 24 Villages in districts of Latehar, West Singhbhum, Sahibganj, Pakur, Hazaribagh & Chatra in Jharkhand through 200Wp Solar Home System (Solar Power Pack) to each household, along with 5 years CMC.

All bids must be accompanied by:

- I.** An EMD amount as mentioned below for specific project applied for, in the form as stipulated in the Bidding Documents to be drawn in favor of "Director JREDA", payable at Ranchi.
- II.** A non-refundable Bid Fee of Rs. 2,000/- (Rupees Two Thousand only) per village upto 4 villages in form of DD drawn in favour of "Director JREDA" payable at Ranchi.
- III.** The bidder applying for villages 5 and above has to submit only Rs. 10,000/- (Rupees Ten Thousand Only) as Bid Fee in form of DD drawn in favour of "Director JREDA" payable at Ranchi.

Bid Fee and EMD has been Exempted for MSME of Jharkhand

The bidders who had participated in 1st and 2nd Call of this tender under DDG, and have submitted Bid Fee earlier need not have to submit Bid Fee.

ANY BID NOT ACCOMPANIED BY AN ACCEPTABLE EMD AND BID FEES SHALL BE REJECTED BY THE EMPLOYER/ AUTHORIZED REPRESENTATIVE AS BEING NON – RESPONSIVE.

Project-wise estimated load and EMD requirement is mentioned below:

Project No.	Name of the District	Block	Name of Village	Village Census Code	Households	Capacity in Watt	Sanctioned Amount (Lakhs)
1	Latehar	Mahuadand	Beshra Kona	367115	5	1000	2.51
2	Latehar	Barwadih	Kushabethan	366938	9	1800	4.52
3	West Singhbhum	Bandhgaon	Kentai	377099	10	2000	5.03
4	West Singhbhum	Bandhgaon	Guipai	377169	13	2600	6.54

Project No.	Name of the District	Block	Name of Village	Village Census Code	Households	Capacity in Watt	Sanctioned Amount (Lakhs)
5	West Singhbhum	bandgaon	Chirkubera	377173	13	2600	6.50
6	Sahibganj	Mnddro	AURJANR	358157	8	1600	4.02
7	Sahibganj	Taljhari	RODO	358915	8	1600	4.02
8	Sahibganj	Borio	BELRA	358193	3	600	1.51
9	Sahibganj	Barhait	BEDOMBARI	358742	11	2200	5.53
10	Sahibganj	Taljhari	TEBO(BASGO)	358917	12	2400	6.03
11	Pakur	Littipara	Pangdo	359758	7	1400	3.52
12	Hazaribagh	Ichak	Pandra	368067	12	2400	6.00
13	Hazaribagh	Ichak	Parasirajghat	368069	10	2000	5.00
14	Hazaribagh	Chauparan	Sahijana	367619	5	1000	2.50
15	Chatra	Hunterganj	GAIDHATARI	348224	7	1400	3.52
16	Chatra	Kunda	RATNAG	348536	8	1600	4.02
17	Chatra	Lawalaung	Lare	348590	8	1600	4.02
18	Chatra	Hunterganj	BENGWATARI	348289	11	2200	5.53
19	Chatra	Lawalaung	Malgo	348575	11	2200	5.53
20	Chatra	Kunda	RAJPAR	348544	13	2600	6.54
21	Chatra	Lawalaung	Garhe	348574	13	2600	6.54
22	Chatra	Hunterganj	BISRAMPUR	348228	14	2800	7.04
23	Chatra	Kunda	GARO	348491	14	2800	7.04
24	Chatra	Lawalaung	Baheradih	348548	10	2000	5.00

Important note: The above mentioned figures against each Project are indicative. Bidders are advised to conduct on-ground surveys related to Project(s) at their own cost and risk and submit Bid(s), including financial bid, based on actual survey.

- A Bidder can submit Bid for one or more than one Project. Each Bidder shall submit one Bid along with only one set of all relevant documents in support of eligibility. Bidder submitting for one Project, shall submit Bid fee and EMD as prescribed in RfP. However, Bidder(s) submitting Bid(s) for more than one Project, shall submit cumulative Bid fee and cumulative EMD required for all Projects being Bid for. Only one set of all technical & commercial qualification related documents shall be submitted, in a separate envelop, by a Bidder bidding for more than one Projects.
- Evaluation of Bid(s) shall be done individually for each Project as per terms and conditions of RfP. The Contract would be awarded to/ carried out by the lowest Bidder of each Project, subject to available capacity of the lowest Bidder. The approved lowest Bidder shall be required to furnish unconditional acceptance to execute the Work at the lowest turnkey contract value and as per specifications and terms & conditions of this RfP.
- In case if any Project is dropped before signing of Agreement due to appropriate reasons (already electrified, abandoned, or not compatible with DDG Guidelines), by the

competent authority of JREDA, the RfP for such Projects shall stand cancelled.

5. Bidder(s) can download RfP document online at <http://jharkhandtenders.gov.in>. Bidder(s) shall furnish Bid Fee of required value in the form of crossed Demand Draft drawn in favour of “Director JREDA”, payable at Ranchi, from any Nationalized /Scheduled Bank (duly discharged). Bidder(s) bidding for more than one Project shall have to furnish one Demand Draft of a value equivalent to Bid fee for all Projects Bidder(s) bidding for.
6. Bid submission (for detailed instruction, please refer to section 8 of RfP):

I. Online submission:

A. Technical Bid – (Fee/Pre-Qualification/Technical Cover)

- 1) EMD & Bid Fee
- 2) Pre-Qualification Details
- 3) Technical Details & Declaration
- 4) Technical Details of documents

B. Financial Bid – (Finance Cover)

Duly Quoted & digitally signed Bill of Quantity (BOQ) in the file supplied by JREDA in .xls and .pdf format shall be uploaded.

II. Physical submission: Bidder shall submit hard copies of the following required and relevant documents in the following manner:

- i. Envelop: EMD of Project(s) (in original), Bid Fee of Project(s) (in original), a summary sheet containing a table describing all Projects Bidder is placing Bid;
- ii. Envelop shall be send to the office of the undersigned so as to reach the office by 19/07/2016 to 20/07/2016 up to 11.30 am.

7. **Important Dates:** Following dates and schedule shall be adhered to for this RfP. In case any public holiday falls on these dates, next working day shall be considered for the purpose of only concerned event; all other dates and schedule shall remain unchanged, unless informed otherwise by the office of the undersigned.

Event	Date
Date of publication of NIT on website: http://jharkhandtenders.gov.in	27.06.2016 (Monday)
Date & time of Pre-bid meeting	07.07.2016 (Thursday) at 12.00 PM
Last date & time for receipt of online bids	19.07.2016 (Tuesday) upto 05:00 PM
Uploading of Document on web site of JREDA Date:	From 27/06/2016
Submission of original copies of Bid fee & EMD (Offline)	19.07.2016 and 20.07.2016 up to 5.00 P.M.
Bid Opening Date & Time :	21.07.2016 (Thursday) at 03:00 PM at JREDA, Jharkhand

8. The Bidder will be required to download the Bidding Documents from web portals mentioned above. However, they will have to pay a non – refundable bid fee as mentioned above in the form of demand draft in favour of “Director JREDA”, payable at

Ranchi along with their bid and provide the DD details in the web documents. The acceptance of the bid shall be subjected to acceptance of the bid fee.

- The guidelines to submit bid online can be downloaded from website <http://Jharkhandtenders.gov.in>
- To **participate in bidding process**, bidders have to get '**Digital Signature Certificate (DSC)**' as per Information Technology Act-2000 to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get above mention digital signature certificate **from any approved vendors (CCA)**. Bidders, who already possess valid Digital Signature Certificates, need not to procure new Digital Signature Certificate.
- The bidders have to submit their bids online in electronic format with digital Signature. The bids without digital signature will not be accepted. No proposal will be accepted in physical form.
- Bids will be opened online as per time schedule mentioned above.
- Bidders should get ready with the **scanned copies of Bid Fee and EMD (in the form of Bank Guarantee/Demand Draft)** as specified in the tender document. Before submission of online bids, bidders must ensure that scanned copy of all the necessary documents have been **attached with bid**.
- Bidder have to produce the **original D.D. towards bid fee & EMD (in the form of Bank Guarantee/Demand Draft)** in approved form to "Director, Jharkhand Renewable Energy Development Agency, Ranchi" on the date & time as mentioned in the RfP failing which bidder will be disqualified. The **details of Bid Fee, EMD** specified in the tender documents **should be the same as submitted online (scanned copies)** otherwise tender will summarily be rejected.
- The EMD amount to be entered on JREDA's e-procurement website is 2% of the total project cost (the total project cost is Rs. 118 Lakhs) which is Rs. 2.36 Lakhs. But the bidder has to submit the EMD amount valid for the respective village in which he is participating.
- Uploaded documents of successful bidders will be verified with the original before signing the agreement. The shortlisted bidder has to produce the original documents to JREDA for verification.
- The department will not be responsible for delay in online submission due to any reason.
- All the required information for bid must be filled and submitted online. If the bid is not found to be uploaded online in the website (<http://Jharkhandtenders.gov.in>), bid shall be rejected even though the bidder/s have submitted Bid fee & EMD. No hard copy is required to be submitted in the office of JREDA except original Bid fee & EMD.
- Scanned copies of the documents to be up-loaded in pdf format on the website

<http://Jharkhandtenders.gov.in>.

9. A prospective bidder may participate in the bidding for any or all villages as per the laid-down norms of JREDA. Any query for clarification of the bids shall be entertained only through email i.e., info@jreda.com during the office hours and no further communication shall be entertained from this end beyond the specified date.

Note: MSME Jharkhand has been exempted from the bid fee and EMD. MSME seeking exemption from Bid Fee & EMD, shall submit documentary evidence supporting the exemption.

10. The Bidders shall have to submit their financial bids ONLINE ONLY (duly encrypted bids) and upload the required relevant documents as per time schedule (Important Dates).
11. Since Bidders are required to digitally sign their bids for online submission using Class III - Digital Certificates only, Bidders are advised to obtain the same at the earliest. For further information, Bidders are requested to contact with Tenders Jharkhand Tel : 0120-4200462 / International Callers : +91-120-4200462 E-Mail : eproc-support@gov.in.. (Note: It may take up to 7 working days to issue Digital Certificates. So the Bidders are advised to take appropriate action.)
12. Bidders intending to participate in the RfP are required to get themselves trained on the e-Procurement System. The Bidders are required to contact the service provider; Tenders Jharkhand Tel: 0120-4200462 / International Callers: +91-120-4200462 E-Mail: eproc-support@gov.in.
13. The Earnest Money Deposit should be deposited in the form of crossed Demand Draft drawn in favour of 'Director, JREDA', payable at Ranchi or in the form of Bank Guarantee in favour of 'Director, JREDA' - A/C of the Bidder, from any Nationalized /Scheduled Bank (duly discharged), of the equivalent amount, valid up to 6 (six) months from the last date of submission of tender document (No other form of EMD will be acceptable). The Bid(s) without EMD(s) of appropriate value(s) shall be rejected.
14. All interested bidders can clarify their queries relating to the RfP & e-tendering process during pre-bid meeting organized by JREDA as mentioned above at JREDA's conference hall.
15. Validity period for financial bids will be for 180 days from the date of opening of the technical bid. During this period, the Agreement shall be signed.
16. At JREDA, single point contact will be an officer of the State Implementing Agency (SIA) who will be the Director JREDA in office or at 0651-2491161.
17. The Director, JREDA, Ranchi shall have full rights to accept or reject any or all Bids without assigning any reason thereof.
18. Other details can be seen in the RfP document.

**Sd/-
Director,
JREDA, Ranchi**

DISCLAIMER

Though adequate care has been taken while preparing the Bidding documents, the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within ten (10) days from the date of notification of RfP /Issue of the RfP documents, it shall be considered that the RfP documents are complete in all respects has been received by the Bidder

The information contained in this Request for Proposal document “RfP” or subsequently provided to Bidders, whether verbally or in documentary or any other form by or on behalf of Jharkhand Renewable Energy Development Agency (JREDA) or any of their employees or advisers, is provided to Bidders on the terms and conditions set out in this RfP and such other terms and conditions subject to which such information is provided.

This RfP is not an agreement and is neither an offer nor invitation by JREDA to the prospective Bidders or any other person. The purpose of this RfP is to provide interested parties with information that may be useful to them in the formulation of their proposals pursuant to this RfP. This RfP includes Statements, which reflect various assumptions and assessments arrived at by JREDA in relation to Rural Electrification Works of Chatra, Latehar, Garhwa, Palmau, Singhbhum, Gumla, Simdega, Sahebanj, Hazaribagh, Pakur Districts of Jharkhand under Deendayal Upadhyaya Gram Jyoti Yojana. Such assumptions, assessments and Statements do not purport to contain all the information that each Bidder may require. This RfP may not be appropriate for all persons, and it is not possible for JREDA, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this RfP. The assumptions, assessments, Statements and information contained in this RfP, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RfP and obtain independent advice from appropriate sources.

Information provided in this RfP to the Bidders is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative Statement of law. JREDA accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

JREDA, its employees and advisers make no representation or warranty and shall have no liability to any person including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RfP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RfP and any assessment, assumption, Statement or information contained therein or deemed to form part of this RfP or arising in any way in this Selection Process.

JREDA also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Bidder upon the Statements contained in this RfP. JREDA may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RfP.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by JREDA or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with

the Bidder and JREDA shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation for submission of the Proposal, regardless of the conduct or outcome of the Selection Process.

The specification mentioned for all the equipment which include Solar modules, module mounting structures, interfacing panels, switch gears & other associated equipment etc., to complete the power generation and evacuation system, the present bidding documents is for the reference only. It is subject to revise/ alter as per the design/ planning/good engineering practices etc., to be carried out by the selected bidder, to the satisfaction of the Employer or its authorized representatives. It is advised that the bidders must satisfy himself with the prevailing site conditions before design/ plan. The design must be optimized for the site conditions and directed to achieve the maximum output form the installed capacity at all times. Moreover, the components not separately mentioned, but are required to complete the plant for operation is also included in the scope of bidder and shall be vetted by the Employer or its authorised representatives.

TABLE OF CONTENTS

1	Checklist of Important Documents	1
2	General Criteria	2
3	Important Instructions	5
4	Definitions	9
5	Scope of Work	11
6	General Conditions of Contract	13
7	Commercial Terms and Conditions	22
8	Submission of Bid	24
9	Instructions to Bidder	26
10	Technical Specifications	29
11	Annexures	36
12	Schedules	65

1 Checklist of Important Documents

S. No.	Document	Submitted (Y/N)
1.	Required EMD & Bid Fee	
2.	Form and Formats Annexure 1 to 4	
3.	Agreement in case of JV (Annexure-8)	
4.	Certificates according to requirement as per eligibility criteria Annexures-6 to 9	
5.	MAAT certificate duly certified by CA as per commercial eligibility criteria	
6.	Balance sheet with profit and loss of last Five years (CA certified)	
7.	Summary sheet containing a table describing all Projects for which Bidder is placing Bid.	
8.	Strategic plan to maintain system for 5 years	
9.	Commitment letter of IEC certified manufacturers to cater	
10.	TIN, PAN, Service tax no. ITR (ST-2 photo copy)	

2 General Criteria

2.1 Qualifications

All interested Bidders who meet the following eligibility criteria can participate and submit bids as individual firms or as Joint Venture (JV) of firms:

2.2 Technical eligibility

2.2.1 Technical criteria for Individual firm

The Bidder must have successfully erected, tested and commissioned Generation (including Renewable Energy), Transmission or sub-transmission & Distribution works/ stations in last 7 years as on the scheduled date of bid opening, having at least:

- a) 80% kW capacity (of generation or transmission/distribution network or operation and maintenance works) stipulated in bid in single completed work; OR
- b) 50% kW capacity each (of generation or transmission/ distribution network or operation and maintenance works) stipulated in bid in two completed works; OR
- c) 40% kW capacity each (of generation or transmission/ distribution network or operation and maintenance works) stipulated in bid in three completed works; OR
- d) Technical experience of erection, testing and commissioning of at least one DDG project, whose generation capacity shall be higher than the maximum of the individual DDG projects covered in the bid. (For example: a bid of DDG projects of 50 kW 2 Nos., 40 kW 5 Nos., 30 kW 5 Nos. projects is floated; individual firm having experience of 50 kW single project can quote for all the 12 projects in the bid, whereas single firm having experience of one No 30 kW project can quote for 5 Nos. 30 kW projects only)

And the system so created/ maintained must be in satisfactory operation for at least one (1) year as on date of opening of bid.

2.2.2 Technical criteria for Joint Venture (JV)

Bids may be submitted by joint venture firms (having not more than three partners with one partner as a lead partner), wherein:

- a) All the partners should jointly meet qualification requirements set forth at point (a) or (b) or (c) or (d) of 2.2.1 above; AND
- b) Successfully erected, tested and commissioned or completed at least single similar works/project in last 7 years as on the date of bid opening:
- c) A single turnkey contract, having at least 50% of the kW capacity experience as considered in proposed bid by a lead partner; AND
- d) A single turnkey contract, having at least 30% of the kW capacity considered in proposed bid, by each of remaining partner(s).

2.3 Commercial Eligibility

2.3.1 For individual Firm

- a) The Bidder shall meet the following minimum commercial criteria in past 7 years of work of electrical erection, testing and commissioning or electrical O&M services in Generation, Transmission or sub-transmission & Distribution projects/stations:
 - i. 80% of estimated amount of Project in a single completed work; OR
 - ii. 50% of estimated amount of Project in each of two completed works individually; OR
 - iii. 40% of the estimated amount of the Project in each of three completed works individually.
- b) Minimum Average Annual Turnover (MAAT) for best three years out of last five financial years of the Bidder should not be less than 30% of the estimated cost of the project.
- c) For Bidders to qualify for more than one Project, the MAAT requirement shall be the sum of MAAT requirement (as specified in sub clause (b) of clause 2.3.1) of the Projects, they proposed to qualify.

2.3.2 For Joint Ventures

- a) The Bidder shall meet the following minimum commercial criteria in past 7 years of electrical work of erection, testing and commissioning or of electrical O&M services in Generation, Transmission or sub-transmission & Distribution projects/stations:
 - i. 80% of the estimated amount of the Project in a single completed work; OR
 - ii. 50% of the estimated amount of the Project in two completed works individually; OR
 - iii. 40% of the estimated amount of the Project in three completed works individually.
- b) The figures for each of the partner of the joint venture shall be added together to determine the Bidder compliance with the minimum qualifying criteria set out; however, in order for a joint venture to qualify, the partner(s) of joint venture must meet the following minimum criterion.
 - i. The lead partner shall meet, not less than 40% of the minimum criterion given in MAAT;
 - ii. Each of the other partner(s) shall meet not less than 25% of the criterion given in MAAT.
- c) For Bidder to qualify for more than one Project, the sum of requirements of individual Projects shall be considered for determination of Qualifying Requirement of the Bidder.

- d) If the Company has formed in last 2 years (i.e. formed after FY13-14), total turnover shall be divided by three and shall be compared with MAAT requirement of the bid. In case, turnover so calculated is more than MAAT requirements, agency shall be commercially accepted for participation in the bidding. However no such relaxation shall be available for Company formed less than 2 years before.

The Technical and Financial Eligibility for particular villages is provided in Schedule 1 and 2 in the RfP.

3 Important Instructions

- 3.1 A Bidder quoting for one Project only, financial bid shall be opened if the Bidder qualifies on technical and commercial criteria.
- 3.2 Technical eligibility of a Bidder quoting for more than one Project would be assessed at the Project level, without aggregating Bid capacity for individual Projects. However, commercial eligibility of such bidder would be assessed at the cumulative level, considering all Projects for which the Bidder is the lowest cost bid. This would be referred while assessing the sufficiency of eligibility criteria of such Bidder while awarding such Projects.

Explanation: Financial bid of all those Bidders who qualify technical criteria shall be opened. Subsequently, lowest financial bid for all Projects shall be identified. For a Bidder quoting for one or more than one Project:

- i. Projects shall be awarded amongst those in which the Bidder is lowest cost Bidder;
 - ii. However, a Bidder can participate in all villages JREAD will award maximum **Fifteen (15) villages** to one Bidder, in a case a bidder becomes lowest (L1) in more than **Fifteen (15) villages**, then the first 15 villages will be awarded to such Bidder, for rest of the villages JREDA will give the option to L2 bidder to match the price of L1 of particular village, and in subsequent manner to L3, L4 and so on.
 - iii. The sequence of opening of financial proposals of bidders who qualify in technical bid shall be in ascending order as per the project number provided in the RfP.
- 3.3 In case more than one Bidder qualify as lowest cost Bidder (tie situation) for a Project, the selection of Successful Bidders shall be through tiebreaker as provided below :
- 3.3.1 A Bidder who has successfully implemented higher number of DDG projects of the size of the Project concerned, or bigger size, shall be given priority;
- 3.3.2 If tie situation persists even after the application of the above provision at 3.3.1, Bidder whose cumulative cost of all completed assignments for generation, transmission or sub-transmission and distribution, as shown in experience certificate, is higher shall be given priority.

3.4 Exposure of Price Bids:

Illustration:

- 3.4.1 In case the bidder has participated for 20 projects and become technically and commercially qualify only in 9 projects, then only those 9 financial proposals will be eligible for financial evaluation and remaining 11 will become null and void. And the bidder shall have no claim on exposure of the rates while opening of the BOQ sheet of price bid.
- 3.4.2 Since the system of e-procurement opens all the financial proposals together, all 20 financial proposals will be exposed but only 9 financial proposals shall be considered

for evaluation.

- 3.5 The Bidder should mention the name of manufacturer of IEC certified solar module, battery manufacturer and their commitment to cater the requirement of Bidder on priority basis(within scheduled timeframe).
- 3.6 All relevant documents (experience, commitment etc.) should be submitted along with the technical bid; otherwise bid submitted will not be shortlisted for evaluation of financial bid.
- 3.7 The financial bid shall remain firm and no price variation shall be allowed during financial bid validity period. RfP document can be downloaded through www.jreda.com and <http://.jharkhandtenders.gov.in>. Bidder(s) shall furnish Bid Fee of required value in the form of crossed Demand Draft drawn in favour of ‘Director, JREDA’, payable at Ranchi, from any Nationalized /Scheduled Bank (duly discharged). Bidder(s) bidding for more than one Project shall have to furnish Demand Draft of a value equivalent to Bid Fee for all Projects Bidder is bidding for.
- 3.8 Duly prepared Bid with all relevant documents should be put and sealed in proper envelopes for physical submission. Bid and documents which are to be uploaded by the Bidders online should be submitted online as per time schedule (important dates) specified in this RfP.

3.9 Bid submission

3.9.1 Online submission:

Bidders shall have to submit their financial bid and the following documents/certificates online as per time schedule (Important Dates)

A. Technical Bid – (Fee/Pre-Qualification/Technical Cover)

1) EMD & Bid Fee

- a) Scanned Copy of Demand draft drawn in favour of “DIRECTOR, JREDA”, payable at Ranchi towards Cost of Bid Fee and Bank Guarantee/Demand Draft in form of Earnest Money Deposit (EMD) issued in favour of “Director, JREDA” as specified in the Notice Inviting Bid.
- b) MSME Jharkhand has been exempted from the bid fee and EMD. MSME seeking exemption from Bid Fee & EMD, shall submit documentary evidence supporting the exemption.

2) Pre-Qualification Details

- a) Scanned Copy of Certificate for MAAT and PNW.

3) Technical Details & Declaration

- a) Proposed work programme (work method, time schedule and financial flow), description, and charts as necessary (Duly to be signed digitally) to comply with the requirement of the Bidding Document.
- b) Scanned copy of an Affidavit by the Bidder that he/she has accepted the RfP.

4) Technical Details of documents

Scanned copies/Prescribed Formats of Documents to be uploaded in .pdf format file duly digitally signed by the bidder.

- a) Income Tax clearance certificate/PAN Card.
- b) Sale Tax/VAT clearance certificate.
- c) Financial Report for the last 5 years (upto 31/3/2015) certified by chartered Accountant.
- d) Annual Turn over Details certified by Chartered Accountant.
- e) Net worth certificate certified by Chartered Accountant.
- f) Proof of test certificates solar PV module, batteries and latest test certificate should confirm that Solar PV system and distribution system are as per MNRE specifications. The test certificate issued before 1st April 2013 will lead to outright rejection of the BID
- g) Details of the bidder as per instruction as per Annexure of Bid should be duly digitally signed.
- h) Any other documents as required.

B. Financial Bid – (Finance Cover)

- a) Duly Quoted & digitally signed Bill of Quantity (BOQ) in the file supplied by JREDA in .xls and .pdf format shall be uploaded.

NOTE: All the documents should be digitally signed.

3.9.2 **Physical submission:** EMD of equivalent value required for Project(s) Bidding for and Bid Fee of equivalent value required for Project(s) Bidding for, along with a summary sheet containing a table describing all Projects for which Bidder is placing Bids

3.9.3 Since the online bids are required to be signed using Class III - Digital Certificates only, Bidders are advised to obtain the same at the earliest. For further information, Bidders are requested to contact at:

Tenders Jharkhand
Tel : 0120-4200462 /
International Callers : +91-120-4200462
E-Mail : eproc-support@gov.in,

(Note: It may take up to 7 working days to issue Digital Certificates.)

3.10 Bidder intending to participate in the RfP are required to get themselves trained on the e-procurement system. The Bidders are required to contact the service provider Tenders Jharkhand to confirm their session in advance.

3.11 Only one EMD should be deposited, for all the project in one envelop, in the form of cross Demand Draft drawn in favour of “Director, JREDA” payable at Ranchi from a nationalized/ scheduled bank, or Bank Guarantee in favour of “Director, JREDA” payable at Ranchi.

3.12 Validity of financial bids will be for 180 days from the date of opening of the technical bid. During this period, the Agreement shall be signed.

3.13 At JREDA, single point contact will be an officer of the State Implementing Agency (SIA) who will be the Director JREDA in office or at 0651-2491161

3.14 The Director, JREDA, Ranchi shall have full rights to accept or reject any or all the Bids, in part or full, without assigning any reason thereof.

4 Definitions

Terms and conditions not defined herein shall have the same meaning as are assigned to them, in the Indian Contract Act or any other Act in vogue, or by any person of common knowledge and prudence. In General Conditions of Contract, the specifications and bill of quantity, the following words shall have the meanings hereby indicated, unless there is something in the subject matter or content inconsistent with the subject.

1. **“Agreement”** shall mean an agreement signed between JREDA and Successful Bidder for implementation of Project as per terms and conditions laid therein.
2. **“Beneficiaries”** shall mean the households of the Project Area.
3. **“Bid(s)”** shall mean response by an eligible Bidder against this RfP.
4. **“Bidder(s)”** means eligible firms/ JVs who submit Bid(s) in response to this RfP.
5. **“Contract”** shall mean and include the general conditions, specifications, schedules, drawings, Agreement, work orders issued against the lowest financial bid.
6. **“Contract Price”** shall mean the financial bid of the Bidder to whom Contract is awarded.
7. **“DDG”** shall mean Decentralized Distributed Generation system.
8. **“DDUGJY”** shall mean Deen Dayal Upadhyay Gram Jyoti Yojna of Ministry of Power, Government of India.
9. **“Engineer”** shall mean the Engineer or Engineers authorized by JREDA to supervise, inspect, verify and certify the work, for the purpose of this contract.
10. **“General Conditions”** shall mean the General conditions of Contract.
11. **“Implementing Agency (IA)”** shall mean Jharkhand Renewable Energy Development Agency (JREDA).
12. **“Month”** shall mean calendar month.
13. **“Nodal Agency”** shall mean Rural Electrification Corporation, Ministry of Power, Govt. of India.
14. **“Performance Guarantee Test (PGT)”** shall mean performance test to be conducted by Nodal Agency/ JREDA during 6 months after Project commissioning to ensure desired performance. Accordingly, PGT period shall be construed as a period of 6 months from Project commissioning.
15. **“Project”** shall mean such DDG projects which are approved by Nodal Agency for implementation.
17. **“Project Area”** shall mean the village/ hamlet for which Project is approved and shall be implemented.

18. **“Proposal”** shall mean technical proposal and/ or financial proposal submitted by Bidder in response to this RfP.
19. **“RfP”** shall mean this RfP document, its formats & annexures and amendments, if any.
20. **“Site”** shall mean the area where Project is proposed to be implemented and includes the piece of land where the DDG system shall be installed.
21. **“Successful Bidder”** shall mean a Bidder declared successful after Bid evaluation and awarded with the contract or their successors and permitted assigns.
22. **“Work”** shall mean any work entrusted to the Successful Bidder for successful commissioning of DDG system as per scope of work and Agreement.
23. **“Writing”** shall include any manuscript, typewritten, printed or other statement reproduced in any visible form whether under seal or written by hand.

5 Scope of Work

- 5.1 Design, supply, installation, commissioning and operation, for 5 years, of 200 W Solar Home System in various villages of Jharkhand, as per Projects mentioned in Table 1, on turnkey basis as per details given therein.
- 5.2 Operation & maintenance of DDG system for five years, as per guidelines of DDG, as amended/ replaced/ sub-assumed, under DDUGJY in the following Projects as mentioned in the RfP document.
- 5.3 Design, Construction, Installation of 200Wp Solar Home System (Solar Power Pack) at all the locations given below.
- 5.4 Details of households and other productive / community load is given below in Table-1

Table 1: Estimated project capacity and tentative household

Project No.	Name of the District	Block	Name of Village	Village Census Code	Households	Capacity in Watt	Sanctioned Amount (Lakhs)
1	Latehar	Mahuadand	Beshra Kona	367115	5	1000	2.51
2	Latehar	Barwadih	Kushabethan	366938	9	1800	4.52
3	West Singhbhum	Bandhgaon	Kentai	377099	10	2000	5.03
4	West Singhbhum	Bandhgaon	Guipai	377169	13	2600	6.54
5	West Singhbhum	bandgaon	Chirkubera	377173	13	2600	6.50
6	Sahibganj	Mnddro	AURJANR	358157	8	1600	4.02
7	Sahibganj	Taljhari	RODO	358915	8	1600	4.02
8	Sahibganj	Borio	BELRA	358193	3	600	1.51
9	Sahibganj	Barhait	BEDOMBARI	358742	11	2200	5.53
10	Sahibganj	Taljhari	TEBO(BASGO)	358917	12	2400	6.03
11	Pakur	Littipara	Pangdo	359758	7	1400	3.52
12	Hazaribagh	Ichak	Pandra	368067	12	2400	6.00
13	Hazaribagh	Ichak	Parasirajghat	368069	10	2000	5.00
14	Hazaribagh	Chauparan	Sahijana	367619	5	1000	2.50
15	Chatra	Hunterganj	GAIDHATARI	348224	7	1400	3.52
16	Chatra	Kunda	RATNAG	348536	8	1600	4.02
17	Chatra	Lawalaung	Lare	348590	8	1600	4.02
18	Chatra	Hunterganj	BENGWATARI	348289	11	2200	5.53
19	Chatra	Lawalaung	Malgo	348575	11	2200	5.53
20	Chatra	Kunda	RAJPAR	348544	13	2600	6.54
21	Chatra	Lawalaung	Garhe	348574	13	2600	6.54
22	Chatra	Hunterganj	BISRAMPUR	348228	14	2800	7.04
23	Chatra	Kunda	GARO	348491	14	2800	7.04
24	Chatra	Lawalaung	Baheradih	348548	10	2000	5.00

- 5.5 Designing, supply, installation & commissioning and operation, for 5 years to be

carried out for the Project, as per norms of JREDA.

- 5.6 Supply of electricity to Beneficiaries and collect charges, as prescribed by JREDA, for the same.

6 General Conditions of Contract

- 6.1 **Manner of Execution:** Execution of Work shall be carried out in an approved manner as outlined in the technical specifications/ standards or where not outlined, in accordance with relevant Indian Standard/ specifications, to reasonable satisfaction of JREDA. The timelines for the execution of Work shall be as per Table 2 below:

Table 2: Work execution timelines

Sl. No	Activity	Timelines
1	Issue of Letter of Award (LoA) to Successful Bidder	15 days from the date of opening of financial bid
2	Signing of Agreement between JREDA & Successful Bidder	15 days from the date of LoA
3	Work completion	6 months from the date of signing of Agreement

- 6.2 The Successful Bidder shall start Work within 15 days after the Agreement.
- 6.3 If, at any time, it appears that the actual progress of Work does not conform to the milestones as per Agreement, a revised time schedule shall be submitted by Successful Bidder to JREDA to ensure completion of the Work within the overall timeframe of the Project. The revised time schedule shall be submitted to JREDA for his approval and should be approved by JREDA. Milestones for completion of Work shall be:
- 6.4 All the materials required for the installation of 200 W Solar Home System, as per Agreement signed, shall be kept at Site in the custody of the Successful Bidder.
- 6.5 **Inspection During Erection:** JREDA Engineer shall be entitled to inspect and supervise and test during erection and commissioning at all reasonable times. Such inspection will not relieve the Successful Bidder of their obligations under the Agreement. All the equipment may be inspected by the authorized representatives of JREDA at the factory and/ or before dispatch of the material at Site.
- 6.6 **Completion of Work:** Time being the essence of contract, the erection of the **200Wp Solar Home System (Solar Power Pack)** shall be completed within the period specified in the Agreement i.e. 4 months from the date of Signing of Agreement. After completion of project, a joint commissioning certificate (JCC) (Annexure-11) duly signed shall be submitted by the authorized representative of the Successful Bidder. Every JCC should have two sets of photographs of following:
- Solar PV Modules installed on structure (Three views).
 - Junction Box (three views)
 - Charge Controller and control panels installed (Three views)
 - Battery bank installed (Three views)

- 6.7 **Rejection of works:** In the event of any of the material supplied/ work done by the Successful Bidder being found defective in material or workmanship or otherwise not in conformity with the requirements of the Agreement, JREDA shall either reject the material/ work and/ or advise the Successful Bidder to rectify the same. The Successful Bidder on receipt of such notices shall rectify or replace the defective material and rectify the work free of cost. If the Successful Bidder fails to do so, JREDA may:
- a) At its option replace or rectify such defective materials and/ or work and recover the extra cost, so involved, from the Successful Bidder plus services charges @ 20% of the cost of such rectification, from the Successful Bidder and/ or terminate the Contract for balance work/ supplies with enforcement of penalty as per Contract.
 - b) Defective materials/ workmanship will not be accepted under any conditions and shall be rejected outright without compensation. The Successful Bidder shall be liable for any loss/ damage sustained by JREDA due to defective work.
- 6.8 **Extension of construction time:** If the completion of Work is expected to get delayed due to any reason, the Successful Bidder shall without delay give notice to the JREDA in writing of events leading to/ causing delay and his claim, if any, for an extension of timelines. JREDA on receipt of such notice shall examine the merit of the request and shall provide extension, only in case of force majeure events, as may be reasonable. However, such extension shall be without prejudice to other terms and conditions of the contract.
- 6.9 **Liquidated damages for delay in completion of Work:** If the Successful Bidder fails to complete the Work within the period specified in the Agreement or any extension granted thereto under force majeure conditions, JREDA will recover from the Successful Bidder as penalty @ 0.5% at the contract price for each week of delay. The total penalty shall not exceed 10% (ten percent) of the contract price. Beyond 10 weeks of delay, JREDA may:
- a) Allow Successful Bidder to continue Work; OR
 - b) JREDA may terminate the Contract with Successful Bidder and get Work completed by other party at risk and cost of Successful Bidder.

In either of the cases above, JREDA would recover the loss of subsidy from the Central Govt. as per DDG guidelines from the Successful Bidder. This recovery shall be in addition to penalty for delay for 10 weeks.

- 6.10 **Operation & maintenance:** Successful Bidder shall execute the comprehensive operation & maintenance for five (5) years from the date of commissioning of **200Wp Solar Home System (Solar Power Pack)**, to ensure regular power supply to end user at the rated generation capacity of **200Wp Solar Home System (Solar Power Pack)**. The Successful Bidder shall be responsible for collecting the tariff, as defined in this RfP by JREDA, from the Beneficiaries.
- 6.11 **Eventuality in case Grid reached during O&M period:** If grid power reaches to the Project area before 5 years, then the power produced from the system can be exported

to the grid.

- 6.12 **Penalty for non-performance/ under performance:** The successful developer shall be responsible for supplying the required quantum of power for 6-8 hours of electricity per day at the identified timings, as decided by Gram Panchayat of Beneficiary area from time to time, as per the Contract for at least for 25 days in a month, failing which, the Successful Bidder shall pay penalty at the rate of **Rs. 100/hr** for the shortage in duration of supplied power. The amount may be recovered by revoking the Bank Guarantee (BG) of the Successful Bidder. The balance amount of thus revoked BG can be returned to Successful Bidder upon furnishing new BG of original amount.
- 6.13 The successful bidder has to maintain the **complaint register** and has to address the complaint for non-supply of power at any particular house hold, street light, community centre, etc., the supply should be restored in three days from the date of complain, failing which the developer shall pay Liquidated Damages (LD) at the rate of **Rs. 30/day/household** or community centre or street light for the not restoring the power supply. The amount may be recovered by revoking the Bank Guarantee (BG) of the Successful Bidder. The balance amount of thus revoked BG can be returned to Successful Bidder upon furnishing new BG of original amount.
- 6.14 **Responsibility to rectify the loss and damage:** If any loss or damage occurs to the Work or any part thereof or materials/ plant/ equipment for incorporation therein, during the period for which the Successful Bidder is responsible for the Work, the Successful Bidder shall at his own cost rectify/ recoup such loss or damage, so that the Work confirms in every respect with the provision of the Contract to the satisfaction of the site in charge/ JREDA. The Successful Bidder shall also be liable for any loss or damage to the Work/ equipment occasioned by him in course of any operation carried out to him during performing the Contract.
- 6.15 **Responsibility towards the workman or outsiders:** JREDA will, in no case be responsible for any accident fatal or non-fatal, caused to any workman or outsider in course of transport or execution of Work. All the expenditure, including treatment or compensation, will be entirely borne by the Successful Bidders. The Successful Bidder shall also be responsible for any claims of the workers, including PF, Gratuity, ESI & other legal obligations.
- 6.16 **Penalty due from the Successful Bidder:** All costs or damages for which the Successful Bidder is liable to JREDA will be deducted from any money due to the Successful Bidder, including the CPG/ POG.
- 6.17 **Other responsibility of Successful Bidder:** Notwithstanding anything mentioned in the specifications or subsequent approval or acceptance of the DDG system by JREDA, if at all, the ultimate responsibility for satisfactory performance of the entrusted Work shall rest with the Successful Bidder.

6.18 Force Majeure

- 6.18.1 Implementing Agency (IA) and Successful Bidder shall ensure due compliance to terms and conditions of the Agreement. However, neither IA nor Successful Bidder shall be liable for any claim for any loss or damages whatsoever, arising out of failure to carry out the terms of the Agreement to the extent that such a failure is due to force majeure events, such as fire, rebellion, mutiny, civil commotion, riot, strike, lock-out, forces of nature, accident, act of god, and any other reason beyond the control of IA and Successful Bidder.
- 6.18.2 Any party to Agreement claiming benefits of clause 6.18 shall notify in writing the other party to Agreement, within 10 (ten) days from the beginning of such events, the causes and expected time when such events shall cease to exist.
- 6.18.3 In case force measure event is notified by Successful Bidder, JREDA shall verify the facts and may grant such extension in implementation timelines as the facts justify. In case JREDA notifies force majeure event, the Successful Bidder shall have to cooperate and wait till such event cease to exist.
- 6.19 **Makes of equipment to be used in the Project:** The Successful Bidder shall ensure that equipment used in the Project meet or exceed the technical specifications/ standards as specified in this document. All major equipment should be type tested at Govt./NABL accredited laboratories of the country and test certificates for all the required tests should be submitted to the JREDA before installation of the same.

6.20 Warranty period

- 6.20.1 The Work done/ material supplied by the Successful Bidder specifications should be warranted for satisfactory operation and against any defect in material and workmanship at least for a period of five (5) years, from the date on which the 200Wp Solar Home System (Solar Power Pack) been commissioned. Warrantee on the battery bank & charge controller should be of five years & of SPV modules used in systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years. The above warrantee certificates shall be furnished to the JREDA.
- 6.20.2 Any defect noticed during this period should be rectified by the Successful Bidder free of cost upon written notice from Gram Panchayat of the Project Area, with a copy of the notice to JREDA for its information. Save for force majeure events, once the reporting of the fault/non-operational status is endorsed by Successful Bidder, action should necessarily be taken to make the DDG system operational within three (3) days. If the DDG System is not made operational within three days, JREDA may rectify the same at the cost of Successful Bidder, along with 20% service charges. In case of force majeure events, the defects shall be rectified as soon as possible and the same shall be reported to JREDA.
- 6.20.3 The warrantee period shall be extended by the period during which the plant remains non-operative due to reasons, as ascertained by JREDA, within control of the Successful Bidders.

6.21 **Insurance:** The Successful Bidder shall arrange insurance coverage for the materials at his custody for the Work under execution. The Successful Bidder shall take up insurance or such other measures, for the manpower so as to cover the claim for damage arising under workmen's compensation Act and other applicable State/Central labour laws. JREDA shall not bear any responsibility on this account.

6.22 **Certificates not to affect rights of JREDA:** The issuance of any certificate by JREDA or any extension of time granted by JREDA shall not prejudice the rights of JREDA in terms of the Contract nor shall relieve the Successful Bidder of his obligations for due performance of the Contract.

6.23 Payment terms

6.23.1 The payment, against project, cost to the Successful Bidder shall be made as per given below:

- i. **60%** of Project cost shall be released after supply and delivery of goods in full and in good condition at project site as certified by Consignee & JREDA Officials. This payment shall be released after receipt of inspection report by JREDA accompanied by bill;
- ii. **30%** of project cost shall be released after successful installation of complete Project. This payment shall be released after receipt of inspection report by JREDA accompanied by bill;
- iii. Balance **10%** of the project cost shall be released within 6 months from performance guarantee testing.

6.23.2 Presentation of appropriate bill in triplicate for each stage of payment.

6.23.3 All payments shall be released only after milestones are achieved and certified for satisfactory completion as per three tier quality control mechanism under DDUGJY.

6.23.4 The following conditions shall also be applicable:

- a) Income tax will be deducted at source;
- b) No payment will be payable in foreign currency;
- c) The price shall remain constant during the currency of the contract

6.24 **Settlement of disputes:** All disputes concerning questions of fact arising under the contract shall be decided by the Director, JREDA provided a written appeal by the Successful Bidder is made to JREDA. The decision of the Director, JREDA shall be final and binding to all concerns.

6.25 Any dispute or difference, including those considered as such by only one of the parties arising out of or in connection with the Contract, shall, to the extent possible, be settled amicably between the parties. If amicable settlement cannot be reached, then all disputed issues shall be settled by arbitration as provided in the contract.

6.26 Transfer of Project after efflux of time

6.26.1 After five (5) years, Implementing Agency (IA) shall decide on the option to take over the Project or handover the Project to the same agency or any other agency, as approved by the State Government, for further operating the Project. In case of transfer of the Project to IA/ State Government./ other agency, as approved by the State Government, Successful Bidder shall ensure that Project is transferred in good working condition as certified by the JREDA official(s).

6.26.2 The decision to hand over the Project to any agency will be finalized 6 months prior to the expiry of five (5) years BOMT period.

6.27 The Successful Bidder shall be responsible for providing training /capacity building to villagers for running the power plant. The Successful Bidder has to engage 1 or 2 villagers from the respective village for operation and maintenance for CMC period of the project.

6.28 **Termination due to delay in completion of Work:** JREDA may by written notice of default to the Successful Bidder, terminate the Contract in circumstances detailed here under:

6.28.1 If in the opinion of the JREDA, the Successful Bidder fails to complete the Work within the time specified in the Agreement or within the period for which extension has been granted under force majeure by JREDA to the Successful Bidder.

6.28.2 If in the opinion of JREDA, the Successful Bidder fails to comply with any of the provisions of the Contract.

6.29 In the event of JREDA terminating the Contract in whole or in part as provided in sub-clause 6.28.1 or 6.28.2 above, JREDA reserves the right to engage another party at the risk and cost of the Successful Bidder upon such terms and in such a manner as it may deem appropriate and the Successful Bidder shall be liable to JREDA for any additional costs or any losses caused to JREDA, as may be required for the completion of Work or O&M for five (5) years of the 200Wp Solar Home System (Solar Power Pack), and / or for penalty as defined under this RfP document until such reasonable time as may be required for the final completion of the Work/ O&M for five (5) years.

6.30 In the event JREDA does not terminate the Contract as provided in sub-clause 6.28.1 the Successful Bidder shall continue performance of the Contract, in which case he shall be liable to JREDA for penalty for delay as set out in this RfP document until the Work is completed.

6.31 **Language and measures:** All documents pertaining to the Contract including specifications, schedules, notice correspondences, operating and maintenance instructions, drawings or any other writings shall be written in English language.

6.32 Correspondence

6.32.1 Any notice to the Successful Bidder under the terms of the Contract shall be served by registered post to the SINGLE POINT contact address as specified by the Successful

Bidder in the Bid documents or by hand to the authorized local representative of the Successful Bidder.

6.32.2 Bidders are suggested to mandatorily specify SINGLE POINT contact (office address and designated official along with e-mail id) on which JREDA shall direct all communications related to this RfP. JREDA shall not direct any communication to any other address/ official of the Bidder.

6.33 Any notice to JREDA shall be served to the Director, JREDA, Ranchi.

6.34 **Secrecy:** The Successful Bidder shall treat the details of the specifications and other documents as private and confidential and they shall not be reproduced without written authorization from JREDA.

6.35 Inspection and Tests:

6.35.1 JREDA shall have the right to inspect the systems / goods and/ or get it tested from authorized test centres to confirm its conformity to the technical specifications. The cost of testing will be borne by the Successful Bidder.

6.35.2 JREDA shall have access and right to inspect the Project or part thereof at any stage

6.36 Clarification on RfP documents

6.36.1 For any clarification regarding RfP document and eligibility criteria, Bidder may attend pre-bid meeting or contact nodal officer in his office. JREDA shall not be responsible for any postal delay.

6.36.2 Verbal clarification and information's given by JREDA or its employees or representatives shall not be in any way entertained.

6.37 Amendment of RfP documents

6.37.1 At any time prior to the submission of the Bid(s) or prior to the opening of the financial bid, JREDA may for any reason, whether at its own initiative or in response to a clarification requested by a Bidder, modify the RfP documents by issuing amendments on www.jreda.com. These amendments will be binding on Bidders;

6.37.2 JREDA will not bear any responsibility or liability arising out of non-receipt of the information regarding amendments in time or otherwise. Bidder must check the website for any such amendment before submitting their Bid.

6.38 **Assignment / Sub Letting:** The Successful Bidder shall not assign, sublet or transfer the contract or any part thereof to any party.

6.39 **Expenses of Agreement:** A formal Agreement shall be entered into with the Successful Bidder, as per format (Annexure-14), for the proper fulfilment of the Contract. The expenses of completing and stamping of the Agreement shall be paid by the Successful Bidder.

- 6.40 **Arbitration:** That, in the event of any dispute or difference whatsoever arising under the Contract awarded by the JREDA, the same shall be referred to arbitration, which shall be as per the provisions of the Indian Arbitration Act, 1996 and the rules made there under and amendments thereof. All the proceedings of arbitration will take place in Ranchi. The award in such arbitration shall be final and binding on all the concerned parties. In this case, the arbitrator shall be Principal Secretary, Energy Department, Govt. of Jharkhand.
- 6.41 **Jurisdiction:** That, any dispute between the manufacturer/Successful Bidder and JREDA, Ranchi shall be subjected to Ranchi jurisdiction.
- 6.42 RfP documents are not transferable.
- 6.43 Bidder shall be responsible for submission of Bid complete in all respect accompanied by all relevant documents/ certificates/ enclosures as required by terms and conditions of this RfP. Incomplete Bid, in any respect, shall be liable to be rejected.
- 6.44 If at any time, during tendering process or after award of Work, any of the documents/information submitted by the Bidder is found to be incorrect, false or untruthful, the bid and/or the resultant order may be summarily rejected/cancelled at the risk of the Bidder;
- 6.45 In the event of any of the breach of the conditions of the contract at any time on the part of the Bidder, the Contract may be terminated by the competent authority of JREDA, Ranchi without any compensation to the Bidder.
- 6.46 Octroi/ Entry tax, if applicable, will have to be borne by the Bidder.
- 6.47 If Successful Bidder is found unable to complete the Work within the specified time period, JREDA will be free to purchase the balance goods from elsewhere and get the Work completed at his (Successful Bidder's) cost and risk. However, before taking any such action, JREDA shall give appropriate opportunity to Successful Bidder to reply to notice regarding such failure. The Work or any part thereof which the Successful Bidder has failed to supply or if not available, the best and nearest available substitute thereof shall be purchased by JREDA and Work will be completed. Any such loss or damage which JREDA may sustain due to such failure on the part of the Successful Bidder, recovery of such loss or damage shall be made from any sum payable to the Successful Bidder. If recovery is not possible from the bills and the Successful Bidder fails to pay the losses or damages, the recovery shall be made law applicable under these circumstances.
- 6.48 Bidder will have full responsibility for packing, forwarding, transportation, insurance during supply and responsibility of any type of breakages/losses etc. The goods/systems should be delivered installed and commissioned at Site in the perfect conditions as ordered. The Successful Bidder shall ensure adequate insurance of valuable goods against any loss by theft or damage by fire/flood etc. The insurance charges will have to be borne by the Successful Bidders only. The Successful Bidder must arrange to adequately and properly pack goods so as to ensure the safe delivery of the same.

- 6.49 In case any defective material or any type of substandard material is supplied, the material will be rejected and it will be the responsibility of the Successful Bidder for taking back the rejected materials/ systems at his/ her own cost.
- 6.50 Any type of fittings, accessories, assemblies, essentially required components, which are not described or mentioned in the RfP documents, but are required for implementation of the Project, shall have to be supplied by the Successful Bidder at his own cost.
- 6.51 Notice inviting RfP, RfP documents, prescribed rate sheets and terms and conditions will form part of the Agreement, consequent upon the rates being offered for Agreement;
- 6.52 JREDA reserves the right to postpone the date of receipt and opening of Bid or cancel the RfP without bearing any liability, whatsoever, upon JREDA consequent upon such decision.
- 6.53 The acceptance of a Bid will rest with the competent authority of JREDA, Ranchi who does not bind him/herself to accept the lowest Bid and may reject any or all Bid(s) without assigning any reason thereof.
- 6.54 In case of changes in any of the Projects due to significant changes in the status of Households or villages, fresh approval for project cost shall be obtained by JREDA from Nodal Agency for DDG program. Though JREDA shall endeavour to release timely payments against such projects as per changed status, but such payments shall be subjected to fund made available by Central/ State Govt. JREDA shall not be accountable for delay, if any, in payments in such cases and shall not be liable for any payment delay.
- 6.55 JREDA will not issue any certificate to avail Excise Duty and Concessional Custom Duty (ED & CCD) benefits.
- 6.56 Any or all Bid(s) may be rejected or accepted partially or fully without assigning any reason thereof by the competent authority Director, JREDA, Ranchi.
- 6.57 If Successful Bidder, whose rates have been accepted, does not sign the Agreement within fifteen (15) days from the date of issue of the Letter of Award (LoA), EMD of the Successful Bidder shall be forfeited and his Bid shall be treated as cancelled.
- 6.58 The approved rates will be valid till the completion of the five (5) years of O&M period of the Project. No price escalation/ variation will be allowed for any reason, whatsoever, including changes in statutory charges/ duties/ taxes.
- 6.59 Power of attorney to sign the agreement on behalf of Bidder and partnership deed, memorandum of articles of association, etc. should be enclosed along with Bid documents.
- 6.60 **Non-Assignments:** The Successful Bidder shall not assign or transfer the Work issued as per Agreement or any part thereof to any party.

7 Commercial Terms and Conditions

7.1 Earnest Money Deposit

7.1.1 The Bidder shall submit the Earnest Money Deposit (EMD) of requisite value in the form of crossed Demand Draft drawn in favour of '**Director, JREDA**', payable at Ranchi; OR in the form of Bank Guarantee in favour of '**Director, JREDA**', from any Nationalized /Scheduled Bank (duly discharged), of equivalent amount, valid up to 180 days from the date of opening of technical bid. The Bid without the correct amount of EMD shall be rejected. Bidder(s) bidding for more than one Project, shall submit EMD of a value equivalent to all Projects bid for.

Note:

- a) MSME Jharkhand has been exempted from the Bid fee and EMD. MSME seeking exemption from Bid Fee & EMD, shall submit documentary evidence supporting the exemption.
- b) The bidders had participated in 1st and 2nd Call of this tender under DDG, and have submitted Bid Fee earlier need not have to submit Bid Fee.

7.1.2 The request for adjustment of earlier dues in place of EMD will not be entertained.

7.1.3 EMD of Successful Bidder shall be returned after it furnishes CPG of requisite value.

7.1.4 No interest will be paid on the earnest money.

7.1.5 In case if a Bidder is found ineligible at the time of opening the Bid, the EMD of the ineligible Bidder(s) shall be returned within two (2) months after declaration of final results, after approval from competent authority of JREDA. No interest will be paid on the earnest money.

7.1.6 **Forfeiture of EMD** - It should be clearly understood that the EMD of Bidder will be forfeited if:

- a) A Successful Bidder fails to accept and execute the Agreement to the satisfaction of JREDA, if it is placed within the Bid validity / extended validity period;
- b) Any Bidder withdraws its Bid during the Bid validity period.

7.1.7 Decision of Director, JREDA will be final and binding on the Bidder.

7.2 Contract Performance Guarantee

7.2.1 Successful Bidder shall be required to submit, immediately after award of the contract, i.e. at the time of signing of Agreement, a Contract Performance Guarantee (CPG) (of value 10% of total contract value) in the form of Bank Guarantee valid up to successful commissioning and Performance Guarantee Testing (PGT) of the project, valid up to 6 months after scheduled completion period of the project (For example, if schedule completion period of a DDG project is 9 months, CPG shall be valid up to 15 months).

7.2.2 CPG shall be forfeited by JREDA in case of non-performance of the Contract by

Successful Bidder, including, inter alia:

- a) When Successful Bidder fails to commence the Work within timelines specified in RfP or withdraws immediately after signing of the Agreement;
- b) When Successful Bidder fails to complete the Work as per timelines or any extension in timelines provided by JREDA;
- c) When Successful Bidder commits any material breach of the Contract during/ before commissioning of the Project;
- d) When Successful Bidder fails to make timely payments of any penalty/ loss/ outstanding amount, payable by the Successful Bidder to JREDA, due on it during/ before commissioning of the Project;
- e) When CPG is revoked, liquidated damages shall not be imposed on the Successful Bidder.

7.2.3 If not revoked earlier for non-performance of the Contract by Successful Bidder, CPG shall be returned to Successful Bidder with thirty (30) days after final acceptance of successful commissioning and submission of Project Operation Guarantee.

7.3 Project Operation Guarantee

7.3.1 Successful Bidder shall also be required to submit Project Operation Guarantee (POG) after **Final Acceptance of Successful Commissioning**, a POG (of value 20% of total contract value), in the form of Bank Guarantee valid up to 60 months from scheduled date of commissioning of project. POG shall be returned to the Successful Bidder on successful completion of five (5) years O&M of the Project from the date of commissioning of the Project.

7.3.2 In case of non-performance of the Contract by Successful Bidder, POG shall be forfeited by JREDA:

- a) When Successful Bidder fails to perform O&M at any point of time within the prescribed period of 5 years;
- b) When any penalty/ recoverable amount before Project commissioning is not recovered, even after revocation of CPG;
- c) When Successful Bidder commits any material breach of the Contract during O&M period of 5 years post commissioning of Project.

7.3.3 If not revoked earlier for non-performance of the Contract, POG shall be returned to Successful Bidder on completion of 5 years of O&M period.

8 Submission of Bid

8.1 Online submission

Bidders shall have to submit their financial bid and the following documents/certificates online as per time schedule (Important Dates)

A. Technical Bid – (Fee/Pre-Qualification/Technical Cover)

1) EMD & Bid Fee

- a) Scanned Copy of Demand draft drawn in favour of “DIRECTOR, JREDA”, payable at Ranchi towards Cost of Bid Fee and Bank Guarantee/Demand Draft in form of Earnest Money Deposit (EMD) issued in favour of “Director, JREDA” as specified in the Notice Inviting Bid.
- b) MSME Jharkhand has been exempted from the bid fee and EMD. MSME seeking exemption from Bid Fee & EMD, shall submit documentary evidence supporting the exemption.

2) Pre-Qualification Details

- a) Scanned Copy of Certificate for MAAT and PNW.

3) Technical Details & Declaration

- a) Proposed work programme (work method, time schedule and financial flow), description, and charts as necessary (Duly to be signed digitally) to comply with the requirement of the Bidding Document.
- b) Scanned copy of an Affidavit by the Bidder that he/she has accepted the RfP.

4) Technical Details of documents

Scanned copies/Prescribed Formats of Documents to be uploaded in .pdf format file duly digitally signed by the bidder.

- a) Income Tax clearance certificate/PAN Card.
- b) Sale Tax/VAT clearance certificate.
- c) Financial Report for the last 5 years (upto 31/3/2015) certified by chartered Accountant.
- d) Annual Turn over Details certified by Chartered Accountant.
- e) Net worth certificate certified by Chartered Accountant.
- f) Proof of test certificates solar PV module, batteries and latest test certificate should confirm that Solar PV system and distribution system are as per MNRE specifications. The test certificate issued before 1st April 2013 will lead to outright rejection of the BID
- g) Details of the bidder as per instruction as per Annexure of Bid should be duly digitally signed.
- h) Any other documents as required.

B. Financial Bid – (Finance Cover)

- a) Duly Quoted & digitally signed Bill of Quantity (BOQ) in the file supplied by JREDA in .xls and .pdf format shall be uploaded.

NOTE: All the documents should be digitally signed.

8.2 Physical Submission (Technical bid): It shall consist as below:

- 8.2.1 **Envelope:** It should be super-scribed “EMD & Bid Fee for Project/ Projects against RfP no. _____, Dated ___/06/2016” and should contain the

following documents:

- a) Original EMD for value equivalent to Project(s) for which the Bidder is bidding
- b) Original demand draft towards Bid Fee for value equivalent to Project(s) for which Bidder is bidding
- c) A table containing the details of Bid(s) submitted by Bidder, as shown below:

Table 3: Summary of Projects for which Bids submitted

Project no. as per RfP	Name of the Village	District	Capacity in kW	EMD amount in INR	MAAT requirement as per RfP qualification criteria (INR Lakh)

Note: in case of MSME no RfP fee and EMD has to be submitted only filled in table has to be submitted.

- 8.2.2 Envelop should be superscribed "RfP No. _____, Date __/06/2016", and should also be properly sealed and addressed to the Director JREDA, 3rd Floor, S.L.D.C. Building, Kusai Colony, Doranda, Ranchi-834002 (Jharkhand)
- 8.2.3 The Envelop of Bidder should reach the above mentioned office from __/06/2016 to __/06/2016 upto 15:00 hrs, failing which the Bid shall not be considered for evaluation.

9 Instructions to Bidder

9.1 Successful Bidder shall implement the Project of 200 W Solar home system. The Bidder shall Operate & Maintain the plant for five (5) years and hand it over to the Implementation Agency or as decided by the State Government in good working condition at the end of this period. All the replaced parts will be handed over to the Implementation Agency or as decided by the State Government.

9.2 Successful Bidder shall be responsible for collecting tariff from villagers as decided by JREDA. Tariff to be collected by the Successful Bidder is as follows:

Household	BPL	INR 30 per month
	Non-BPL	INR 60 per month

9.3 Bid is being called in two parts: one part covering Technical Bid and another covering Financial Bid. The Financial bid of a Project will be evaluated only after Bidder qualifies in the Technical Bid evaluation.

9.4 General instructions

- a) If grid power reaches the village before 5 years then the power produced from the 200WP Solar Home System shall work as backup system during unavailability of grid electricity.
- b) The Successful Bidders for this RfP will require ensuring full compliance of specifications and standards annexed herein; and generation of electricity as per DPR and design submitted by them.
- c) Bidder are advised to visit all the Sites for which they desire to quote the Bid and do field survey before Bid submission.
- d) Financial bid quoted must be firm and fixed for design, supply, installation, commissioning & operation for five (5) years (as per financial bid) including packing, forwarding, insurance, taxes & duties etc. No price variation will be allowed.
- e) Prices shall be mentioned in Indian Rupees.
- f) The Bidder shall keep his financial bid valid initially for a period of one hundred & eighty (180) days from the date of opening of the technical bid.
- g) Upon selection, the Successful Bidder shall submit a finalized list of equipment containing terms and conditions, specifications, design and make of material, inspection clause etc. within fifteen (15) days of signing the Agreement. No deviation shall be allowed after submission of this finalized list within the stipulated period of time.
- h) The Bidders are required to carefully study all the conditions of the RfP, the enclosed specifications and the relevant provisions of REC norms, before submission of their Bid. The technical particulars of the materials offered must comply with the latest standards and specifications of MNRE.

- i) No new partner/ partners shall be accepted in the firm/ company or the Bid in respect of the Work.
 - j) Direct or indirect canvassing on the part of the Bidder or his/ her representatives will lead to disqualification.
 - k) Bidders must mention their financial bids, online only. The financial bid should be firm and fixed, for five (5) years, for design, supply, installation, commissioning and operation of 200 W Solar Home System including:
 - i. Packing, forwarding, loading, unloading, transportation and insurance charges etc.;
 - ii. Storage and maintenance of requisite inventory of spare parts to rectify and make DDG system operational within specified timeframe;
 - iii. Taxes and duties as applicable in the state of supplier;
 - iv. Taxes and duties applicable in Jharkhand.
 - l) No Bidder applying individually or as a member of JV, as the case may be, can be member of another JV.
- 9.5 For quality control of plant and equipment supplied by the Successful Bidder, a three-tier quality control mechanism will be followed as per REC guidelines:
- 9.6 First Tier
- a) Inspection by JREDA of all the components such as solar module, battery, cables etc. shall be mandatory for each lot at the time of dispatch / installation in accordance with the requirement of terms of reference of REC/MNRE/BIS guidelines and specifications at the Contractor's cost. This inspection will cover all the villages of each Project.
- 9.7 Second Tier
- a) Rural Electrification Corporation will get the inspection done of the works/materials from its non-field staff and by outsourcing it. REC may outsource it to retired employees of State Electricity Boards/State Utilities/ CPSUs. All such reports should be organized and analyzed by REC through the project implementation. These individuals would be designated as REC Quality Monitors (RQM). The inspection will cover quality checks at pre-shipment stage at the vendors' outlet of major materials and 10% villages on random sample basis.
 - b) In addition to above, complete system after installation at various places in Jharkhand as specified in the RfP shall be tested after commissioning in accordance with NIT conditions and required specifications duly amended as on date of opening of financial Bid by BEE certified auditors of JREDA.
- 9.8 Third Tier
- a) Independent Evaluators (Individuals/Agency) will be engaged by the Ministry of Power for evaluation, at random, of supply and erection of the project under the

programme. These persons would be designated as National Quality Monitors (NQM). Evaluation will cover 1% villages. They shall also report on the general functioning of the Quality Control mechanism in the District.

- b) The Monitors shall submit their report to the Ministry. The reports of the NQMs will be sent by REC to the RQM for appropriate action within a period to be specified. In case quality check by RQM or NQM reveals 'unsatisfactory' Work, the Contractor will replace the material or rectifies the workmanship (as the case may be) within the time period stipulated. In respect of NQM Reports, the REC Quality Coordinator shall, each month, report on the action taken on each of the pending Reports. All works rated 'unsatisfactory' shall be re-inspected by RQM or NQM after a rectification report has been received from the Contractor to implementing agency and REC Quality Coordinator. REC will designate a Member as in charge of the Monitoring system.
- c) Recurrent adverse reports about quality of Work in a given District / State might entail suspension of the program in that area till the underlying causes of defective Work have been addressed.
- d) The REC Quality Coordinator / Third party inspection unit shall be the authority to receive and inquire into complaints / representations in respect of quality of Works and they would be responsible for sending a reply after proper investigation to the complainant within thirty (30) days. The REC for this purpose, shall ensure the following:-
 - i. The name, address and other details of the REC Quality Coordinator / third party inspection unit will be given adequate publicity in the State (including RfP notices, websites, etc. as the authority empowered to receive complaints.
 - ii. All complaints shall be acknowledged on receipt (giving registration no.) and likely date of reply shall be indicated. On receipt of the report, the complainant shall be informed of the outcome and the action taken / proposed.
 - iii. Complaints received through the Ministry of Power, REC will normally be sent to the REC Quality Coordinator for enquiry and necessary action. In case report from an RQM is desired, this shall be furnished within the time specified. In case an adequate response is not received within the stated time schedule, the REC may depute an NQM and further processing will be done only on the basis of NQM report.
 - iv. The RQC shall make a monthly report to the REC (in a prescribed format) and the status of action on complaints shall be discussed in the District Committees.

10 Technical Specifications

SOLAR POWER PACK - Model I (with a D.C. Fan): The System consists of 200 Wp SPV Module, Lithium Ferro phosphate Battery (approx .. 1000 Watt hours). The system would cater to the Load of 5 Nos. of LED(max. 7.0 Watts each), 1 D.C. Fan (20Watts), 25 watt DC power plug, provision for Mobile Phone Charging etc for 5-6 hrs a day.

SOLAR POWER PACK- Model I {with a D.C. Fan}

The System consists of:

- SPV Module (with Module Mounting Structure) :200 Wp
- Battery: 12.8 Volts, 75 AHr. (approx .. 1000 Watt hours) Lithium Ferro phosphate
- Solar Charge Controller with MPPT to appropriately charge and protect the battery against overcharge.
- Load:
 - 5 Nos. of White Light Emitting Diode (W-LED) Luminaire (max. 7.0 Watts each) for 5-6 Hrs./ day
 - 1 D.C. Fan(20Watts) for 5-6 Hrs. I day
 - Power for a 12V DC TV (max. 25 watts) set, to be purchased separately (Optional) for 5-6 hrs. I day
 - Provision for Mobile Phone Charging

TECHNICAL DETAILS

PV MODULE (S)

- i. Indigenously manufactured PV modules should be used
- ii. The PV modules should be made up of crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II/ BIS 14286 from an NABL or IECQ accredited Laboratory.
- iii. The module efficiency should not be less than 14%.**
- iv. The terminal box on the module should have a provision for opening, for replacing the cable, if required.
- v. There should be a Name Plate fixed inside the module which will give:
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number
 - d. Year of manufacture
- vi. A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.

BATTERY

- i. **Lithium Ferro phosphate type battery only.**
- ii. Capacity approx. 1000 Watt Hour
- iii. Maximum Depth of Discharge 90%
- iv. Battery should conform to the latest BIS/ International standards.

LIGHT SOURCE

- i. Two light sources shall be with 7.0 Watts of white LED and Light Output should be Minimum 25 Lux when measured at the periphery of 2.5 meter diameter from a height of 2.5 meter
- ii. At any point within area of 2.5mtr diameter periphery the light level should not be more than three limes of the periphery value.
- iii. The illumination should be uniform without Dark Bands or abrupt variations and soothing to the eyes. Higher output would be preferred.
- iv. The colour temperature of W-LEDs used in the system should be in the range of 5500°K-6500°K.
- v. LEDs should not emit ultraviolet light.
- vi. The light output from the W-LED light source should be constant throughout the duty cycle.
- vii. The lamps should be housed in an assembly suitable for indoor use.

ELECTRONICS

- i. The total electronic efficiency should be at least 85 %.
- ii. Electronics should have temperature compensation for proper charging of the battery throughout the year.
- iii. The idle current should be less than 2 mA.
- iv. The voltage drop from module terminals to the battery terminals should not exceed 0.6 volts including the drop across the diode and the cable when measured at maximum charging current.
- v. The PCB containing the electronics should be capable of solder free installation and replacement.
- vi. Necessary lengths of wires/cables, switches suitable for DC use and fuses should be provided.

ELECTRONIC PROTECTIONS

- i. Adequate protection is to be incorporated under "No Load" condition.
- ii. The system should have protection against battery overcharge, deep discharge condition.
- iii. Load reconnect should be provided at 80% of the battery capacity status.
- iv. Adequate protection should be provided against battery reverse polarity.
- v. Fuses should be provided to protect against short circuit conditions.
- vi. Protection for reverse flow of current through the PV module(s) should be provided.

MECHANICAL COMPONENTS

- i. Corrosion resistant frame structure should be provided to hold the SPV module.
- ii. The frame structure should have provision to adjust its angle of inclination to the horizontal, so that it can be installed at the specified tilt angle.
- iii. Light source should be either for wall mounted or ceiling mounted or can be hung from the ceiling in a stable manner, as per site requirements.
- iv. A vented plastic/ wooden/ metallic box with acid proof corrosion resistant paint for housing the storage battery indoors should be provided.

INDICATORS

- i. The system should have two indicators, green and red.

- ii. The green 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.
- iii. Red indicator should indicate the battery "Load Cut Off" condition

QUALITY AND WARRANTY

- i. The Solar home system including Battery will be warranted for a period of five years from the date of supply.
- ii. The PV module(s) will be warranted for a minimum period of 25 years from the date of supply. PV modules used in Solar Home System must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- iii. The Warranty Card to be supplied with the system must contain the details of the system. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.

OPERATION And MAINTENANCE MANUAL

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar Home System. The following minimum details must be provided in the Manual:

- i. Basic principles of Photovoltaics.
- ii. A small write-up (with a block diagram) on Solar Home System - its components, PV module, battery, electronics and luminaire and expected performance.
- iii. Significance of indicators.
- iv. Type, Model number, voltage & capacity of the battery, used in the system.
- v. The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system must be indicated in the manual.
- vi. Clear instructions about mounting of PV module(s).
- vii. Clear instructions on regular maintenance and trouble shooting of the Solar Home System.
- viii. DO's and DONT's.
- ix. Name and address of the contact person for repair and maintenance.

WHITE-LED (W-LED) BASED SOLAR STREET LIGHTING SYSTEM

Supply of 1 number of street light per 5 households.

Using Lithium Batteries A standalone solar photovoltaic Street lighting system (SLS) is a lighting unit used for illuminating an open area. The Solar Street Lighting System consists of solar photovoltaic (SPV) module, a luminaire, storage battery, control electronics, inter-connecting wires/cables, module mounting pole including hardware and battery box. The luminaire is based on White Light Emitting Diode (W-LED), a solid state device which emits light when electric current passes through it. The luminaire is mounted on the pole at a suitable angle to maximize illumination on the ground. The PV module is placed at the top of the pole at an angle facing south so that it receives solar radiation throughout the day, without any shadow falling on it. A battery is placed in a box attached to the pole.

Electricity generated by the PV module charges the battery during the day time which powers the luminaire from dusk to dawn. The system lights at dusk and switches off at dawn automatically.

BROAD PERFORMANCE SPECIFICATIONS

The broad performance specifications of a W-LED light source based Solar Street Lighting System are given below:

PV Module	40Wp under STC
Battery Minimum	200 Watt Hour (Lithium Ferro phosphate)
Light Source	7 Watt (Max.) W-LED luminaire, dispersed beam, soothing to eyes with the use of proper optics and diffuser
light Output	Multiple Light levels:

The lamp should have two levels of light to take care of different lighting needs during the night.

PV Module	40 Wp under STC
Battery	Minimum 200 Watt Hour (Lithium Ferro phosphate)
Light Source	White Light Emitting Diode (W-LED)
light Out put	<ul style="list-style-type: none"> • Minimum 16 Lux when measured at the periphery of 4 meter diameter from a height of 4 meter (at "High" illumination level). The illumination should be uniform without dark bands or abrupt variations. • Minimum 8 lux at lower illumination level (Higher light output will be preferred)
Lumen o/p	800 Lumens (at 100% light Level)
Mounting of light	5 meters pole mounted
Electronics Efficiency	Minimum 90% total
Duty Cycle	Dusk to dawn 4 Hours full light, 8 hours lower light level with motion sensor

TECHNICAL DETAILS

PV MODULE (S)

- Indigenously manufactured PV modules should be used

- ii. The PV modules should be made up of crystalline silicon solar cells and must have a certificate of testing conforming to IEC 61215 Edition II/ BIS 14286 from an NABL or IECQ accredited Laboratory.
- iii. The power output of the module under STC should be a minimum of 37Wp
- iv. The Load voltage* should be appropriate for charging of battery used, under the standard test conditions (STC) of measurement.
- v. **The module efficiency should not be less than 14%.**
- vi. The terminal box on the module should have a provision for opening, for replacing the cable, if required.
- vii. There should be a Name Plate fixed inside the module which will give:
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number
 - d. Year of manufacture
- viii. A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.

*The Load voltage conditions of the PV modules are not applicable for the system having MPPT.

BATTERY

- i. 200 Watt Hour Capacity.
- ii. Lithium Ferro phosphate.
- iii. Maximum Depth of Discharge 90%.
- iv. Battery should conform to the latest BIS/ International standards.

LIGHT SOURCE

- i. The light source will be of white LED type.
- ii. The color temperature of W-LEDs used in the system should be in the range of 5500°K to 6500°K.
- iii. LEDs should not emit ultraviolet light.
- iv. The light output from the W-LED light source should be constant throughout the duty cycle.
- v. The lamps should be housed in an assembly suitable for outdoor use.

ELECTRONICS

- i. The total electronic efficiency should be at least 85 %.
- ii. The idle current should be less than 1 mA.
- iii. The voltage drop from module terminals to the battery terminals should not exceed 0.6 volts including the drop across the diode and the cable when measured at maximum charging current
- iv. The PCB containing the electronics should be capable of solder free installation and replacement.

ELECTRONIC PROTECTIONS

- i. The system should have protection against battery overcharge, deep discharge condition.
- ii. Adequate protection should be provided against battery reverse polarity.
- iii. Fuses should be provided to protect against short circuit conditions. Fuse is not mandatory, in case, over current protection is provided in the driver circuit.
- iv. Protection for reverse flow of current through the PV module(s) should be provided.

MECHANICAL COMPONENTS

- i. A corrosion resistant metallic frame structure should be fixed on the pole to hold the SPV module.
- ii. The frame structure should have provision to adjust its angle of inclination to the horizontal between 0 and 45, so that the module can be oriented at the specified tilt angle.
- iii. The pole should be made of Galvanised Iron (GI) pipe.
- iv. The height of the pole should be 4 metres above the ground level, after grouting and final installation.
- v. The pole should have the provision to hold the luminaire.
- vi. The Luminaire housing should be water proof (IP 65) and should be painted with a corrosion resistant paint and should be housing the battery.

INDICATORS

- i. The system should have two indicators, green and red.
- ii. The green 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.
- iii. Red indicator should indicate the battery "Load Cut Off" condition

QUALITY AND WARRANTY

- i. **The complete Solar Street Lighting System (including battery) will be warranted for a period of Five years from the date of supply.**
- ii. **The PV module(s) will be warranted for a minimum period of 25 years from the date of supply.** PV modules used in Solar Home Lighting System must be warranted for their output peak watt capacity, which should not be less than 90% at the end of Ten (10) years and 80% at the end of Twenty five (25) years.
- iii. The Warranty Card to be supplied with the system must contain the details of the system. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.

OPERATION And MAINTENANCE MANUAL

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar Home System. The following minimum details must be provided in the Manual:

- Basic principles of Photovoltaics .
- A small write-up (with a block diagram) on Solar Home System - its components, PV module, battery, electronics and luminaire and expected performance.
- Significance of indicators .
- Type, Model number, voltage & capacity of the battery, used in the system .
- The make, model number, country of origin and technical characteristics (including IESNA LM-80 report) of W-LEDs used in the lighting system must be indicated in the manual.
- Clear instructions about mounting of PV module(s) .
- Clear instructions on regular maintenance and trouble shooting of the Solar Home System .
- DO's and DONT's .
- Name and address of the contact person for repair and maintenance .

11 Annexures

Annexure - 1

COVERING LETTER

(On the letterhead of the Company)

From:
(Full Name & Address of the Bidder)
M/s

The Director,
Jharkhand Renewable Energy Development Agency
3rd Floor, SLDC Building, Kusai, Doranda,
Ranchi-834002. Jharkhand, INDIA

Sub: Offer in the response to RfP No _____ Dated __/06/2016
for design, supply ,installation, commissioning and operation for 5 year of 200 W Solar Home
System (Solar Power Pack) in thevillage (as mentioned in the RfP) of
.....district.

Sir,
We hereby submit our Bid in full compliance with terms and conditions of the attached RfP.
The Bid is submitted for design, supply ,installation, commissioning and O&M for 5 year of
200 W Solar Home System (Solar Power Pack) for the below mentioned Villages.

Item No.	Project No.	Village Name	District Name
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Yours faithfully,
(Signature of Authorized Signatory)
Name:
Designation:
Company Seal:

Annexure - 2

UNDERTAKING

(On the letterhead of the Bidder)

I _____, S/o Shri _____
resident of _____ being Director/ proprietor / partner / of M/s.

CST registration No. is _____,

Income Tax PAN No. is _____,

Service Tax No. is (ST-2) _____,

TIN No. is _____

Hereby give consent to the JREDA, Ranchi to deduct from our bills whatever amount payable by us on account of the CT / VAT and IT dues etc., if any, demanded by the concerned departments.

For and on behalf of the Bidder

Place:

Dated:

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Annexure - 3**Experience Summary**

(For all relevant project(s) completed. Please enclose LoA / Work Order / Copy of Agreement and completion certificate / performance certificate for all projects being shown in experience)

Sl. No	Particulars	Project 1	Project 2	Project 3
1.	Name of organization which has awarded the works.			
2.	Name of the location of the work.			
3.	Total contract amount.			
4.	Year of award.			
5.	Detail of involvement in work as an Individual or as a company.			
6.	Was the work satisfactorily completed within stipulated period?			

Note:

All the above mentioned information must be supported by relevant documents and certificates.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Annexure - 4

Declaration by the Bidder

Regarding RfP No. : _____, Date ___/06/2016

DECLARATION

I/We _____ (hereinafter referred to as the Bidder) being desirous of bidding for the Work under the above mentioned RfP have carefully read and understood the enclosed terms and conditions of the RfP and agreed to abide by them. I / we have carefully noted that any counter condition or additional condition/ deviation put forth by me / us **is liable for summarily rejecting our Bid(s) which shall only be considered with JREDA's terms and conditions.**

I / we do hereby declare that

1. The Bidder is fully aware of local conditions and all the requirements of the RfP documents and agrees with all provisions of the RfP documents. Bidder has quoted for Project(s) after conducting due diligence/ survey of the indicated Project Site(s).
2. The Bidder is capable of executing and completing the Project as required by the RfP;
3. The Bidder accepts all risks and responsibilities directly or indirectly connected with the performance of the Agreement/ Work;
4. The Bidder has no collusion with other Contractor/any employee of JREDA or any other person or firm in the preparation of the Bid;
5. The Bidder has not been influenced by any statement or promises of JREDA or any of its employees but only by the RfP documents;
6. The Bidder is financially solvent and sound to execute the Project;
7. The Bidder is sufficiently experienced and competent to perform the contract to the satisfaction of JREDA;
8. Bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State & Central Government that may affect the Work, its performance or personnel employed therein.
9. The Bidder fully meets all the eligibility requirements as specified in the RfP document.

10. I/we declare that our Firm/Company or any of our associate firms / companies has not been black listed or otherwise debarred for any supply of goods/services or work by the Central Government, any of the State Governments or any public sector undertakings or any Govt. Company.
11. If this declaration is found to be incorrect or if any RfP condition is found violated by us, then without prejudice to any other action that may be taken, my/our EMD/ security money may be forfeited in full and the Bid, to the extent accepted, may be cancelled. The decision of JREDA shall be final and binding on all parties in this regard. The signature of our authorized representative is as below.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Annexure - 5

Format for Bank Guarantee for Performance Security

(Format for BG be submitted on Non-judicial Stamp Paper of appropriate value)

BANK GUARANTEE No. _____, amount of Bank Guarantee INR (in figure) (Rupees in words) covers from (DD/MM/YYYY) to (DD/MM/YYYY).

This Bank Guarantee made on _____ (Day) of _____ (Month) of ____ (Year) between _____ (hereinafter called the Guarantor) and M/s _____ (hereinafter called the Successful Bidder) in favour of Director, JREDA, Ranchi (hereinafter called the Implementing Agency) on the following Terms and Conditions:

Whereas, the Successful Bidder having entered into Agreement on (Date) _____ with the Implementing Agency (a copy of said Agreement has been received by Guarantor) and Successful Bidder having agreed to deposit performance Bank Guarantee of INR (in figure) (Rupees in words) in favour of the Implementing Agency in the form of Bank Guarantee, in token towards Design, Supply, Installation, Commissioning & operation of solar power plant on BOMT basis for 5 years from the date of Commissioning against Notice Inviting Tender (“NIT”), _____ dated _____,

to the satisfaction of the Director of the Implementing Agency for years/months _____ against the said Agreement.

Whereas the Guarantor further agree that the Director of the Implementing Agency is competent to decide whether the execution of Design, Supply, Installation, Commissioning & operation of solar power plant on BOMT basis for 5 years from the date of Commissioning is as per terms & conditions of said NIT. Director of Implementing Agency’s decision shall be binding on Guarantor.

Whereas the Guarantor further agree to pay immediately the amount Guaranteed within a period of one week of the same being demanded by the Implementing Agency with intimation to the Successful Bidder.

This Guarantee shall remain enforced and shall continue to be enforceable till _____, and shall be extended on receiving instructions from the Successful Bidder, with intimation to the Implementing Agency. However, the Bank Guarantee shall stand automatically enforceable for a period of further 90 days unless discharged by the Implementing Agency.

Whereas the Guarantor further agree that their liability under this Guarantee shall not be affected by any change in the Agreement or the terms and conditions between the Successful Bidder and the Implementing Agency without the consent or knowledge of the Guarantor or whatsoever.

Whereas the Guarantor further agree that Director JREDA’s decision whether Successful Bidder has committed any breach or non-observance of the terms and conditions of the said Agreement shall be final and enough for Guarantors to make payment to the Implementing Agency.

Whereas the Guarantor further agree that the amount due or amounts of damage or loss caused to or suffered by Implementing Agency are binding on us and undertaking to pay the

amount Guaranteed hereby or part thereof as required, immediately/within one week of the demand made by the Implementing Agency.

Whereas the Guarantor hereby undertakes not to revoke this Guarantee during its currency period except with the prior consent of the Implementing Agency in writing. However, unless a demand or claim is made in writing on or before the expiry of this Guarantee as mentioned above, the Guarantor shall be released and discharged from all liabilities there under.

Notwithstanding anything contained in foregoing our liability under this Guarantee is restricted to INR in figure (Rupees in words only). Bank Guarantee shall remain in force up to 90 days from the date of expiry of currency/extended period of the Bank Guarantee.

For, Bank,

(Signature / Name of Bank Officer / Seal of Authorized Signatory)

Annexure - 6**Financial Eligibility Parameters of Bidder - Turnover**

[On the letterhead of Chartered Accountant / Bidder]

(Separate sheet should be filled for each company in case of JV)

To,

The Director,
 Jharkhand Renewable Energy Development Agency
 3rd Floor, S.L.D.C. Building,
 Kusai Colony, Doranda,
 Ranchi - 834002

Dear Sir,

Sub: Turnover Certificate for site survey, planning, design, engineering, assembly, manufacturing, testing, supply, loading, transportation, unloading, insurance, delivery at site, handling, storage, installation, testing, commissioning of works for Rural Electrification Works of 24 Villages in districts of Latehar, West Singhbhum, Sahibganj, Pakur, Hazaribagh & Chatra in Jharkhand through 200Wp Solar Home System (Solar Power Pack) to households, along with 5 years CMC, under Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY)

We certify that the Bidding Company had a Minimum Average Annual Turnover (MAAT) of Rs. -----

----- based on audited annual accounts of the last five years ending 31.03.2015.

S. No.	Year	Turnover (Rs.)
1	2010-11	
2	2011-12	
3	2012-13	
4	2013-14	
5	2014-15	

Authorised Signatory

Chartered Accountant

Membership No. & FR No.,

phone no, email id

(Power of Attorney holder)

(Stamp & Signature)

Date:

Annexure - 7**Financial Eligibility Parameters of Bidder – Networth**

[On the letterhead of Chartered Accountant / Bidder]

(Separate sheet should be filled for each company in case of JV)

To,

The Director,
 Jharkhand Renewable Energy Development Agency
 3rd Floor, S.L.D.C. Building,
 Kusai Colony, Doranda,
 Ranchi - 834002

Dear Sir,

Sub: Networth Certificate for site survey, planning, design, engineering, assembly, manufacturing, testing, supply, loading, transportation, unloading, insurance, delivery at site, handling, storage, installation, testing, commissioning of works for Rural Electrification Works of 24 Villages in districts of Latehar, West Singhbhum, Sahibganj, Pakur, Hazaribagh & Chatra in Jharkhand through 200Wp Solar Home System (Solar Power Pack) to households, along with 5 years CMC, under Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY)

This is to certify that Net Worth of _____ {insert the name of Bidding Company}, as on 31st March 2015 is Rs _____. The details are appended below

.Particulars	Amount (In Rs.)
Equity Share Capital	
Add: Reserves	
Subtract: Revaluation Reserve	
Subtract: Intangible Assets	
Subtract: Miscellaneous Expenditure to the extent not written off and carried forward losses	
Net Worth as on 31st March 2015	

Authorised Signatory

Chartered Accountant

Membership No. & FR No.,

phone no, email id

(Power of Attorney holder)

(Stamp & Signature)

Date:

Annexure – 7 (A)**Experience: Technical Eligibility Criteria for Individual Firm**

	Generation		Transmission		Sub-transmission/ Distribution	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects in last 7 years whose capacity was more than or equal to 80% of Project capacity for which bid is being placed						
Completed projects in last 7 years whose capacity was more than or equal to 50% of Project capacity for which bid is being placed						
Completed projects in last 7 years whose capacity was more than or equal to 40% of Project capacity for which bid is being placed						
Completed DDG projects in last 7 years whose capacity was more than or equal to the Project capacity for which bid is being placed						

- | | |
|--|----------|
| 1. Number of Projects for which Bid is submitted by Bidder | (in No.) |
| 2. Total Project cost for which Bidder is placing Bid: | INR Lakh |
| 3. Total Project capacity for which Bidder is placing Bid: | kWp |
| 4. Maximum size of a Project for which Bidder is bidding | kWp |
| 5. Minimum size of a Project for which Bidder is bidding | kWp |

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bid(s).

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Annexure - 7 (B)**Experience: Commercial Eligibility Criteria for Individual Firm**

	Generation		Transmission		Sub-transmission/ Distribution	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects in last 7 years whose estimated cost was more than or equal to 80% of Project cost for which bid is being placed						
Completed projects in last 7 years whose estimated cost was more than or equal to 50% of Project cost for which bid is being placed						
Completed projects in last 7 years whose estimated cost was more than or equal to 40% of Project cost for which bid is being placed						

1. Number of Projects for which Bid is submitted by Bidder (in No.)
2. Total Project cost for which Bidder is placing Bid: INR Lakh
3. Total Project capacity for which Bidder is placing Bid: kWp
4. Maximum size of a Project for which Bidder is bidding kWp
5. Minimum size of a Project for which Bidder is bidding kWp

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bids.

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Annexure – 8

Form of Joint Venture Agreement

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE TO BE PURCHASED IN THE NAME OF JOINT VENTURE)

PROFORMA OF JOINT VENTURE AGREEMENT

BETWEEN , ANDFOR BID SPECIFICATION NO DATE..... OF the JREDA.

THIS Joint Venture Agreement executed on thisday of Two thousand sixteen and between M/s a company incorporated under the laws ofand having its Registered Office at (hereinafter called the "Lead Partner" which expression shall include its successors, executors and permitted assigns), M/s. a company incorporated under the laws of and having its Registered Office at (hereinafter called the "Partner" which expression shall include its successors, executors and permitted assigns) and M/s a company incorporated under the laws of..... and having its Registered Office at (hereinafter called the "Partner" which expression shall include its successors, executors and permitted assigns) for the purpose of making a bid and entering into a contract (in case of award) against NIT No. dated for design, supply ,installation, commissioning and operation for 5 year of 200 Wp Solar Home System (Solar Power Pack) in thevillage (as mentioned in the RfP) ofdistrict, being executed by the Jharkhand Renewable Energy Development Agency, Ranchi having its Registered Office at _____ (hereinafter called the "JREDA").

WHEREAS the JREDA invited bids as per the above mentioned Specification for the design, supply, installation, commissioning and operation for 5 years for decentralized 200 Wp Solar Home System (Solar Power Pack) for 24 Villages in 6 Districts of Jharkhand in the bidding documents.

General Conditions (Qualification Requirement of the Bidder), forming part of the bidding documents, stipulates that a Joint Venture of two or more qualified firms as partners, meeting the requirement as applicable may bid, provided the Joint Venture fulfills all other requirements of tender and in such a case, the BID shall be signed by all the partners so as to legally bind all the Partners of the Joint Venture, who will be jointly and severally liable to perform the Contract and all obligations hereunder.

The above clause further states that the Joint Venture agreement shall be attached to the bid and the contract performance guarantee will be as per the format enclosed with the bidding document without any restriction or liability for either party.

AND WHEREAS the bid has been submitted to the Employer vide proposal No _____ dated _____ against the Project No ____ (Specification No _____) by Lead Partner based on the Joint Venture agreement between all the Partners under these presents and the bid in accordance with the requirements of General Conditions (Qualification Requirements of the Bidders), has been signed by all the partners.

NOW THIS INDENTURE WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the Partners to this Joint Venture do hereby now agree as follows:

1. In consideration of the award of the Contract by the Employer to the Joint Venture partners, we, the Partners to the Joint Venture agreement do hereby agree that M/s _____ shall act as Lead Partner and further declare and confirm that we shall jointly and severally be bound unto the JREDA for the successful performance of the Contract and shall be fully responsible for the design, manufacture, supply, and successful performance of the system in accordance with the Contract.
2. In case of any breach of the said Contract by the Lead Partner or other Partner(s) of the Joint Venture agreement, the Partner(s) do hereby agree to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
3. Further, if the JREDA suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performance guaranteed as per the specification in terms of the Contract, the Partner(s) of these presents undertake to promptly make good such loss or damages caused to the JREDA, on its demand without any demur. It shall not be necessary.

or obligatory for the JREDA to proceed against Lead Partner to these presents before proceeding against or dealing with the other Partner(s).

4. The financial liability of the Partners of this Joint Venture agreement to the Employer, with respect to any of the claims arising out of the performance of non- performance of the obligations set forth in the said Joint Venture agreement, read in conjunction with the relevant conditions of the Contract shall, however, not be limited in any way so as to restrict or limit the liabilities of any of the Partners of the Joint Venture agreement.
5. It is expressly understood and agreed between the Partners to this Joint Venture agreement that the responsibilities and obligations of each of the Partners shall be as delineated **in Appendix-I (*To be incorporated suitably by the Partners)** to this agreement. It is further agreed by the Partners that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Partners under this Contract.
6. This Joint Venture agreement shall be construed and interpreted in accordance with the laws of India and the courts of Ranchi shall have the exclusive jurisdiction in all matters arising thereunder.
7. In case of an award of a Contract, We the Partners to the Joint Venture agreement do hereby agree that we shall be jointly and severally responsible for furnishing a contract performance security & Project Operation Guarantee from a bank in favour of the JREDA in the forms acceptable to purchaser for value of 10% & 20% of the Contract Price in the currency/currencies of the Contract.
8. It is further agreed that the Joint Venture agreement shall be irrevocable and shall form an integral part of the Contract, and shall continue to be enforceable till the JREDA discharges

the same. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Partners to the Joint Venture agreement have through their authorized representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of lead Partner

has been affixed in my/ our presence
pursuant to the Board of Director's
resolution dated

(Signature of authorized
representative)

Signature
Name
Designation
Name
Designation
company
Common Seal of the

• **Common Seal of other Partners** has been affixed in my/our presence
pursuant to the Board of Director's
authorized resolution dated representative)

(Signature of

Signature
Name
Designation
company
Common Seal of the

WITNESSES:

1. 2.
(Signature) (Signature)
Name Name
(Official address) (Official address)

Annexure - 8 (A)**Technical Eligibility Criteria for Joint Venture Firm**

Technical eligibility criteria (JV Firms)	Generation		Transmission		Sub-transmission/ Distribution	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects by any of JV partners in last 7 years whose capacity was more than or equal to 80% of Project capacity for which bid is being placed						
Completed projects by any of JV partners in last 7 years whose capacity was more than or equal to 50% of Project capacity for which bid is being placed						
Completed projects by any of JV partners in last 7 years whose capacity was more than or equal to 40% of Project capacity for which bid is being placed						
Completed DDG projects on turnkey basis by the lead partner in last 7 years whose capacity was at least 50% of the Project capacity for which bid is being placed						

Completed DDG projects on turnkey basis by second partner in last 7 years Project capacity for which bid is being placed						
Completed DDG projects on turnkey basis by third partner in last 7 years whose capacity was at least 30% of the Project capacity for which bid is being placed						

1. Number of Projects for which Bid is submitted by Bidder _____
2. Total Project cost for which Bidder is placing Bid: INR Lakh
3. Total Project capacity for which Bidder is placing Bid: kWp
4. Maximum size of a project kWp
5. Minimum size of a project kWp

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bids.

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed.

Note:

In case one or more than one of the partners of JV meet any of the above criteria, total number of projects and name of all such projects against each criterion shall be mentioned.

Annexure - 8 (B)**Experience: Commercial Eligibility Criteria for Joint Venture Firm**

	Generation		Transmission		Sub-transmission/ Distribution	
	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients	No. of projects	Name of projects/ clients
Completed projects by any of the partners in last 7 years whose estimated cost was more than or equal to 80% of Project cost for which bid is being placed						
Completed projects by any of the partners in last 7 years whose estimated cost was more than or equal to 50% of Project cost for which bid is being placed						
Completed projects by any of the partners in last 7 years whose estimated cost was more than or equal to 40% of Project cost for which bid is being placed						

1. Number of Projects for which Bid is submitted by Bidder _____
2. Total Project cost for which Bidder is placing Bid: INR Lakh
3. Total Project capacity for which Bidder is placing Bid: kWp
4. Maximum size of a project kWp
5. Minimum size of a project kWp

Total project capacity and total project cost means the sum of all the project capacities and all the project costs for which the Bidder is submitting Bids.

Bidder shall enclose proper supporting documents in favour of work experience as shown in the table above. If a Bidder is placing Bid(s) for more than one Project, only one set of supporting documents in favour of above declared work experience should be enclosed.

Note: In case one or more than one of the partners of JV meet any of the above criteria, total number of projects and name of all such projects against each criterion shall be mentioned.

Annexure - 9**Experience: MAAT Criteria**

1. Total Project capacity for which Bidder is placing Bid: kWp
2. Total Project cost for which Bidder is placing Bid: INR Lakh
3. Qualifying MAAT requirement for Project(s) for Bidder is bidding: _____ INR Lakh

If Bidder is an Individual Firm					
Years	2010 - 11	2011 - 12	2012 - 13	2013 - 14	2014 15
Years selected for MAAT					
Turnover of years selected for MAAT					
MAAT of Bidder					

If Bidder is JV Firm (MAAT of Lead Member as well as others should be given separately)					
Years	2010 - 11	2011 - 12	2012 - 13	2013 - 14	2014 15
Years selected for MAAT					
Turnover for Years selected for MAAT					
MAAT of Bidder					

Note:

In case Bidder is a Firm

1. Minimum Average Annual Turnover (MAAT) for best three years out of last five financial years of the Bidder should not be less than 30% of the estimated cost of the project.
2. For Bidder to qualify for more than one project, the MAAT requirement shall be the sum of MAAT requirement of the projects, they proposed to qualify.

In case of JV Firms

1. The figures for each of the member of the joint venture shall be added together to determine the Bidder compliance with the minimum qualifying criteria set out; however in order for a joint venture to qualify, the member(s) of joint venture must meet the following minimum criteria:
 - i. The lead member shall meet not less than 40% of the minimum criteria given in MAAT;
 - ii. Each of the other member(s) shall meet not less than 25% of the criteria given in

MAAT.

2. For Bidder to qualify for more than one project, the sum of requirements of individual projects shall be considered for determination of Qualifying Requirement of the Bidder.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Annexure - 10**Inspection Report**

Jharkhand Renewable Energy Development Agency

JREDA Officials _____

INSPECTION REPORTFor SUPPLY, INSTALLATION & COMMISSIONING of DDG Solar Home System at
_____ Village, _____ Block, _____ District

Inspection report No. _____ Date _____

1. Name of Successful Bidder _____

2. Order No. _____ Dated _____

3. Challan MTR No. _____ Dated _____

4. Invoice No. _____ Dated _____

5. Receipt of Material _____ Dated _____

6. Project Head _____

7. Transportation/Freight _____

8. Date of Installation and Commissioning _____

S. No.	Name of System	Quantity Received			Sr. No. from _____ to _____ (attach separate list)	Quantity Done	Quantity Accepted	Quantity Rejected	Remarks
		No	w/VAh / kVA	Total Kw / VAh /kVA					
1	SPV Modules								
2.	Battery								

9. Number of households benefited: _____ (list enclosed)

10. 11. Number of street lights provided:

12. Community load provided to: _____ (list enclosed)

13. Civil work: properly ventilated control room size _____ m³

14. For providing information, if required, additional sheet can be attached.
15. Certified that the above-accepted work has been verified on and found
to be as per specifications of MNRE, Detailed Project Report and Agreement. Entries
have been made in the relevant register.
16. Original list with signature of beneficiary is kept in JREDA office.

Signature of Inspecting Authority

With name and seal

Signature of Controlling

with name and seal

Annexure - 11

Joint Commissioning Certificate, Training Certificate and Completion Certificate

DDG based 200W Solar Home System has been successfully installed and commissioned in

Name of Village/place _____ Block _____ Distribution

As per Agreement _____ dated _____

This is also to certify that:-

1. The system is working satisfactorily and
2. The general training to all the beneficiaries has been provided.

Two sets of photographs of following Systems have been taken as per terms & conditions of RfP are enclosed & copy of the same is also kept in JREDA Office Records:-

1. Solar PV Modules installed on structure (Three views).
2. Junction Box (three views)
3. Charge Controller and control panels installed (Three views)
4. Battery bank installed (Three views)

(Signature with full name and seal)

Village Sarpanch /
Secretary of Panchayat /organization

(Signature with full name and seal)

Authorized Signatory of Project developer

(Signature with full name and seal)

JREDA

Annexure - 12

Performance Guarantee Testing Report Post Commissioning of the Project

This is to certify that the 200 W Solar Home System in village _____ Block _____, District _____ is working satisfactory for the following parameters:

- 1.
- 2.
- 3.
- 4.

Further, the following installations/ structures were found in satisfactory working order

- 1.
- 2.
- 3.
- 4.

It is also certified that the Successful Bidder provided power _____ hours per day for _____ days every month from the date of commissioning of the plant.

(Signature with full name and seal)

Village Sarpanch /
Secretary of Panchayat /organization

(Signature with full name and seal)

Authorized Signatory of Project developer

(Signature with full name and seal)

JREDA

Annexure - 13**Financial Bid**

Project No.	Name of the District	Name of Village	No of Systems	Total Capacity (Watt)	Project Cost (Rs.) (in figure)	Project Cost (INR) (in word)
1	Latehar	Beshra Kona	5	1000		
2	Latehar	Kushabethan	9	1800		
3	West Singhbhum	Kentai	10	2000		
4	West Singhbhum	Guipai	13	2600		
5	West Singhbhum	Chirkubera	13	2600		
6	Sahibganj	Aurjanr	8	1600		
7	Sahibganj	Rodo	8	1600		
8	Sahibganj	Belra	3	600		
9	Sahibganj	Bedombari	11	2200		
10	Sahibganj	Tebo(Basgo)	12	2400		
11	Pakur	Pangdo	7	1400		
12	Hazaribagh	Pandra	12	2400		
13	Hazaribagh	Parasirajghat	10	2000		
14	Hazaribagh	Sahijana	5	1000		
15	Chatra	Gaidhatari	7	1400		
16	Chatra	Ratnag	8	1600		
17	Chatra	Lare	8	1600		
18	Chatra	Bengwatari	11	2200		
19	Chatra	Malgo	11	2200		
20	Chatra	Rajpar	13	2600		
21	Chatra	Garhe	13	2600		
22	Chatra	Bisrampur	14	2800		
23	Chatra	Garo	14	2800		
24	Chatra	Baheradih	10	2000		

Important note

1. Project cost is all inclusive cost of/ for design, supply, installation, commissioning and O&M, for 5 years, of 200 W Solar Home System based DDG system and all associated civil works etc.
2. Bidder must note that only Project Cost will be considered to determine Successful Bidder (Lowest Project Cost).
3. Financial bid of a Bidder of only those Projects shall declared for evaluation which qualify on technical criteria.

4. The Price shall be is inclusive of all costs as well as duties and taxes (the custom duty & levies, duties on taxes /VAT etc.) paid or payable and such taxes, duties, levies, additionally payable will be to the contractor's account.

(Signature, Name & Designation of the person authorized by Firm/JVs of Firm)

Name & seal of Firm/ JV Firm _____

Place:

Date:

Annexure - 14

Format for Agreement

(Format for Agreement to be executed on INR100/- Non-judicial Stamp Paper)

This agreement is signed on this ---- (day) ----- of ----(month)---- of ----(year)----- at Ranchi between M/s-----
(hereinafter called as “Successful Bidder”), and Jharkhand Renewable Energy Development Agency, Ranchi (hereinafter called as “JREDA”), on the following terms and conditions:

That, the Successful Bidder has agreed to implement Project as per scope of work / specifications mentioned in RFP No.....Dated issued by JREDA;

That, Successful Bidder agrees to start Work within 15 days after this Agreement;

That, the Successful Bidder agrees to design, supply, installation, commissioning and operation, for 5 years, of decentralised distributed 200 W Solar Home System, all associated civil works in various villages of Jharkhand, as per Projects mentioned in Table 1 of RfP, on turnkey basis as per details given therein;

That, Successful Bidder agrees to carry out design and construction, Installation of 200 W Solar Home System of the Project;

That, Successful Bidder agrees to carry out operation & maintenance of DDG system for five years, as per guidelines of DDG, as amended/ replaced/ sub-assumed, under Deen Dayal Upadhyay Gram Jyoti Yojana;

That, JREDA and Successful Bidder agree to abide, as applicable, by all other provisions of RfP, including but not limited to technical specifications, commercial terms and conditions, general conditions of contract;

That, Successful Bidder agrees to supply of desired amount of electricity to Beneficiaries and collect charges, as prescribed by JREDA, for the same;

That, after successfully completing 5 years of O&M, if the Project is to be transferred to IA/ State Government./ other agency, as approved by the State Government, Successful Bidder shall ensure that Project is transferred in good working condition as certified by the Engineer and the concerned JREDA

That, the financial bid of the Successful Bidder shall remain firm and valid till successful completion of 5 years of O&M period;

That, the breakup of our financial bid is as follows:

1. Part I: Lump sum cost of design, supply, installation and commissioning of Solar PV system

Project No.	Name of the District	Name of Village	DPR Capacity of the system (Watt)	Lump sum cost system (Rs.)

Note: The Price is inclusive of all costs as well as duties and taxes (the custom duty & levies, duties on taxes /VAT etc.) paid or payable and such taxes, duties, levies, additionally payable will be to the contractor's account.

2. Part A: Plant, Equipment, Civil Material to be supplied include

Project No.	Name of the District	Name of Village	Particular of Items	Total Price (Rs.)	
1			Cost of Solar Power system including module, battery, charge controller etc. (All equipment and auxiliary systems and accessories required for system operation)		
			Cost of providing necessary control equipment including data logging facility, street lighting etc (if applicable).		
			Cost of providing connection and fitting to House-holds& Street lights		
			Cost of Civil work		Total A1
2			Cost of Solar Power system including module, battery, charge controller etc. (All equipment and auxiliary systems and accessories required for system operation)		
			Cost of providing necessary control equipment including data logging facility, street lighting etc (if applicable).		
			Cost of providing connection and fitting to House-holds& Street lights		
			Cost of Civil work		Total A2
3					
...					

Note: The Price is inclusive of all costs as well as duties and taxes (the custom duty & levies, duties on taxes /VAT etc.) paid or payable and such taxes, duties, levies, additionally payable will be to the contractor's account.

3. Part B: Installation & Erection, Testing and Commission include

Project No.	Name of the District	Name of Village	Erection Part	Total Price (Rs.)	
1			Cost of installation & commissioning of Solar power pack 200Wp system including module, battery, charge controller etc. (All 200WP Solar Home System equipment and auxiliary systems and accessories required for 200WP Solar Home System operation)		
			Cost of erection of necessary control equipment including data logging facility, street lighting etc (if applicable).		
			Cost of providing connection and fitting to House- holds		Total B1
2			Cost of installation & commissioning of Solar power pack 200Wp system including module, battery, charge controller etc. (All 200WP Solar Home System equipment and auxiliary systems and accessories required for 200WP Solar Home System operation)		
			Cost of erection of necessary control equipment including data logging facility, street lighting etc (if applicable).		
			Cost of providing connection and fitting to House- holds		Total B2

3					
...					

Note: The Price is inclusive of all costs as well as duties and taxes (the custom duty & levies, duties on taxes /VAT etc.) paid or payable and such taxes, duties, levies, additionally payable will be to the contractor's account.

4. Part C: Cost of spare parts for 5 years after commissioning of the systems

Project No.	Name of the District	Name of Village	Cost of spare parts	Total Price (Rs.)
			Cost of spare parts for 5 years after commissioning of the systems	C1
			Cost of spare parts for 5 years after commissioning of the systems	C2
			Cost of spare parts for 5 years after commissioning of the systems	C3
			Cost of spare parts for 5 years after commissioning of the systems	C4

Note: The Price is inclusive of all costs as well as duties and taxes (the custom duty & levies, duties on taxes /VAT etc.) paid or payable and such taxes, duties, levies, additionally payable will be to the contractor's account.

5. Part D: Cost of providing power in village for 5 years including operation & maintenance of 200WP Solar Home System and associated auxiliary systems taking into account the recovery from end users.

Project No.	Name of the District	Name of Village	Cost of providing power	Cost of providing Power (Rs)	Fixed tariff collected from villagers @ Rs. 30 and Rs. 60 per household per month from BPL and APL. (Rs)	Effective Cost of providing power (Rs)
				I	II	III = I - II
			Cost of providing power in village for five years including operation & maintenance of 200WP Solar Home System and associated auxiliary systems taking into account the recovery from end users.			D1
			Cost of providing power in village for five years including operation & maintenance of 200WP Solar Home System and associated auxiliary systems taking into account the recovery from end users.			D2
			Cost of providing power in village for five years including operation & maintenance of 200WP Solar Home System and associated auxiliary systems taking into account the recovery from end users.			D3

Note: The Price is inclusive of all costs as well as duties and taxes (the custom duty & levies, duties on taxes /VAT etc.) paid or payable and such taxes, duties, levies, additionally payable will be to the contractor's account.

6. Part E: Total Village Value

Project No.	Name of the District	Name of Village	Total A (in Rs.)	Total B (in Rs.)	Total C (in Rs.)	Total D (in Rs.)	Total Village Price (A+B+C+D) (in Rs.)

Note: The Price is inclusive of all costs as well as duties and taxes (the custom duty & levies, duties on taxes /VAT etc.) paid or payable and such taxes, duties, levies, additionally payable will be to the contractor's account.

That, the Agreement will be valid up to-----.

IN WITNESS WHEREOF Successful Bidder and JREDA, through their authorized signatories who affix their signatures and seal at Ranchi, sign the Agreement:

Witnesses;

Successful Bidder

1.

JREDA

2.

12 Schedules

Schedule - 1

Qualification requirement - Technical eligibility

Project No.	Name of the District	Name of Village	DPR Capacity of the Project (Watt)	80% One work (Watt)	50% two work order (Watt)	40% three work order (Watt)
1	Latehar	Beshra Kona	1000	800	500	400
2	Latehar	Kushabethan	1800	1440	900	720
3	West Singhbhum	Kentai	2000	1600	1000	800
4	West Singhbhum	Guipai	2600	2080	1300	1040
5	West Singhbhum	Chirkubera	2600	2080	1300	1040
6	Sahibganj	Aurjanr	1600	1280	800	640
7	Sahibganj	Rodo	1600	1280	800	640
8	Sahibganj	Belra	600	480	300	240
9	Sahibganj	Bedombari	2200	1760	1100	880
10	Sahibganj	Tebo(Basgo)	2400	1920	1200	960
11	Pakur	Pangdo	1400	1120	700	560
12	Hazaribagh	Pandra	2400	1920	1200	960
13	Hazaribagh	Parasirajghat	2000	1600	1000	800
14	Hazaribagh	Sahijana	1000	800	500	400
15	Chatra	Gaidhatari	1400	1120	700	560
16	Chatra	Ratnag	1600	1280	800	640
17	Chatra	Lare	1600	1280	800	640
18	Chatra	Bengwatari	2200	1760	1100	880
19	Chatra	Malgo	2200	1760	1100	880
20	Chatra	Rajpar	2600	2080	1300	1040
21	Chatra	Garhe	2600	2080	1300	1040
22	Chatra	Bisrampur	2800	2240	1400	1120
23	Chatra	Garo	2800	2240	1400	1120
24	Chatra	Baheradih	2000	1600	1000	800

Schedule - 2**Qualification requirement - Financial eligibility**

Project No.	Name of the District	Name of Village	Estimated Project Cost	Single work order having minimum value	Two work order having minimum value	Three work order having minimum value	MAAT Requirement Any three of last five years upto march 2016
			Rs. Lakhs				
1	Latehar	Beshra Kona	2.51	2.01	1.26	1.01	0.75
2	Latehar	Kushabethan	4.52	3.62	2.26	1.81	1.36
3	West Singhbhum	Kentai	5.03	4.02	2.51	2.01	1.51
4	West Singhbhum	Guipai	6.54	5.23	3.27	2.61	1.96
5	West Singhbhum	Chirkubera	6.50	5.20	3.25	2.60	1.95
6	Sahibganj	Aurjanr	4.02	3.22	2.01	1.61	1.21
7	Sahibganj	Rodo	4.02	3.22	2.01	1.61	1.21
8	Sahibganj	Belra	1.51	1.21	0.75	0.60	0.45
9	Sahibganj	Bedombari	5.53	4.42	2.76	2.21	1.66
10	Sahibganj	Tebo(Basgo)	6.03	4.83	3.02	2.41	1.81
11	Pakur	Pangdo	3.52	2.82	1.76	1.41	1.06
12	Hazaribagh	Pandra	6.00	4.80	3.00	2.40	1.80
13	Hazaribagh	Parasirajghat	5.00	4.00	2.50	2.00	1.50
14	Hazaribagh	Sahijana	2.50	2.00	1.25	1.00	0.75
15	Chatra	Gaidhatari	3.52	2.82	1.76	1.41	1.06
16	Chatra	Ratnag	4.02	3.22	2.01	1.61	1.21
17	Chatra	Lare	4.02	3.22	2.01	1.61	1.21
18	Chatra	Bengwatari	5.53	4.42	2.76	2.21	1.66
19	Chatra	Malgo	5.53	4.42	2.76	2.21	1.66
20	Chatra	Rajpar	6.54	5.23	3.27	2.61	1.96
21	Chatra	Garhe	6.54	5.23	3.27	2.61	1.96
22	Chatra	Bisrampur	7.04	5.63	3.52	2.82	2.11
23	Chatra	Garo	7.04	5.63	3.52	2.82	2.11
24	Chatra	Baheradih	5.00	4.00	2.50	2.00	1.50