

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.: 01/JREDA/DDG/SPV/20-21

Dated: 19.08.2020

1	Name of the work	Request for Proposal (RFP) for Rural Electrification Works of 04 Villages in districts of West Singhbhum in Jharkhand through Solar Photovoltaic Power Plants (Mini/Micro grid) with distribution network & connection to households along with 5 years CMC and CMC work of 17 villages in districts of Chatra, West Singhbhum & Sahibganj under Decentralized Distributed Generation (DDG) Scheme of Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY).
2	Estimated cost (Rs.)	Rs. 215.456 Lacs
3	Time of completion	45 (Forty five) days
4	Date of publication of NIT on website: http://jharkhandtenders.gov.in	25.08.2020 (Tuesday)
5	Date & time of Pre-bid meeting	02.09.2020 (Wednesday) at 1.00 P.M.
6	Last date & time for receipt of online bids	21.09.2020 (Monday) up to 5:00 P.M.
7	Submission of original copies of Bid fee & EMD (Offline)	21.09.2020 and 22.09.2020 up to 5.00 P.M.
8	Technical Bid Opening Date	23.09.2020 (Wednesday) at 3:00 P.M.
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)
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**E-mail: info@jreda.com Website: www.jreda.com
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NIT No.: 01/JREDA/DDG/SPV/20-21

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 4 Villages in West Singhbhum in Jharkhand through **Solar Photovoltaic Power Plants (Mini/Micro grid)** with distribution network & connection to households, along with 5 years CMC on Build, Operate, Maintain and Transfer (BOMT) basis.

All bids must be accompanied by:

- I.** An EMD amount as mentioned below for the 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. 10,000/- (Rupees Two Thousand only) in form of DD drawn in favour of "Director JREDA" payable at Ranchi.
- III.** Bid Fee and EMD has been Exempted for MSE of Jharkhand. MSE of the Jharkhand shall fulfill the following criteria:
 - i. The manufacturing or Service unit is located within the State of Jharkhand.
 - ii. The Head Office or Corporate Office of such registered unit/company/enterprise is within the territorial jurisdiction of Jharkhand.
 - iii. MSE is registered with the Directorate of Industries /District Industries Centre, Khadi and Village Industries Board, Directorate of Handloom, Sericulture and Handicraft of Jharkhand Govt, Industrial Area Development Authorities and National Small Industries Corporation Ltd or any other body specified by Directorate of Industries, Jharkhand Govt from time to time and other industrial units/enterprises which have submitted IEM and been issued Date of Production (DOP) certificate by GM ,DIC/MD, Industrial Area Development Authorities /Director, Industries, GoJ.
 - iv. The unit/company/enterprise is registered under Jharkhand Goods and Services Tax (JGST) Act-2017 or The Central Goods & Services Tax (CGST) Act 2017
 - v. The MSE /other enterprise and unit must have encouraged local people in employment.

- vi. The MSE /other enterprise and unit must have complied with all statutory and legal formalities of concerned regulators/Act.
- vii. The MSE unit availing preferential treatment will give an undertaking with respect to (i) to (vi) above including a categorical statement that the product/services being supplied to Govt. Deptt. or its agencies has been manufactured/created by the unit located in Jharkhand only, giving details of batch no./date or any other identifiable tag (GSI etc.) as per prevalent established practice.

Any bid not accompanied by acceptable EMD and bid fees shall be rejected by the employer/ authorized representative as being non – responsive.

Project-wise estimated load and details is mentioned below:

Table-1: Details of 4 villages where supply & installation required:

Sl No.	Name of the District	Block	Village	Census code	Capacity (kWp)	House Holds	Project Cost (in Lakhs)
1	West Singhbhum	Tonto	Agoban	377984	12	45	34.75
2	West Singhbhum	Bandhgaon	Akir	377174	6	24	19.8
3	West Singhbhum	Bandhgaon	Manmaru	377098	7	25	23.5
4	West Singhbhum	Bandhgaon	Rogto	377187	7	25	23.5
Total (A)					32	119	101.55

Table-2: Details of 17 villages where 05 Years CMC required:

Sl. No.	District	Block	Village	Census Code	Capacity (KWp)	Nos. of HHs	Project Cost (In Lakhs)	Date of Inst	Cost of CM for 5 years @20% of project cost
1	Chatra	Hunterganj	Ghatdhari	348222	7	28	21	22-03-2018	4.2
2	Chatra	Hunterganj	Kolhua	348223	11	41	31.29	14-04-2018	6.258
3	Chatra	Hunterganj	Koluapahar	348286	5	20	16.5	14-08-2018	3.3
4	Chatra	Lawalaung	Limodih	348555	9	35	27	20-03-2018	5.4
5	Chatra	Hunterganj	Gue	348290	10	40	28.61	28-05-2018	5.722
6	West Singhbhum	Tonto	Rutagutu	377988	7	25	22	22-05-2018	4.4
7	West Singhbhum	Tonto	Husia	377992	14	55	40.18	14-02-2018	8.036
8	West Singhbhum	Tonto	Gaupur	377964	5	20	16	15-03-2018	3.2
9	West Singhbhum	Tonto	Kuessuta	377982	13	50	37.46	15-06-2018	7.492
10	West Singhbhum	Tonto	Udalkam	377979	9	35	27	20-06-2018	5.4
11	West Singhbhum	Tonto	Akahata	377986	20	77	57	10-03-2018	11.4
12	West Singhbhum	Sonua	Baskata	376932	14	54	43.17	18-02-2018	8.634
13	West Singhbhum	Manoharpur	Lowasokra	377746	9	35	29	09-12-2018	5.8
14	West Singhbhum	Tonto	Bundu	377985	38	145	106	19-02-2018	21.2
15	Chatra	Hunterganj	Kenrimoh	348288	9	35	28.8	15-06-2018	5.76
16	Sahibganj	Barhait	Chaperi	358700	7	37	23.5	14-02-2018	4.7

17	Sahibganj	Borio	Amjani	358468	4	15	15.02	14-02-2018	3.004
	Total (B)				191	747	569.53		113.906
	Total Project Cost (A+B)								215.456

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.

1. 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. Only one set of all technical & commercial qualification related documents shall be submitted, in a separate envelop, by a Bidder.
2. Evaluation of Bid shall be done for supply & installation of plants including 5 years of CMC in all the 4 nos. of villages and CMC for 5 years in other 17 nos. of villages as one single Project as per terms and conditions of RfP. The Contract would be awarded to/ carried out by the lowest cumulative rate by the Bidder, subject to capacity of the lowest Bidder devised on basis of cumulative parameters. 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.
3. 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 the Project shall stand cancelled.
4. 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).
5. 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 (in original), Bid Fee of Project (in original);
- ii. Envelop shall be send to the office of the undersigned so as to reach the office by 21.09.2020 and 22.09.2020 up to 5:00 P.M.

3. **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	25.08.2020 (Tuesday)
Date & time of Pre-bid meeting	02.09.2020 (Wednesday) at 1.00 P.M.
Last date & time for receipt of online bids	21.09.2020 (Monday) up to 5:00 P.M.
Uploading of Document on web site of JREDA Date:	From 05.09.2020 at 10.00 A.M.
Submission of original copies of Bid fee & EMD (Offline)	21.09.2020 and 22.09.2020 up to 5.00 P.M.
Bid Opening Date & Time:	23.09.2020 (Wednesday) at 3:00 P.M.

4. 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 (**Rs. 4.309 Lakhs**) to be entered on JREDA's e-procurement website.
 - Non-refundable **Bid Fee of 10,000/- (Rupees Ten Thousand only)** in form of DD drawn in favour of "Director JREDA" payable at Ranchi.
 - 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>.
5. A prospective bidder may participate in the bidding for any or all villages as per the laid-down norms of JREDA. Any quarry 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:** MSE Jharkhand has been exempted from the bid fee and EMD. MSE seeking exemption from Bid Fee & EMD, shall submit documentary evidence supporting the exemption.
6. 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).
7. 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 : +91-120-4200462E-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.)
8. 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: +91-120-4200462E-Mail: eproc-support@gov.in.
9. 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.

10. **The confirmation on issuance of Bank Guarantee (EMD/Performance Security) has to be submitted by respective Bank/ Branch to JREDA via email or hard copy on the address as mentioned in this document.**
11. 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.
12. 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.
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.
14. The Director, JREDA, Ranchi shall have full rights to accept or reject any or all Bids without assigning any reason thereof.
15. 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, Simdeia, 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, PCU, 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 from 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.

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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.	Audited 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.	Civil work design, size of control room, positioning of battery and inverters free space, ventilation provisions	
9.	Strategic plan to maintain system for 5 years	
10.	Commitment letter of IEC certified manufacturers with relevant test certificate	
11.	PAN, GST No. Service tax no., ITR (ST-2 photo copy)	
12.	Undertaking by MSE of Jharkhand	

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 installation part of the project (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)
- e) 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 the qualification requirements set forth at point (a) or (b) or (c) or (d) or 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:
 - i. A single turnkey contract, having at least 50% of the kW capacity experience as considered in proposed bid by at least one partner, AND
 - ii. 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's 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 criteria
 - The lead partner shall meet, not less than 40 % of the minimum criteria given in MAAT.
 - Each of the other partner(s) shall meet not less than 25% of the criteria 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.

- 2.3.3 If the Company has formed in last 2 years (for the company not older than 3 years), 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. 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.
 - iii. In Case Bidder have quoted rates of more than the villages qualified in technical bid, JREDA shall award projects (Villages) in cluster or Projects falling in one District.
- 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 or PCU/inverter 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 For meeting technical eligibility bidder should submit work order and work completion certificate issued by any SNA/Gov. organization/PSU. Sub contracts work /Third party/Petty works shall not be accepted.

3.10 Bid submission

3.10.1 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) MSE Jharkhand has been exempted from the bid fee and EMD. MSE 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) Copy of PAN card and acknowledgement copy of the Income Tax Return (ITR) for three financial years which has been considered for calculation of Minimum Average Annual Turnover (MAAT).
- b) Copy of TIN number.
- c) Financial report (Audited Balance sheet with Profit & Loss statement) for the last 5 years certified by chartered Accountant. However, bidder may submit Financial report of any three Financial years which has been considered for calculation of MAAT. or
- d) Bidder may also submit the copy of Financial report (Audited Balance sheet with Profit & Loss statement) for the last 3 years certified by chartered Accountant i.e. FY- 2017-18, 2018-19, 2019-20.
- e) Annual Turn over Details certified by Chartered Accountant.
- f) Net worth certificate certified by Chartered Accountant.
- g) 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 2019 will lead to outright rejection of the BID
- h) Details of the bidder as per instruction as per Annexure of Bid should be duly digitally signed.
- i) 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.

- 3.10.2 **Physical submission:** EMD of equivalent value required for Project(s) Bidding 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
- 3.11 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.
- 3.12 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.
- 3.13 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.
- 3.14 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
- 3.15 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 including PDN.
8. **“DDG-SPV”** shall mean solar photovoltaic based DDG system.
9. **“DDUGJY”** shall mean Deen Dayal Upadhyay Gram Jyoti Yojna of Ministry of Power, Government of India.
10. **“Engineer”** shall mean the Engineer or Engineers authorized by JREDA to supervise, inspect, verify and certify the work, for the purpose of this contract.
11. **“General Conditions”** shall mean the General conditions of Contract.
12. **“Implementing Agency (IA)”** shall mean Jharkhand Renewable Energy Development Agency (JREDA).
13. **“Month”** shall mean calendar month.
14. **“Nodal Agency”** shall mean Rural Electrification Corporation, Ministry of Power, Govt. of India.
15. **“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.
16. **“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. **“PDN”** shall mean Power Distribution Network for distribution of electricity in the Project Area.
20. **“RfP”** shall mean this RfP document, its formats & annexures and amendments, if any.
21. **“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.
22. **“Successful Bidder”** shall mean a Bidder declared successful after Bid evaluation and awarded with the contract or their successors and permitted assigns.
23. **“Work”** shall mean any work entrusted to the Successful Bidder for successful commissioning of DDG system as per scope of work and Agreement.
24. **“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 decentralised distributed SPV Power Plants along with PDN, all associated civil works etc. on Build, Operate, Maintain & Transfer (“BOMT”) basis in various villages of Jharkhand, as per Projects mentioned in Table 1, on turnkey basis as per details given therein.
- 5.2 BUYBACK OF EXISTING MATERIALS: The Successful bidder shall buy back the existing material in the village. The bidder shall quote the rate considering the buyback cost of the materials.
- 5.3 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.
- 5.4 Design, Construction of suitable control rooms of DDG-SPV for installation of battery bank, Power Conditioning Unit (PCU) & control panels required for defined capacity of DDG-SPV Power Plant at all the locations given below.
- 5.5 Details of BPL / APL households and other productive / community load is given below in Table-1

Table 1: Estimated project capacity, PDN length, and tentative household

Sr no	Name of the District	Block	Name of Village	Total No of House Hold	Total No of BPL Households	Total No of Non BPL HHS	DPR capacity of the Project t(KW)	Total Length of distribution network (km)
1	West Singhbhum	Bandhgaon	Manmaru	25	21	4	7	1
2	West Singhbhum	Bandhgaon	Rogto	25	25	0	7	1.1
3	West Singhbhum	Tonto	Agoban	45	45	0	12	1.9
4	West Singhbhum	Bandhgaon	Akir	24	24	0	6	1

Table 2: Estimated project capacity, PDN length, and tentative household

Sl. No.	District	Block	Village	Capacity (KWp)	Nos. of HHS	Nos. of BPL HHS	Nos. of Non BPL HHS	Total Length of distribution network (km)
1	Chatra	Hunterganj	Ghatdhari	7	28			
2	Chatra	Hunterganj	Kolhua	11	41			
3	Chatra	Hunterganj	Koluapahar	5	20			
4	Chatra	Lawalaung	Limodih	9	35			
5	Chatra	Hunterganj	Gue	10	40			
6	West Singhbhum	Tonto	Rutagutu	7	25			
7	West Singhbhum	Tonto	Husia	14	55			
8	West Singhbhum	Tonto	Gaupur	5	20			
9	West Singhbhum	Tonto	Kuessuta	13	50			
10	West Singhbhum	Tonto	Udalkam	9	35			

11	West Singhbhum	Tonto	Akahata	20	77			
12	West Singhbhum	Sonua	Baskata	14	54			
13	West Singhbhum	Manoharpur	Lowasokra	9	35			
14	West singhbhum	Tonto	Bundu	38	145			
15	Chatra	Hunterganj	Kenrimoh	9	35			
16	Sahibganj	Barhait	Chaperi	7	37			
17	Sahibganj	Borio	Amjani	4	15			
	Total			191	747			

➤ Note: - Length of distribution network may change as per the requirement of site.
Bidders are advised to survey site and quote the rate accordingly.

- 5.6 Designing, supply, installation & commissioning and operation, for 5 years, of appropriate Power Distribution Network to be carried out for the Project, as per norms of Jharkhand State Grid Code, so that PDN is compatible with future requirements of Grid connectivity.
- 5.7 Supply of desired amount 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/Deliverables	Timelines
1	Issuance of Letter of Award (LoA) to the contractor	X Days
2	Signing of Agreement between JREDA & Contractor and submission of CPG.	X+ 5 Days
3	PDI offer	X+15 days
4	Dispatch of major construction material i.e Solar Panel, Inverter, Cable, Battery Bank, Ploe, LT& Control Panel in good condition at project site	X+25 Days
5	Construction of Power Distribution network (PDN) from Power plant to the Household	X+30Days
6	Providing connection to the Individual Household with metering arrangement from distribution network	X+30 Days
7	Development of Major Civil work including boundary walls, construction, site cover etc	X+ 30Days
8	Installation of Module PV modules and BOS including power conditioners/inverter. Charge controller/MPPT units, storage batteries, cables used in power generation plant	X+35 Days
9	Commissioning of complete generation and distribution network	X+40Days
10	Testing and commissioning over the project	X+45 Days

- 6.2 The Successful Bidder shall start work immediately after issuance of LOA.
- 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 SPV power plant, 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 SPV power plant shall be completed within the period specified in the Agreement i.e. 45 days from the date of issue of work order. 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:
- a) Control room with modules installed on structure (Three views).
 - b) String Junction Box (SJBs), Array Junction Box (AJBs) & Main Junction Box (MJB) (three views)
 - c) PCU & control panels installed in the PCU room (Three views)
 - d) Battery bank installed in the battery room (Three views)
 - e) Lighting arrestor & Earthing kit installed (Three views)
 - f) Power Distribution Network (Ten 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 DDG-SPV along with PDN, to ensure regular power supply to end user at the rated generation capacity of DDG-SPV. **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 DDG project 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 SPV power plant along with Power Distribution Network has been commissioned. Warrantee on the battery bank & PCU should be of five years & of SPV modules used in solar power plants/ 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 all goods in full and in good condition including Construction of boundary wall and control room and at project sites 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 and Commissioning 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 period of the contract
- 6.23.5 Bidders shall have to submit photographs of all system (Solar panel, Inverter, Battery, Pole) including boundary wall and suitable control room of project area.
- 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 and Blacklist the agencies 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.

6.28.3 If in the opinion of JREDA, the Successful Bidder has submitted false/fake document in JREDA including EMD, CPG, or PBG during tender or during execution 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 SPV Power Plant, 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 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 may issue certificate to avail Excise Duty and Concessional Custom Duty (ED & CCD) benefits on request of developer as per norms of Government of India.
- 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.
- 6.61 **Corrupt or Fraudulent Practices :** JREDA require the bidder/successful bidder is strictly observe /adhere the laws against fraud and corruption in force in India, namely, Prevention of corrupt act 1988 or their amendment or replacement.

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) MSE Jharkhand has been exempted from the Bid fee and EMD. MSE seeking exemption from Bid Fee & EMD, shall submit documentary evidence supporting the exemption.

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.

c) The Bidder has submitted false /fake Bank Guarantee.

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.

7.4 If in opinion of JREDA, Bank Guarantee or any other document submitted for EMD, Contract Guarantee or Project operation Guarantee is found to be false/fake or Performance declared fake by concerned branch. The work order/agreement will be terminated and agency shall be blacklisted with immediate effect.

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) MSE Jharkhand has been exempted from the bid fee and EMD. MSE 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) Copy of PAN card and acknowledgement copy of the Income Tax Return (ITR) for three financial year which has been considered for calculation of Minimum Average Annual Turnover (MAAT).
- b) Copy of TIN number.
- c) Financial report (Audited Balance sheet with Profit & Loss statement) for the last 5 years certified by chartered Accountant. However, bidder may submit Financial report of any three Financial years which has been considered for calculation of MAAT. or
- d) Bidder may also submit the copy of Financial report (Audited Balance sheet with Profit & Loss statement) for the last 3 years certified by chartered Accountant i.e. **FY- 2017-18, 2018-19, 2019-20**.
- e) Annual Turn over Details certified by Chartered Accountant.
- f) Net worth certificate certified by Chartered Accountant.
- g) 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 2018** will lead to outright rejection of the BID
- h) Details of the bidder as per instruction as per Annexure of Bid should be duly

digitally signed.

- i) 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 “NIT no. 01/JREDA/DDG/SPV/20-21” 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 MSE no RfP fee and EMD has to be submitted only filled in table has to be submitted.

- 8.2.2 Envelop should super scribed “NIT no. 01/JREDA/DDG/SPV/20-21”, 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 Envelope of Bidder should reach the above mentioned office from **21.09.2020** to **22.09.2020 upto 17.00 hrs**, failing which the Bid shall not be considered for evaluation.

9 Instructions to Bidder

9.1 Successful Bidder shall implement the Project on Build, Operate, and Maintain & Transfer (BOMT) basis. 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(s) covered under this RfP at any point of time during five (5) years from the date of Agreement, then the power produced from the DDG Project can be exported to the grid.
- 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 on BOMT basis (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 DDG-SPV on BOMT basis 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, power conditioning unit, 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/**households** 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.

98 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

- 10.1 SPV modules and BOS including power conditioners/inverter, charge controller/ MPPT units, storage batteries, cables used in SPV power generation plant should strictly have minimal technical requirement/ standards as per latest MNRE guidelines. Technical specifications defined in this section notwithstanding, the most recent technical specifications of MNRE/ REC, till the time of submission of Bid, shall supersede the specifications defined in this Bid document and Bidders shall have to abide by the same. The Bidders are advised to keep themselves updated regarding the same.
- 10.2 If specifications of any component are not provided/mentioned in RfP documents, the same shall be as per BIS/ IS/ IEC specifications applicable at the time of submission of Bid.

10.3 Technical specification for solar photo voltaic modules & cells

10.3.1 Mono/multi-crystalline Silicon solar photo-voltaic modules:

- a) The SPV modules must conform to the latest edition of any of the following IEC/equivalent BIS standards for SPV module design qualification and type approval:
 - i. Crystalline silicon terrestrial SPV modules - IEC 61215/IS14286
 - ii. Thin film terrestrial SPV modules - IEC 61646/Equivalent IS (Under Dev.)
 - iii. Concentrator SPV modules & assemblies - IEC 62108
 - iv. For the SPV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701
 - v. Solar PV Mono/Multi crystalline Module should be of high efficiency (>15% Multi, >17% Mono)

10.3.2 In addition, the modules must conform to IEC 61730 Part 1-requirements for construction & Part 2- requirements for testing. For safety qualification or equivalent IS shall be applicable.

10.4 Other details of technical specification solar photo voltaic modules

- 10.4.1 SPV modules used in solar power plants / systems 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. All specifications refer to the Standard Test Conditions (STC). Above modules should be as per latest MNRE / IEC norms & tested at test centres accredited by MNRE/ NABL.
- 10.4.2 The panel should be supplied with a plastic coated thermal sticker to be affixed at the back side of SPV Module which contains the matter in English / Hindi about warning against illegal use of SPV module.
- 10.4.3 Protective devices against surges at the SPV module shall be provided. Low voltage

drop bypass diodes shall be provided.

10.4.4 PV modules must be tested and approved by one of the IEC authorized test centres.

10.4.5 The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.

10.4.6 The Bidder shall carefully design and accommodate requisite numbers of the modules to achieve the rated power in his Bid.

10.4.7 Other general requirement for the PV modules and subsystems shall be the following:

- a) The rated output power of any supplied module shall have tolerance of $\pm 3\%$.
- b) The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than two (2) percent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
- c) The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of bypass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
- d) IV curves at STC should be provided by Bidder.

10.4.8 Identification and traceability

- a) Each SPV module must use a RF identification tag (RFID). RFID shall be mandatorily placed inside the module laminate. RFID must contain the following information:
 - i. Name of the manufacturer of SPV Module
 - ii. Name of the manufacturer of solar cells
 - iii. Month and year of manufacture (separately for solar cells and module)
 - iv. Country of origin (separately for solar cells and module)
 - v. I-V curve for the module
 - vi. Peak Wattage, I_m , V_m and PF for the module.
 - vii. Unique Serial No and Model No of the module.
 - viii. Date and year of obtaining IEC SPV module qualification certificate.
 - ix. Name of the test lab issuing IEC certificate.
 - x. Other relevant information on traceability of solar cells and module as per ISO 9000 series.

10.5 Warranties

10.5.1 Material Warranty:

- a) Material Warranty is defined as: The manufacturer should warrant the Solar

Module(s) to be free from the defects and/or failures specified below for a period not less than five (5) years from the date of sale to the Bidder

- b) Defects and/or failures due to manufacturing
- c) Defects and/or failures due to quality of materials
- d) Non- conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s).

10.6 PCU/ Inverter

10.6.1 As SPV array produces direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the “Power Conditioning Unit (PCU)”. In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive. The power conditioning unit should also have provision of charge controller in case of systems with battery backup. If necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

Switching devices	IGBT/MOSFET
Control	Microprocessor /DSP
Nominal AC output voltage and frequency (In case single phase inverters are offered, suitable arrangement for	415V, 3 Phase, 50 Hz
Grid Frequency Synchronization range	± 3 Hz or more
Ambient temperature considered	-20° C to 50° C
Humidity	95 % Non-condensing
Protection of Enclosure	IP-20(Minimum) for indoor. IP-65(Minimum) for outdoor.
Grid Frequency Tolerance range	± 3 or more
Grid Voltage tolerance	20% & ± 15 %
No-load losses	Less than 1% of rated power
Inverter efficiency(minimum)	>93% (In case of 10kW or above)
Inverter efficiency (minimum)	> 90% (In case of less than 10 kW)
THD	< 3%
PF	> 0.9

10.6.2 Three Phase PCU/inverter shall be used with each power plant system (10kW and/or above) but in case of less than 10kW power plant system single phase inverter shall

be used.

- 10.6.3 PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- 10.6.4 The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- 10.6.5 Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- 10.6.6 The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
- 10.6.7 The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS STD. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
- 10.6.8 Less than 10 kW PCU/inverter shall be tested from the MNRE approved test centres/NABL/BIS/IEC accredited testing-calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.
- 10.6.9 Only Manufacturer self-certification shall be submitted for PCU/Inverter having capacity 10kW and/or above.

10.7 Data acquisition system/ plant monitoring

- 10.7.1 Successful Bidder shall install appropriate Time-of-Day (ToD) meter at Site to keep record of 15- minute time block-wise generation and supply of electricity. For this purpose, the standard and specifications of the meter shall be at par with those recommended by electricity distribution companies of Jharkhand suitable for generation and supply from plants of the size of Project.
 - 10.7.2 The meter should have capacity to store 15-minute time block-wise data on generation and supply for 40-45 days and day-wise data on generation and supply for 6 months in such a form as to help Engineer download it using MRI.
- 10.8 There should be an easily accessible emergency stop switch.

10.9 Protection and safety

- 10.9.1 Specifically, the inverter should be three phase static solid state type power conditioning unit. Both AC & DC lines shall have suitable MCB/MCCB and Contractors to allow safe start up and shut down of the system. PCU should have protections for overload, surge current, high Temperature, over / under voltage and over / under frequency & reverse polarity. The complete operation process & safety instructions should be printed on the sticker & suitably pasted on the PCU. The inverter shall have provision for input & output isolation (automatic & manual).
- 10.9.2 Each solid state electronic device shall have to be protected to ensure long life of the inverter as well as smooth functioning of the inverter. Inverter should have safety

measures to protect inverter from reverse short circuit current due to lightning or line faults of distribution network.

10.9.3 PCU should be suitably placed in control room on a suitable wooden or concrete platform with complete safety measure as per norms.

10.10 Battery Bank

10.10.1 The tubular VRLA/GEL batteries must be conforming to the programme of Ministry of New and Renewable Energy. The battery bank capacity shall be of different capacities as specified in the price schedule, of tubular VRLA/GEL Battery of 2 volt cells. The general specifications shall be as under:

- a) The battery bank shall consist of required number of deep-discharge electrochemical storage cells, suitably interconnected as required. Parallel connections of storage cells will be discouraged.
- b) The cells shall be capable of deep discharge and frequent cycling with long maintenance intervals and high coulombic efficiency. Automotive or car batteries shall not be accepted.
- c) The nominal voltage and capacity of the storage bank shall be selected and specified by the supplier in the Bid.
- d) The self-discharge rate of the battery bank or individual cell shall not exceed four (4) percent per month.
- e) The permitted maximum Depth of Discharge (DOD), shall not be more than 80%.
- f) The cells shall include explosion proof safety vents.
- g) Suitable number of corrosion resistant storage racks shall be supplied to accommodate the cells tester and other accessories. The rack design shall be such that minimum space is required, without any way obstructing the maintenance requirements. For metallic racks, standards specified for control panel enclosures and other metallic shall govern.
- h) All the connectors should be insulated except for the end portions.
- i) Charging instructions shall be provided along with the batteries.
- j) A suitable battery rack with interconnections & end connector shall be provided to suitably house the batteries in the bank.
- k) The batteries shall be suitable for recharging by means of solar modules via incremental / open circuit regulators.
- l) Battery interconnecting links shall be provided for interconnecting the battery in series and in parallel as needed and shall be Lead coated heavy duty copper strips.
- m) Connectors for inter cell connection (series / parallel) shall be maintenance free screws. Front covers shall be provided for each battery bank.
- n) The operating range will be 0°C to +55/60°C.

- o) AH Efficiency: >95% and WH Efficiency: >85%
- p) Recombination Efficiency shall be >98%
- q) Self-Discharge of battery shall be <0.5% per week at 27°C.

10.10.2 The minimum rating of battery voltage (V) and Ah at C10 rate of discharge of different villages should be as following:

S. No.	Capacity of Power Plant (kW)	Battery Bank Voltage	Battery capacity Ah @7.2 VAH/W _p
1.	1	48	150
2.	2	48	300
3.	3	48	450
4.	4	48	600
5.	5	96	375
6.	6	96	450
7.	7	96	525
8.	8	96	600
9.	9	96	675
10.	10	120	600
11.	15	240	450
12.	20	240	600
13.	25	240	750
14.	30	240	900
15.	40	240	1200
16.	50	240	1500
17.	60	240	1800
18.	70	240	2100
19.	80	240	2400
20.	90	240	2700
21.	100	240	3000

10.11 Battery Rack

10.11.1 Battery rack should be of matured treated Salwood duly painted single tier or two tier (if required) or epoxy coated MS structure (for VRLA GEL Cells) with rubberized coating on battery runners. Placement of battery should be such that maintenance of the battery could be carried out easily. The non-reactive acid proof mat should be provided to cover the entire floor space covering the battery rack. Battery rack should compulsorily be placed on the appropriate rubbers pads to avoid the contact of racks with the floor, and to protect wooden rack particularly from termite.

10.12 Integration of SPV power plant with grid

10.12.1 The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization.

10.12.2 In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. The supply would be resumed from battery bank or once the grid comes into service PV system shall again be synchronized with grid supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid power connection need to be provided.

10.13 Array structure

10.13.1 Hot dip galvanized MS mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation. However, to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.

10.13.2 The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (for minimum wind speed of 150 km/ hour). Suitable fastening arrangement that do not require drilling in roof tops should be adopted to secure the installation against the specific wind speed.

10.13.3 The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.

10.13.4 Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, and nuts and bolts. Aluminium structures also can be used, that can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided, either by coating or anodization.

10.13.5 The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels

10.13.6 Regarding civil structures the Bidder need to take care of the load bearing capacity of the roof and need to arrange suitable structures based on the quality of roof.

10.13.7 The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m².

10.13.8 The minimum clearance of the structure from the roof level should be 300 mm

10.14 Lightning and over voltage protection

10.14.1 The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV

array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standard. The protection against induced high-voltages shall be provided by the use of Metal Oxide Varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

10.15 Surge Protection

10.15.1 Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and –ve terminals to earth (via Y arrangement)

10.16 Earthing protection

10.16.1 Each array structure of the PV yard should be grounded/ earthed properly as per IS: 3043-1987. In addition the lighting arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of Department as and when required after earthing by calibrated earth tester. PCU, CAD and DC DB should also be earthed properly.

10.16.2 Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

10.17 Array Junction Box (JAB)

10.17.1 This shall consist of suitable polycarbonate / powder coated metal casting. Array junction box allows several photovoltaic strings (from 8 to 32) to be connected in parallel. The total DC power is then distributed to the photovoltaic inverter. It includes photovoltaic string protection, overvoltage protection and a DC output switch disconnecter. In this box/boxes, a separate arrangement, consisting of SPDs and DC connector of suitable specifications for array, shall be made to help it with stand respective flow of current.

10.18 DCDB

10.18.1 DCDB shall be provided with the purpose of providing the option for isolating the battery bank. There shall be copper bus bars of suitable rating and can either be independent or integrated in PCU.

10.19 AC Distribution Board(ACDB)

10.19.1 This shall consist of box of suitable powder coated metal casting. One feeder per phase shall be provided in ACDB with MCB of suitable capacity installed at each feeder in the ACDB. One electronic energy meter, ISI make, single / three phase (as per requirement) of good quality shall also be installed in ACDB suitable placed to measure the consumption of power from SPV Power Plant. Proper rating MCB shall be installed at every feeder (in case of single phase output also, there shall be three feeders) to protect feeders from the short circuit current as per the requirement of the site & instructions of JREDA. A separate dedicated feeder from conventional line to PCU as well as ACDB should also be installed, as per JREDA's instruction.

10.19.2 A separate changeover switch of proper rating should also be suitably installed in the

ACDB to isolate the existing connected load from solar system and cater the power to the existing load from convention power (Mains) in case of emergency. ACDB should be connected between PCU and Load.

10.20 Battery Protection Panel (BPP)

10.20.1 This shall consist of box of suitable powder coated metal casting. BPP should be installed to make provision to isolate the battery bank. Proper rating HRC fuse and MCCB/isolator for DC application should be suitably installed. BPP should be connected between battery bank and DCDB. This can be integrated in the PCU.

10.21 Danger Boards

10.21.1 Danger boards should be provided as and where necessary as per IE Act/IE Rules as amended up to date, as per the instructions of JREDA and affixed at various appropriate locations.

10.22 Cables/ wires

10.22.1 Cables of appropriate size to be used in the system shall have the following characteristics:

- a) Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- b) Temp. Range: -10°C to $+80^{\circ}\text{C}$.
- c) Voltage rating 660/1000V
- d) Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- e) Flexible
- f) Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- g) Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- h) The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.
- i) The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant provided by the Bidder. Any change in cabling sizes if desired by the Bidder/approved after citing appropriate reasons. All cable schedules/layout drawings approved prior to installation.
- j) Multi Strand, Annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS

Standards.

- k) Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947.
- l) The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- m) The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2%.

10.23 Junction Boxes (JBs)

10.23.1 All the JB's/ enclosures for inverters/ charge controllers/ luminaries should be IP 54(for outdoor)/ IP 21(for indoor) shall be as per IEC 529 Junction Boxes for Cables from Solar Array. The junction boxes shall be made up of FRP (Hensel make or equivalent make)/PP/ABS (with prior approval of JREDA) with dust, water and vermin proof. It should be provided with proper locking arrangements.

10.24 Power distribution network

10.24.1 Supply, installation and commissioning of Power Distribution Network (PDN) at the site, which shall operate on the electrical power produced by the SPV Power plant, shall fulfil the below mentioned requirement as per standards/ specifications mentioned therein:

- a) Installation & Supply of minimum three (3) domestic light points along with 3 nos. LED lamps of 9W/10W/11watt each & Installation of one socket point (60W) & one socket point (100 W) thus a total of 193 W upto 200 W will be taken with proper switching arrangement, in every selected house hold of the village with complete fittings of wiring in proper manner within conduit installed on saddle/ casing capping with prior approval of JREDA. In house wiring should be done with Heavy duty wire/ cable. P.V.C. Insulated twisted bright annealed Copper wire of 1.5 Sq. mm (3core) or 2.5 Sq. mm (2core) size Every light point & socket point should be provided with individual switch of 6A rating and should be of reputed make.
- b) Installation of domestic connection to every household shall be through service pipe as per the standard electrical fittings. It shall use cable of aluminium wire PVC insulated sheathed and single core cable (IS694/1990 of 6 sq.mm) of reputed make.
- c) Installation of appropriate load limiting switch / fuse for controlling domestic / street lighting connections, as per requirement of the site.
- d) Supply, installation & grouting of 8 meters MS Poles/tubular pole/PCC pole as per ISI/ JBVNL norms (or if the Bidder has better drawing he may attach the same with additional offer) for overhead / underground distribution network of cables at village/site. All poles/street lights should be numbered by oil paint in the specified format of JREDA. Two numbers of MS sign boards (each of 2' x 2.5' size) has to be

supplied, painted (in the same manner as pole painting instructions) & clamped on the poles of the PDN as per JREDA's instructions.

- e) Supply, installation & commissioning of cabling from pole to pole & pole to house. Cabling between pole to pole/ pole to house can also be done as per Bidder's design with prior approval of JREDA.
- f) Supply, installation & commissioning of one number of 18 W LED Street light luminary for five households each.
- g) Supply of 1 number of street light per 5 households.
- h) Supply & installation of earthing kits, stay wire sets with complete set for poles etc. as per norms where ever required.

Note - All cables should be of copper, tested for general test and measuring method and PVC insulated cables as per IEC 60227 / IS 694 and IEC 60502 / IS 1554. All the materials to be consumed in the power distribution network should be of best quality confirming to specification and should be with prior approval of JREDA.

- i) In case the length of the distribution network increases/decreases due to change in number of households in the villages, then the change upto $\pm 5\%$ should be accommodated in the same price quote. Over and above the change of $\pm 5\%$ the amount will be adjusted on the proportionate bases.

10.25 Operation & Maintenance

Operation & maintenance of SPV Power Plant along with PDN system installed at site has to be done for a period of five (5) years from the date of commissioning of the Project. Successful bidders have to submit the O&M report to JREDA every two months with necessary details of plant.

Annexure

Annexture-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 “NIT no. **01/JREDA/DDG/SPV/20-21**”

for design, supply ,installation, commissioning and operation for 5 year of decentralized solar PV power generating plant in thevillage (as mentioned in the RfP) ofdistrict on BOMT basis.

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 solar photovoltaic decentralized distributedgenerating system (DDG System) for the below mentioned Villages on BOMT basis

Item No.	Project No.	Village Name	District Name
----------	-------------	--------------	---------------

Yours faithfully,
(Signature of Authorized Signatory)
Name:
Designation:
Company Seal:

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 _____

GST No: _____

Hereby give consent to the JREDA, Ranchi to deduct from our bills whatever amount payable by us on account of the CT / **GST** 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 above mentioned information must be supported by relevant documents and certificates.

(Signature of Authorized Signatory)

Name:

Designation:

Company Seal:

Declaration by the Bidder

NIT no. **01/JREDA/DDG/SPV/20-21**

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. The Bidder along with his vendor fully meets all the technical specification requirement for all the components of the plant as mention in the RFP document.
11. 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 or any State Governments or any public sector undertakings or any Govt. Company.

12. 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:

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 no. XX/JREDA/DDG/SPV/20-21” 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)

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 Request for Proposal (RFP) for Rural Electrification Works of **04 Villages** in districts of West Singhbhum in Jharkhand through **Solar Photovoltaic Power Plants (Mini/Micro grid)** with distribution network & connection to households along with 5 years CMC and CMC work of 17 villages in districts of Chatra, West Singhbhum & Sahibganj under Decentralized Distributed Generation (DDG) Scheme of 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 Three years ending 31.03.2019/20.

S. No.	Year	Turnover (Rs.)
1	2017-18	
2	2018-19	
3	2019-20	

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 – Net worth

[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 Request for Proposal (RFP) for Rural Electrification Works of **04 Villages** in districts of West Singhbhum in Jharkhand through **Solar Photovoltaic Power Plants (Mini/Micro grid)** with distribution network & connection to households along with 5 years CMC and CMC work of 17 villages in districts of Chatra, West Singhbhum & Sahibganj under Decentralized Distributed Generation (DDG) Scheme of Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY).

This is to certify that Net Worth of _____ {insert the name of Bidding Company}, as on 31st March 2019/20 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 2019/20	

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 (Including Renewable Energy)		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 (Including Renewable Energy)		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:

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, AND, FOR BID SPECIFICATION NO DATE OF the JREDA.

THIS Joint Venture Agreement executed on this.....day 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 ofand 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 decentralized solar PV power generating plant in the.....village (as mentioned in the RfP) of district on BOMT basis, 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 solar power generating plant for 114 Villages in 7 Districts of Jharkhand on BOMT basis 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 (Signature of authorized
resolution dated representative)

Signature Name
Name Designation
..... Common Seal of the
company
Designation

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

Signature Designation
Name Common Seal of the
company
Designation

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 (Including Renewable Energy)		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

Commercial eligibility criteria (JV Firms)	Generation Generation (Including Renewable Energy)		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.

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

Years	2016-17	2017- 18	2018- 19	2019- 20
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	2016-17	2017- 18	2018- 19	2019- 20	
Years selected for MAAT					
Turnover of 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:

Inspection Report

Jharkhand Renewable Energy Development Agency

JREDA Officials _____

INSPECTION REPORT

For SUPPLY, INSTALLATION & COMMISSIONING of DDG SPV power plant 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								
3.	PCU								

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

10. Approximate length of PDN: _____ km

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

Joint Commissioning Certificate, Training Certificate and Completion Certificate

DDG based Solar Power Plant and Power Distribution Network 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. Control room with modules installed on structure (Three views)
2. Junction boxes (Three views)
3. PCU & control panels installed in the PCU room (Three views)
4. Battery bank installed in the battery room (Three views)
5. Lighting arrestor & Earthing kit installed (Three views)
6. Photos of Power Distribution Network (Ten views)
7. Connections to BPL households has been provided free of cost.

(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

Performance Guarantee Testing Report Post Commissioning of the Project

This is to certify that the Solar Power Plant installed 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

Rural Electrification Works of 04 Villages in districts of West Singhbhum in Jharkhand through Solar Photovoltaic Power Plants (Mini/Micro grid) with distribution network & connection to households along with 5 years CMC under Decentralized Distributed Generation (DDG) Scheme of Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY).

S.No	Name of the District.	Block	Name of Village	Census code	Total No of House Hold	DPR capacity ty of the Project t(KW)	Quoted amount (Figure)	Quoted amount (Word)
1	West Singhbhum	Bandhgaon	Manmaru	377098	25	7		
2	West Singhbhum	Bandhgaon	Rogto	377187	25	7		
3	West Singhbhum	Tonto	Agoban	377984	45	12		
4	West Singhbhum	Bandhgaon	Akir	377174	24	6		
Total (A)								

05 years Comprehensive Maintenance Contract (CMC) work of 17 villages in districts of Chatra, West Singhbhum & Sahibganj under Decentralized Distributed Generation (DDG) Scheme of Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY).

Sl. No.	District	Block	Village	Census Code	Capacity (Kwp)	Nos. of HHs	Cost of CM for 5 years @20% of project cost	Quoted amount (Figure)	Quoted amount (Word)
1	Chatra	Hunterganj	Ghatdhari	348222	7	28	4.2		
2	Chatra	Hunterganj	Kolhua	348223	11	41	6.258		
3	Chatra	Hunterganj	Koluapahar	348286	5	20	3.3		
4	Chatra	Lawalaung	Limodih	348555	9	35	5.4		
5	Chatra	Hunterganj	Gue	348290	10	40	5.722		
6	West Singhbhum	Tonto	Rutagutu	377988	7	25	4.4		
7	West Singhbhum	Tonto	Husia	377992	14	55	8.036		
8	West Singhbhum	Tonto	Gaupur	377964	5	20	3.2		
9	West Singhbhum	Tonto	Kuessuta	377982	13	50	7.492		
10	West Singhbhum	Tonto	Udalkam	377979	9	35	5.4		
11	West Singhbhum	Tonto	Akahata	377986	20	77	11.4		
12	West Singhbhum	Sonua	Baskata	376932	14	54	8.634		
13	West Singhbhum	Manoharpur	Lowasokra	377746	9	35	5.8		
14	West Singhbhum	Tonto	Bundu	377985	38	145	21.2		
15	Chatra	Hunterganj	Kenrimoh	348288	9	35	5.76		
16	Sahibganj	Barhait	Chaperi	358700	7	37	4.7		
17	Sahibganj	Borio	Amjani	358468	4	15	3.004		
Total (B)									
Grant Total (A+B)									

Important note

1. Project cost is all inclusive cost of/ for design, supply, installation, commissioning and O&M, for 5 years, of SPV based DDG system along with PDN and all associated civil works etc. on Build, Operate, Maintain and Transfer (“BOMT”) basis for each Project individually.
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

(To be submitted on the letterhead of the Bidder in PDF format along with BOQ)

Percentage Break up of financial quote

S. No.	Particulars	Break up of financial quote (%)		
		1 to 10 kW	11 to 50 kW	51 kW & Above
a)	Cost in percentage of total Lump sum cost Solar PV Module			
b)	Cost in percentage of total Lump sum cost for PCU/inverter			
c)	Cost in percentage of total Lump sum cost for Battery			
d)	Cost in percentage of total Lump sum cost for design, supply, installation and commissioning of Power Distribution Network			
e)	Cost in percentage of total Lump sum cost for Balance of Plant, Equipment, Civil Material to be supplied			
f)	Cost in percentage of total Lump sum cost for Installation & Erection, Testing and Commission			
g)	Cost in percentage of total Lump sum cost for spare parts for 5 years after commissioning of the systems			
h)	Cost in percentage of total Lump sum cost for providing power in village for 5 years including operation & maintenance of DDG power plant, power distribution network & providing power for 6-8 hrs.			
i)	Buy back of existing materials in 4 villages on the basis of as is where is including transportation etc.			
	Total	100%	100%	100%

Format for Submitting Bank Guarantee for Earnest Money

(To be submitted in Rs. 100/- Non-Judicial Stamp Paper to be purchased in the name of the issuing bank)

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

WHEREAS (Supplier's name) (hereinafter referred to as "Supplier"), a company registered under the Companies Act, 1956 and having its registered office at _____ is required to deposit with you, the Purchaser, by way of Earnest Money Rs. _____ (Rupees _____ only) in connection with its tender for the work with reference to Request For Proposal (RFP) No. _____ dated _____ as per specification and terms and conditions enclosed therein.

WHEREAS the Supplier as per "Request For Proposal: "NIT no. 10/JREDA/DDG/SPV/ 17-18" has agreed to establish a Bank Guarantee in Your favour through us valid up to _____(date) instead of deposit of earnest money in cash.

WHEREAS you have agreed to accept a Bank Guarantee from us in _____ instead of earnest money in cash from the Supplier.

1. We (Bank) hereby agree and undertake to pay you on demand the said amount of Rs _____ (Rupees _____ only) without any protest or demur in the event the Supplier/Tenderer after submission of his tender, resiles from or withdraws his offer or modifies the terms and conditions thereof in a manner not acceptable to you or expresses his unwillingness to accept the order placed and/or letter of intent issued on the Supplier/Tenderer for the work under "NIT no. **01/JREDA/DDG/SPV/20-21**".
2. Your decision as to whether the Supplier/Tenderer has resiled from or has withdrawn his offer or has modified the terms and conditions thereof in a manner not acceptable to you or has expressed his unwillingness to accept the order placed and/or Letter of Intent issued by you on the Supplier/Tenderer for the work under "NIT no. **01/JREDA/DDG/SPV/20-21**" in this regard, shall be final and binding on us and we shall not be entitled to question the same
3. Notwithstanding anything contained in the foregoing, our liability under this Guarantee shall be restricted to Rs. _____ (Rupees _____ only).

4. This Guarantee shall remain valid and in full force and effect up to _____(Date) and shall expire thereafter unless an intimation is given to the Bank by you earlier in writing discharging us from our obligation under this Guarantee.
5. We shall not revoke this Guarantee during its currency except by your consent in writing.
6. This Guarantee shall not be affected by any change in the constitution of the Supplier/Tenderer or yourselves or ourselves but shall ensure to your benefit and be enforceable against our legal successors or assignees by you or your legal successors.
7. Notwithstanding anything contained herein above unless a demand or claim under this Guarantee is made on us in writing within six months from the date of expiry of this Guarantee we shall be discharged from all liabilities under this Guarantee thereafter.
8. We have power to issue this Guarantee under our Memorandum and Articles of Association and the undersigned who is executing this Guarantee has the necessary power to do so under a duly executed Power of Attorney granted to him by the Bank.

Signed and Delivered

For and on behalf of Bank.

(Banker's Name)

Name of Bank Manager:

Format for Submitting Bank Guarantee for Earnest Money

(To be submitted in Rs. 100/- Non-Judicial Stamp Paper to be purchased in the name of the issuing bank)

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

WHEREAS .. (Supplier's name) (hereinafter referred to as "Supplier"), a company registered under the Companies Act, 1956 and having its registered office at is required to deposit with you, the Purchaser, by way of Earnest Money Rs. (Rupees only) in connection with its tender for the work with reference to Request For Proposal (RFP) No.....dated..... as per specification and terms and conditions enclosed therein.

WHEREAS the Supplier as per "has agreed to establish a Bank Guarantee in Your favour through us valid up to (date) instead of deposit of earnest money in cash.

WHEREAS you have agreed to accept a Bank Guarantee from us in.....instead of earnest money in cash from the Supplier.

1. We (Bank) hereby agree and undertake to pay you on demand the said amount of Rs..... (Rupees only) without any protest or demur in the event the Supplier/Tenderer after submission of his tender, resiles from or withdraws his offer or modifies the terms and conditions thereof in a manner not acceptable to you or expresses his unwillingness to accept the order placed and/or letter of intent issued on the Supplier/Tenderer for the work under.
2. Your decision as to whether the Supplier/Tenderer has resiled from or has withdrawn his offer or has modified the terms and conditions thereof in a manner not acceptable to you or has expressed his unwillingness to accept the order placed and/or Letter of Intent issued by you on the Supplier/Tenderer for the work under "NIT no. **01/JREDA/DDG/SPV/20-21**" in this regard, shall be final and binding on us and we shall not be entitled to question the same.
3. Notwithstanding anything contained in the foregoing, our liability under this Guarantee shall be restricted to Rs.(Rupees only).
4. This Guarantee shall remain valid and in full force and effect up to (Date) and shall expire thereafter unless an intimation is given to the Bank by you earlier in writing discharging us from our obligation under this Guarantee.

5. We shall not revoke this Guarantee during its currency except by your consent in writing.
6. This Guarantee shall not be affected by any change in the constitution of the Supplier/Tenderer or yourselves or ourselves but shall ensure to your benefit and be enforceable against our legal successors or assignees by you or your legal successors.
7. Notwithstanding anything contained herein above unless a demand or claim under this Guarantee is made on us in writing within six months from the date of expiry of this Guarantee we shall be discharged from all liabilities under this Guarantee thereafter.
8. We have power to issue this Guarantee under our Memorandum and Articles of Association and the undersigned who is executing this Guarantee has the necessary power to do so under a duly executed Power of Attorney granted to him by the Bank.

Signed and Delivered
For and on behalf of Bank.
(Banker's Name)

Name of Bank Manager:

Schedules

Schedule - 1

Qualification requirement - Technical eligibility

Sr no	Name of the District	Name of Village	Total No of House Holds	capacity of the Project(KW)	80 One work in (KW)	50 %two work order in (KW)	40 %three work order in(KW)
1	West Singhbhum	Manmaru	25	7	6	4	3
2	West Singhbhum	Rogto	25	7	6	4	3
3	West Singhbhum	Agoban	45	12	10	6	5
4	West Singhbhum	Akir	24	6	5	3	2
Cumulative Capacity Required				39	33	21	16

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

Sr no	Name of the District	Name of Village	Total No of House Hold s	Estimate d Project Cost (Rs.) lakh	Single work order having minimum value (Rs. Lakhs)	Two work order having minimum value (Rs. Lakhs)	Three work order having minimum value (Rs. Lakhs)	MAAT Requirement Any three of last five years upto march 2019/20 (Rs. Lakhs)
1	West Singhbhum	Manmaru	25	20.195	16	10	8	6
2	West Singhbhum	Rogto	25	20.315	16	10	8	6
3	West Singhbhum	Agoban	45	31.615	25	16	13	9
4	West Singhbh	Akir	24	18.165	15	9	7	5