

Tender Price: Rs. 1,000/-

TENDER NO. ADC/DRDA/SOLAR POWER PLANT 1KW/2012-13 / 01

DNIT

FOR SUPPLY, INSTALLATION & COMMISSIONING OF

1KW CAPACITY SOLAR POWER PLANTS (2 No.)

IN

**CHC MEHAM & PHC LAKHAN MAJRA OF
DISTRICT ROHTAK**

**ADDL.DEPUTY COMMISSSIONER-CUM- CHIEF PROJECT OFICER,
DRDA ROHTAK-124001**

**PHONE: 01262-250575, Fax No. 01262-247589
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IMPORTANT DATES

LAST DATE FOR SALE OF TENDERS : Up to 5.00 PM on 20.09.2012

LAST DATE FOR SUBMISSION OF TENDERS : Up to 3.00 PM on 21.09.2012

OPENING OF TECHNICAL AND COMMERCIAL BIDS : At 4.00 PM on 21.09.2012

DNIT

FOR SUPPLY, INSTALLATION AND COMMISSIONING OF 2No. SOLAR POWER PLANTS OF 1KW CAPACITY EACH COMPLETE WITH CHARGE CONTROLLER, BATTERIES, INVERTOR etc.

1. SCOPE OF WORK

Supply, installation and commissioning of 02 nos. of Solar Power Plants of 1KW capacity each, complete with charge controller, batteries, invertors, module mounting structure etc. in CHC Meham & PHC Lakhan Majra of district Rohtak of Haryana with 5 years CMC/Warranty on the complete systems including battery and 25 years warranty for solar panel. The quantity may increase or decrease depending upon actual requirement under the scheme.

2. FIVE YEARS WARRANTY/ COMPREHENSIVE MAINTENANCE CONTRACT

1.0 The Comprehensive Maintenance Contract (CMC)

1.1 The Comprehensive Maintenance Contract shall include servicing & replacement guarantee for parts and components (such as battery, electronics, Inverters and PV modules) of Solar Photovoltaic Power Plants for five years from the date of installation. For PV modules, the replacement guarantee is for twenty five (25) years.

1.2 The maintenance service provided shall ensure proper functioning of the system as a whole. All preventive/routine maintenance and breakdown/corrective maintenance required for ensuring maximum uptime shall have to be provided by the Manufacturer. Accordingly, the Comprehensive Maintenance Contract (CMC) shall have two distinct components as described below.

2.0 Preventive/Routine Maintenance

This shall be done by the company at least once in a every six months and shall include activities such as, cleaning and checking the health of the SPV system, cleaning of module surface, topping up of batteries, tightening of all electrical connections, changing of tilt angle of module mounting structure, cleaning & greasing of battery terminals and any other activity that may be required for proper functioning of the Solar Photovoltaic Power Plant as a whole. The maintenance record shall be maintained properly and to be submitted to the client with a copy to ADC-cum-CPO Rohtak on half yearly basis.

3.0 Breakdown/Corrective Maintenance

3.1 Whenever a complaint is lodged by the user, the supplier has to attend the same within a reasonable period of time (7 days) and in any case the breakdown shall have to be corrected within a period not exceeding ten days from the date of complaint.

3.2 .The date of CMC maintenance period shall begin on the date of actual commissioning of Solar Photovoltaic Backup Power system.

3. WARRANTY

3.1 The mechanical structures, electrical works including inverter/charge controllers/ distribution boards/digital meters/ switchgear/ storage batteries, etc. and overall workmanship of the

SPV power plants must be warranted against any manufacturing/ design/ installation defects for a minimum period of 5 years.

3.2 PV modules used in solar power plants 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.

4. SPECIFICATIONS OF SYSTEM

The specifications of the 1KW Solar Power Plant are enclosed as **Annexure-I**.

5. ELIGIBLE SUPPLIERS

- i) The manufacturers (means manufacture of one of any i.e. SPV modules and Charge Controller, PCU and battery) having test certificates of modules, charge controller, PCU and battery tested and approved by one of the NABL/ MNRE GOI Accredited Testing Calibration Laboratories issued on or after 1st April 2010.
- ii). Manufacturers should have the experience for the supply and installation of small solar power packs ranging up to 1.0 KW to total aggregate capacity of 2.0 KW to any State Nodal agency/Govt. Department and others during last three years.
- iii) Tenders received without test certificates of module will be rejected outrightly and no correspondence will be entertained in this regard.
- iv. The manufacturer should have average turnover of more than Rs. 50.00 lac during the years 2010-11 and 2011-12. Certificate from Chartered Accountant shall be enclosed with the offer.

6. EARNEST MONEY DEPOSIT

- (i) The tender should be accompanied with earnest money for the value of Rs.10,000/- (Rupees ten thousand only) in the form of demand draft in favour of Addl. Deputy Commissioner-cum-CPO Rohtak payable at Rohtak
- (ii) Central or Haryana Public Sector Enterprises and “approved sources” as declared by the Industries Department, Haryana, would be exempted from the deposit of EMD.
- (iii) The offers without EMD will be rejected without assigning any reason as being non-responsive.
- (iv) EMD of unsuccessful tenderer shall be returned after award of the contract /order. No interest will be paid on the earnest money.

7. PAYMENT TERMS

- (i) 90% on supply, installation and commissioning of the power plants supported with JCR
- (ii) 10% after 45 days from the date of commissioning against performance bank guarantee valid for five years from commissioning of the devices.

8. PERFORMANCE SECURITY DEPOSIT

- (i) The EMD of successful bidder will be kept as security deposit. The security deposit will be released after submission of 10% performance bank guarantee as per clause-7(ii) valid for five years from commissioning of the power plants.

9. VALIDITY OF BID

The bids shall be valid for a period of 120 days from the date of opening of tender.

10. SERVICE TO BE PROVIDED DURING WARRANTEE PERIOD

During warrantee period, the firm shall ensure proper functioning of the systems. All preventive/ routine maintenance and breakdown / corrective maintenance required for ensuring maximum uptime shall have to be provided. During the warrantee period, complaint, if any, forwarded to the supplier against the system, will have to be attended within 10 days of forwarding such complaints. Supplier as well as district office shall maintain proper record of the complaints. The correspondence of such complaints should preferably be made through e-mail. If the supplier failed to repair/ replace the defective system within 30 days of forwarding the complaint, then ADC-cum-CPO Rohtak may consider repairing / replacing such defective system on the cost of the supplier.

11. TIME SCHEDULE, PENALTY/LIQUIDATED DAMAGES

These systems are to be supplied, installed and commissioned within 45 days of time from the date of issue of work order.

The time for and date of delivery or dispatch stipulated in the supply order shall be deemed to be the essence of the contract, and should the contractor fail to deliver or dispatch any consignment within the period prescribed for such delivery or dispatch stipulated in the supply order, the delayed consignment will be subject to 2% penalty per consignment per month recoverable on the value of the stores supplied. In case of non-payment of the contractor, recovery will be made from his bills or amount of Earnest money or security deposited with ADC-cum-CPO Rohtak, provide also that :

- (a) No recovery of penalty will be made if the Indenting officer accepts the delayed supplies by extending the delivery period up to two weeks by recording in writing that the exceptional circumstances were beyond the control of the supplier and there was no loss to the Government.
 - (b) When the delay on the part of the supplier is of more than two weeks, the matter for extension of delivery period will be considered only if the supplier gives a certificate that there are genuine reasons for delay & then the case will be decided on merits by the ADC-cum-CPO Rohtak. The extension allowed by the ADC-cum-CPO to the extent of purchasing powers delegated to him. In case the delivery period is amended, no penalty for supplies made during the extended period will be recovered from the supplier.
 - (c) On the failure of the suppliers to make supply within the extended period or otherwise, risk purchase at the cost of the supplier will be made by the ADC-cum-CPO Rohtak within two months of the expiry of stipulated delivery period by inviting short terms quotations from the Registered and other known suppliers. The difference of excess cost thus, incurred will be recovered from the supplier from his pending bills, earnest money or security whichever is available. This procedure will be adopted after serving a registered notice to the supplier to supply stores within 15 days.
- (ii) The Contractor shall not;
 - (a) Assign or sublet the contract without written approval of the officer sanctioning the contract.
 - (b) Disclose details of the conditions governing this contract to unauthorized persons (Indenting against this contract is permissible only for the bonafide use of

- Governments departments and quasi public and not for private parties or for the private use of the Government officers).
- (iii) In the event of the contractor failing duly and properly to fulfill or committing breach of any of the terms and conditions of the contract or repeatedly supplying goods liable to rejection hereunder or failing, declining, neglecting/ or delaying to comply with any demand or requisition or otherwise not executing the same in accordance with the terms of this contract, or if the contractor or his agents or servants being guilty of fraud in respect of the contract or any other contract entered into by the contractor or any of his partners or representatives thereof with Government directing, giving, promising or offering any bribes, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise to any person in the employment of Government in any way relating to such officers or person of persons, office or employment or if the contractor or any of his partners become insolvent or apply for relief as insolvent debtor or commence any insolvency proceedings or make any composition with his/ their creditors or attempts to do so then without prejudice to Government rights and remedies otherwise, ADC-cum-CPO/ Government shall be entitled to terminate this contract forthwith and to blacklist the contractor and purchase or procure or arrange from Government's stocks or otherwise at the contractor's risk and at the absolute discretion of the ADC-cum-CPO Rohtak as regards the manner, place or time of such purchases, such supplies as have not been supplied or have been rejected under this agreement or are required subsequently by Government there under and in cases where issues in replacement are made from Government's stocks or supplies, the cost of value of stocks or supplies together with all incidental charges or expenses, shall be recoverable from the contractor on demand and the contractor shall not be entitled to benefit from any profit which may accrue to Government.

12. **ARBITRATION**

- (i) If any question, difference or objection whatsoever shall arise, in any way connected with or arising out of this instrument or the meaning or operation of any part thereof, or the rights, duties or liabilities of either party, then save in so far as the decision of any such matter is herein before provided for and has been so decided, every such matter, including whether its decision has been otherwise provided for and or whether it has been finally decided accordingly or whether the contract should be terminated or has been rightly terminated in whole or in part and as regards the rights and obligations of the parties as a result of such termination, shall be referred for arbitration to any officer appointed by ADC-cum-CPO Rohtak and his decision shall be final and binding and where the matter involves a claim the amount, if any awarded, in such arbitration, shall be recoverable in respect of the matter so referred.
- (ii) The arbitration proceedings are governed by the provisions of Indian Arbitration Act.
- (iii) The Arbitration proceedings can be initiated either by the contractor or by Government whenever there is a dispute, regarding the subject matter of the contract, its terms and conditions, interpretation and the ADC-cum-CPO Rohtak, risk purchase at the cost of the supplier will be made by ADC-cum-CPO Rohtak within two months of expiry of stipulated delivery period by inviting short term quotations from the registered and other known suppliers. The difference of excess cost, thus incurred, will be recovered from the supplier from his pending bills, earnest money, and security, whichever is available. This procedure will be adopted after serving a registered notice to the supplier to supply stores within 15 days.

(iv) **Notice of Arbitration**

- (a) Whenever there is dispute, either party is required to give the other party, a notice of its intention to refer the case to the Arbitration specifying the exact nature of dispute seeking the consent of other party to refer the matter for Arbitration. This is necessary because if arbitrator is appointed without obtaining the consent of the other party, then the reference becomes unilateral and other party can get it set aside from court.
- (b) In case the other party fails to give consent to refer the matter for arbitration, then it is open to the party to move the Civil Court for obtaining the orders of the court for the appointment of an arbitrator under Section 20 of the Indian Arbitration Act.

(v) **Appointment of Arbitrator**

In the event of any dispute arising out of the contract, the aggrieved party approaches the second party for referring the matter to arbitration. In case the second party agrees, a request is made to the Government for appointment of any officer of Haryana Govt. as Arbitrator out of a panel of officers already approved. In case the second party does not agree, an application under Section 20 of the Indian Arbitration Act is made by the aggrieved party in the Court of Senior Sub Judge at Rohtak or in the Court of competent jurisdiction elsewhere for the appointment of an arbitrator. It is important to note that reference for the appointment of an arbitrator can be made to Court within 3 years of dispute. Otherwise, the application becomes time barred. Further proceedings are taken only on the basis of the orders of the Court.

- (VI-a) As soon as Govt. orders are received in this behalf, the case file is passed on to the legal cell of the ADC-cum-CPO office Rohtak by the purchase section concerned. The purchase section will also send a brief history of the case and the details of the dispute involve to the legal cell. The following information in brief is to be supplied by the purchase section to the legal cell:

- (1) The brief history of the case
- (2) No. and date of acceptance of tender
- (3) Name and full address of the contractor
- (4) Nomenclature of the stores ordered in acceptance of tender
- (5) Name of the Indenting Department
- (6) Name and full address of the consignee
- (7) Valuation of the claim
- (8) Officers/ officials who are conversant with the case and would be able to give evidence in support of Govt. claim.

- (b) The purchase Section will collect all the documents that will be required for the conduct of arbitration proceedings. The documents are to be collected not only from the office of ADC-cum-CPO Rohtak but also from the consignee i.e. BD&Po Lakhna Majra & Secretary M.C. Meham. This section will also obtain complete information regarding payment made against the contract and balance of the outstanding payment. The Legal Cell prepare the details of all counter claims which are to be made against the contractor. The officer concerned of the purchase section will assist the legal cell in these matters. The purchase section will also supply a list of officers who dealt with the case at every stage and whose Government may be required at any stage for evidence. It will be the responsibility of the purchase section to arrange for the presence of the witnesses to give evidence on behalf of the Government, wherever necessary.

- (c) In case the file of purchase section relating to the dispute is not free, the purchase section should supply such extracts, including a copy of acceptance and other necessary documents, as it may find necessary for conducting the case.
- (d) Legal Cell will be completely responsible for watching the progress of each case and for production of evidence and to see that the case is successfully conducted before the Arbitrator. It shall be fully assisted by the officials of the purchase section in this behalf.
- (vii) Examination of the claims filed by the contractor before Arbitrator should be undertaken and written statement on behalf of ADC-cum-CPO Rohtak should be prepared as soon as a copy of the claim filed by the contractor before the Arbitrator is received. The legal cell will prepare draft written statement on behalf of the ADC-cum-CPO Rohtak to be filed before the arbitrator. The draft statement shall be shown to the Branch Officer of the Purchase Section concerned and got approved from the ADC-cum-CPO Rohtak before being finally got typed for filing before the Arbitrator. The written statement should be got duly signed and verified by the officers dealing with the contract.

(viii) **Arbitration Proceedings**

The Arbitrator issues a notice to both the parties concerned with the dispute and fixes a date of hearing. After the first date the arbitrator gives time for the filing of claims and counter claims. Thereafter, both the parties are afforded an opportunity to lead oral and documentary evidence in support of their claims. After the evidence has been completed, the arguments are heard by the arbitrator from both sides. It is always safe to file written arguments with the Arbitrator. The Authorized representative conducts the case before the arbitrator and the dealing assistants concerned are duty bound to assist him in the arbitration proceedings in all possible manner. The authorized representative should make it a point to appear before the Arbitrator and request for adjournment and bring the proceedings to the notice of the ADC-cum-CPO Rohtak.

(ix) **Time limit within which Arbitrator is to give his Award**

As per Schedule 1 clause 3 of the Indian Arbitration Act the proceedings are required to be completed by the Arbitrator within four months of the starting of the arbitration proceedings. This period is counted from the date of first hearing. Where it is not possible for the Arbitrator to give his award within this prescribed period, both the parties must agree for the extension of time before the arbitrator by mutual consent and on such mutual consent being filed before the arbitrator, he passes orders of extension. However, if one of the parties does not agree to the extension of time limit, then the application for the extension of time limit has to be filed before the court by the claimant party or in the case where counter claim is filed by the Govt. or contractor, then that party can also move such application for extension of time limit.

(x) **Arbitrator's Award**

On receipt of award in the office of ADC-cum-CPO Rohtak, the ADC-cum-CPO Rohtak will move the competent court to direct the Arbitrator to file the same in the court for being made a rule of court because unless the award is made a rule of court, it is not enforceable. The time limit for moving the application in the

Court for this purpose is 30 days from the date of receipt of award in the Directorate. The Arbitrator can also file award in the Court suo-moto for that no limitation is prescribed. When the award is in favour of the Government, prompt action should be taken to move the court for directing the arbitrator to file the award in the Court. If, the award is not in favour of the Government, the ADC-cum-CPO Rohtak should file its objections within 30 days of receipt of notice from the Court.

(xi) **Recovery proceedings of the Award Amount**

As soon as the award has been made rule of the Court, the purchase section concerned shall serve a demand notice to the contractor for payment of the awarded amount. The purchase section shall simultaneously explore the possibility of effecting recovery in full or part, of the awarded amount, from any pending bills of the contractor. In case payment is not made by the contractor within 30 days of the demand notice, steps should be taken to have the recovery effected by getting decree executed. Legal Cell shall maintain a record of decrees which are to be got executed on the basis of award amount.

(xii) The legal cell shall maintain a record regarding arbitration cases as follows:

- (1) The register showing the arbitration cases moved for the arbitration.
- (2) Separate file in respect of each arbitration case
- (3) A record for the pending amount awarded and the decrees pending execution of the awarded amount.

(Xiii a) After the life of the decree has run out or if at an earlier stage it becomes apparent that recovery is not possible and it is considered no use pursuing the matter of recovery any further, the purchase section will refer the matter to Govt. to seek orders whether or not the recovery proceedings be pursued further and whether or not the amount be written off. Such cases, of course, are rare and should not be referral unless the period of limitation has expired. In all such proposals to the Government, it should be clearly mentioned that the ADC-cum-CPO Rohtak have taken all possible steps to recover the Government dues, and the reasons why the case be not pursued should be given in detail.

(b) Under the Indian Limitation Act, 1963, an application for execution of a decree or order of any Civil Court must be made within 12 years of the date when the decree or order becomes enforceable and where the decree or any subsequent order directs any payment of money or the delivery of any property to be made at a certain date or a recurring periods, application for execution must be made within 12 years of the date when default in making the payment or delivery in respect of which execution is sought takes place. This provision should be kept in view.

(xiv) In case there is a dispute but the contractor instead of taking the dispute to the arbitration files a Civil suit in Court, the ADC-cum-CPO Rohtak should file an application under section 34 of the Arbitration Act requesting the Court that there is an arbitration clause in the agreement and the suit is not maintainable. The objection should be file before filing any written statement in the Court. When the objections are not sustained, the case will have to be defended like any other legal proceedings, the procedure for which has been mentioned.

Legal Proceedings

- (xv) All legal notices served on the Government regarding contracts for ADC-cum-CPO Rohtak stores are dealt with in ADC-cum-CPO Rohtak and not by consignee.
- (xvi) Immediately on the receipt of a notice that a case has been initiated in the court or an award has been filed by the Arbitrator in the Court, the ADC-cum-CPO Rohtak shall immediately move the Govt. for obtaining sanction to defend the case and issue directions to the Assistant District Attorney of the district Rohtak to defend the case. This should be done promptly so as to receive the sanction and have the directions issues before the first hearing of the case. In case the time is very short, the District Attorney concerned can be contacted directly with a request to defend the case pending issue of the directions by the Government.

(xvii) **Plaint, written statement and Rejoinder**

- (a) Normally, a copy of plaint is supplied by the court with the notice. In case it has not been supplied or is not legible, it should be obtained and a written statement should be prepared by the legal cell in consultation with the purchase section and should be got approved from the ADC-cum-CPO Rohtak. If the other party files a reply, rejoinder should also be filed.
- (b) In case there are any preliminary objections regarding limitation, jurisdiction, defect in plaint etc. these should be filed before filing written statement.

(xviii) **Framing of issues**

After the written statement, reply and rejoinder have been filed, the Court frames issues for determination.

(xix) **Evidence**

After the issues have been framed, oral and documentary evidence is led before the Court by both the parties. Evidence of the officers or persons conversant with the matter or the experts having special knowledge about the matter under issue, should be led in support of court case. The department should lead the evidence promptly and Assistant District Attorney should see that the case does not go by default or costs are not awarded by the court as a result of not producing evidence. The purchase section should see that all records relating to the case whether pertaining to ADC-cum-CPO Rohtak or to be obtained from consignee, or other Departments are obtained and made available to the District Attorney. Similarly, all officials who have dealt with the case at any stage and whose evidence is required by the Court should be made available.

(xx) **Arguments**

After the evidence has been completed by both the parties, and the arguments are heard, the Assistant District Attorney should see that the District Attorney concerned is fully briefed on all points so as to enable him to conduct the arguments effectively.

(xxi) **Judgment**

On the receipt of a copy of judgment from the Court, the following action should be taken promptly by legal cell:

- (1) If it is against the ADC-cum-CPO Rohtak, the comments of the legal representative of ADC-cum-CPO Rohtak along with a copy of the judgment should be obtained and if advised, appeal should be filed within the period of limitation.
- (2) If the judgment is in the favour of the ADC-cum-CPO Rohtak, execution proceedings should be initiated and followed up. IN case other party files an appeal it should be contested under the orders of the Government and directions to the concerned District Attorney or Advocate General be got issued from the L.R. promptly.
- (3) In several cases, the judgment debtors reside outside the State of Haryana. In all such cases, it is necessary to obtain a Transfer Certificate i.e. order for transferring the decree for satisfaction to the Court in whose jurisdiction the judgment in the court of Senior Sub Judge through District Attorney. After the receipt of certificate, the District Attorney sends it to the L.R. for further action. On receipt of transfer certificate the L.R. writes to the concerned Court (in case the party resides outside the State of Haryana) or concerned Deputy Commissioner (in case the party resides in Haryana) to file execution application and realize the amount. The ADC-cum-CPO Rohtak is required to give full assistance to the Counsel conducting the execution proceedings. ADC-cum-CPO Rohtak is also required to furnish list of property to be attached in execution proceedings. In all such cases, the ADC-cum-CPO Rohtak should take up the matter for ascertaining the details of property of the judgment debtor as follows:
 - (i) With the State Government concerned through Home Department, Government of Haryana in case the judgment debtor is located outside the Haryana State.
 - (ii) With the General Manager, District Industries Centre (in the case of manufacturer) or with Deputy Commissioner concerned (in other cases) where he is located within Haryana.
 - (iii)

13. INSPECTION OF MATERIAL

The system will be installed by the supplier after inspection by the ADC-cum-CPO Rohtak or his representative at site and acceptance of the same. The supplier shall provide without any extra charge, all materials, tools, testing equipments, labour and assistance of every kind which the inspecting officer may consider necessary for any test or examination which he may require to be made on the supplier premises. Testing charges if any charged by the approved testing centre/ Lab for the checking of performance will be borne by the firm.

14. SUBMISSION OF TENDER

- i) Sealed tender should be submitted in two parts i.e. **Part-I (technical and commercial)** in the Annexure-II and **part-II (price part)** in the Annexure-III the firm should submit their offers in two separate sealed envelopes, marked on one envelop as "Part-I "Technical and Commercial Part" and on other envelope as "Part-II: Price Part". These envelopes should again be sealed in a covering envelope along with forwarding letter, super scribed on top with "Offer for supply, installation and commissioning of 1KW Solar Power Plant.
- ii) Offer should be addressed to ADC-cum-CPO Rohtak by designation not by name.
- iii) ADC-cum-CPO Rohtak shall resume no responsibility for misplacement or premature opening of any part of tender, in case of above instructions or not complied by the tenderer.
- iv) Any offer received after the deadline for submission of offers shall be rejected and returned unopened to the tenderer.

- v) All the pages of tender documents, technical specifications, bids, supporting documents etc. shall be indexed, numbered and duly signed by the authorized signatory and company seal should be affixed on each page. Any part of the tender which is not specifically signed by the authorized signatory and not affixed with company seal shall not be considered for the purpose of evaluation.
- vi) The offers should be signed and sealed by the tenderer or his authorized representative. The names and designation of all persons signing shall be typed or printed below the signature.
- vii) Failure of furnish all information and documentary evidence as stipulated in the tender document or submission of an offer i.e. not substantially responsive to the tender document in all respects shall be summarily rejected.

15. DOCUMENTS TO BE ENCLOSED WITH THE OFFER

Part-I & Part-II of the tender should comprise the following documents:

i) Technical & commercial Part-I

The technical & commercial Part: Part-I of tender shall be offered and furnished complete in all respect in **Annexure-II** along with following documents:

- a) Forwarding letter in Proforma-I
- b) Minimum eligibility condition-qualification in Proforma-II.
- c) Photocopy of partnership deed in case of partnership firm.
- d) Power of attorney for authorized signatory in case of companies.
- e) Test certificate of module from IEC/NABL/ MNRE, Govt. of India approved test centre.
- f) Details of past experience against supply made to different state nodal agencies in Proforma-III.
- g) Photocopies of certificate of satisfactory performance of small solar power packs supplied to state nodal agencies/Govt. departments along with copy of purchase order.
- h) Earnest money deposit.

ii) Price part: Part-II

- a) The price of solar power plant in full and complete set including all parts inclusive of supply, installation, commissioning, packaging, transportation, FOR destination, all taxes & levies, octroi, VAT etc. should be quoted in **Annexure-III** (price part).
- b) Price shall remain firm and fixed. Price variation clause is not acceptable.
- c) Any conditional discounts on the prices offered will not be entertained / considered.
- d) Offers should be quoted in lump sum inclusive of all taxes till the execution of the project and conditional offers with taxes will be rejected out rightly.

16. OPENING AND EVALUATION OFFERS

- i) Part-I: Commercial & Technical part will be opened on 21.09.2012 at 4.00 PM at the office of ADC-cum-CPO Rohtak located in Zila Vikas Bhawan DRDA Rohtak in the presence of tenderers or their authorized representative who chose to attend the meeting.
- ii) ADC-cum-CPO Rohtak, if required, may at its discretion obtain clarifications on offer by requesting such clarifications from any or all the

tenderers. Such requests for clarification and the response shall be in writing.

- iii) The Part-II: Price part of only those tenderers, whose offer technically and commercially acceptable after evaluation will be opened. The date to open the price part will be informed separately.

17. OTHER TERMS AND CONDITIONS

A)

- (i) The make and serial number of PV module used must be recorded by the manufacturer in a permanent manner.
- (ii) The manufacturer should issue excise gate pass for the products sold so that sale of product can be independently verified.
- (iii) Any left out specification(s) (if any) shall be as per the guidelines of the Off-Grid Scheme of the JNNSM of the MNRE, GOI issued vide no. 5/23/2009-P&C dated 16.6.2010, 8.7.2010 with latest amendments.
- (iv) Suitable space for battery bank & control systems shall be provided by the user to the contractor within seven days of placing the order.
- (v) If any new equipment/ gadget is installed/ added with the power supply of the solar system, user shall inform to the contractor before installation/ adding the same and it may be connected with the system only if contractor permits for the same. Contractor shall not be responsible for any defect / fault arises in the equipment (s) due to unauthorized connection.
- (vi) A proper record shall be maintained by the contractor for each site/ project which includes detail of equipments/ load connected generation & consumption of power, detail on breakdown, nature of defect, reason of defect, date of receipt of complaint and date of removal of defect etc. This record should be updated at least once in every six months & It should be got verified by PO of the district.
- (vii) To prevent the system from theft & damage, user shall depute Chaukidar i.e. Routine care to avoid theft & damage will be the responsibility of the user.
- (viii) All fittings, assemblies, accessories, hardware items, civil & electrical works & safety devices as required shall be deemed to be included whether such items are not mentioned in the DNIT.
- (ix) Procurement shall be governed by the policy decision/ guidelines on procurement of stores issued by Department of Industries & Commerce, Haryana vide GO No. 2/2/2010-4 I BII dated 28 May 2010. These guidelines are available on the State Govt. website i.e. www.haryana.gov.in

B)

- i. The offer shall be submitted on original tender form issued by this office, conditional tender and tender not accompanied by EMD shall not be accepted.
- ii. The rates quoted should be FOR destination inclusive of all taxes, octroi, VAT etc.
- iii. In the event of bid being submitted for a firm, it must be signed separately by each members thereof, or in the event of the absence of any partner, it must be signed on his behalf by a person holding a Power of Attorney authorizing him to do so. In case of a company, the quotation should be executed in the manner laid down in the said Companies Article of Association. The signature on the quotation should be deemed to be authorized signatures.
- iv. All columns of the technical and financial bid shall be duly filled in the rates shall not be overwritten and be both in figures and words.

- v. All corrections must be signed by the tenderers..
- vi. The tenders shall be opened in the presence of the bidders who wish to be present at the time of opening of technical as well as financial bid.
- vii. The offer shall be accompanied with a set of complete technical literature along with operation and maintenance manual in English and Hindi.
- viii. Material shall be strictly as per DNIT specifications. If there is any left out specification, the same shall be considered as per the MNRE specification.
- ix. All disputes relating to this work shall be subject to the jurisdiction of Rohtak and ADC-cum-CPO Rohtak shall be the sole arbitrator.
- x. The quantity of supply mentioned in the DNIT is tentative which can be increased or decreased.
- xi. The maker of module and batteries should be strictly as per the make mentioned in the test reports submitted along with the offer. For variation of any make, test report of the same is to be provided with prior approval of ADC-cum-CPO Rohtak.
- xii. The ADC-cum-CPO Rohtak will have the right of rejecting all or any of the quotation without assigning reason thereof.

Read and accepted.

I / We hereby quote to supply the goods and materials specified in the under written schedule in the manner in which and within the time specified as set forth in the conditions of contract at the rates given in the financial bid.

The conditions will be binding upon me / us in the event of acceptance of my / our tender.

I / We herewith enclose Earnest Money deposit of Rs.10,000/- (Rupees ten thousand only) and should I / We fail to execute the work order released by ADC-cum-CPO Rohtak in case our bid is accepted, I / We hereby agree that the above sum of earnest money shall be forfeited by the ADC-cum-CPO Rohtak.

(Signature of the authorized signatory)

Name:

Designation & Company seal:

**Format for forwarding letter
(To be submitted by tenderers on the official letterhead of the company)**

No.

Dated:

To

The Addl. Deputy Commissioner-cum-
Chief Project Officer,(IREP)
DRDA, Rohtak-124001

Subject: - **Offer in response to Notice Inviting Tender No. _____ for supply, installation & commissioning of Solar Power Plant of 1KW capacities in CHC Meham & PHC Lakhn Majra of District Rohtak.**

Sir,

We are hereby submitting our offer in compliance with terms and conditions of the Notice Inviting Tender No._____. As specified, the offer has been submitting in two different envelopes duly marked and seal.

We also further declare:

- a) That we are submitting this offer under the above mentioned notice after having fully read and understood the nature of the work and having carefully noted all the specifications, terms and conditions laid down in the tender document.
- b) That we have never been debarred from executive similar type of work by any central/state/public sector undertakings/departments
- c) That we shall execute the offer work as per specifications, terms and conditions of the tender document.
- d) That our offer shall remain valid for placement of purchase order up to 120 days from the opening of bids.

Yours faithfully,

(Authorized signatory)

Name:

Designation:

Company seal:

**Format for Confirmation of minimum eligibility condition
(To be submitted by tenderers on the official letterhead of the company)**

No.

Dated:

To

The Addl. Deputy Commissioner-cum-
Chief Project Officer,(IREP)
DRDA, Rohtak-124001

Subject: - **Confirmation of minimum eligibility condition for Notice Inviting Tender No. _____ for supply, installation & commissioning of Solar Power Plant of 1KW capacities in CHC Meham & PHC Lakhan Majra of District Rohtak.**

Sir,

Having examined the tender document of NIT No. _____, we hereby confirm the following towards the minimum eligibility condition to participate in the tender of Solar Invertor.

- i) We have valid test certificate of SPV module from _____ tested during _____ and attested copy of the same is enclosed herewith.
- ii) We have valid test certificate of charge controller from _____ tested during _____ and attested copy of the same is enclosed herewith.

Yours faithfully,

(Authorized signatory)

Name:

Designation:

Company seal:

Information in support of meeting eligibility conditions

Details of orders received and executed by manufacturer/supplier for supply of solar power packs to different govt. organizations/state nodal agencies/others in the past: three years

Sr. No.	Name of agency/ organization	P.O. NO./date ordered Qty.	Capacity and no's of systems supplied	year in which the systems were commissioned
1	2	3	4	5

- Note: (1) Attach photocopies of Purchase orders
(2) Attach photocopies of certificate of Satisfactory performance issued by Concerned Agency/Organization

Signature of Authorized Signatory

Name _____

Designation _____

Company seal _____

SPECIFICATION OF 1.0 KW SPV POWER PLANT**1. TECHNICAL SPECIFICATIONS**

ITEM	DESCRIPTION
SPV Module	<ul style="list-style-type: none"> • The photovoltaic modules should be Mono /Poly Crystalline with a total array capacity of 1.0 KW. • The photovoltaic modules should be one of the following make: TATA BP, CEL, BHEL or Moser Baer make. • The Photovoltaic modules must be qualified as per IEC 61215 (revised) / IS 14286 standards and in addition, the modules must conform to IEC 61730-1 requirements for construction & Part-2 requirements for testing, for safety qualification. • The PV modules must be tested and approved from any of the NABL/BIS/ MNRE Accredited Testing Calibration Laboratories. • The supplier shall provide performance guarantee for the PV modules used in the power plant 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.
No's of Modules	10 Nos. each of minimum 100 Wp or above wattage. Module capacity less than minimum 100 watts will not be accepted. Necessary I-V curves of the SPV Modules are required to be furnished.
System autonomy	1+2 day
Battery Bank	<ul style="list-style-type: none"> • VRLA tubular GEL type batteries conforming to National / international standards IEC-61427 & IS-1651 /IS 13369 standards, low maintenance, stationery at C/20 rate). • The batteries of 2 Volt, 300Ah Cells will be connected in series/ parallel to form 24 volt 300 Ah battery bank (EXIDE MAKE). • It will be staged in racks duly painted with acid resistant paint to cover less space.
Power Conditioning Unit	<p>Power conditioner unit of capacity 1.0 KW should convert DC power in to AC power must confirm to standards IEC 61683 for efficiency. A 24 volt DC to 230 volt AC inverter will have following features:</p> <ul style="list-style-type: none"> • MOSFET based PWM modified Sine Wave. • Wide input voltage range • Output voltage 230 \pm 2% • Out frequency: 50 Hz\pm0.5 Hz • Efficiency: > 90% at full load • Low power factor: 0.8 lagging to unity. • Ambient temperature: 0-50 deg. Cent • Relative humidity: 90% Non-condensing • Protections: <ul style="list-style-type: none"> - Over voltage (automatic shut down) - Under voltage (automatic shut down) - Overload - Short circuit (circuit breaker & electronics protection against sustained fault). • Indications: <ul style="list-style-type: none"> - Battery low - Overload - Inverter ON

	<ul style="list-style-type: none"> - Input & output voltage - Input & output current - Frequency - Power output • Cooling: Air cooled
SPV Charge Controller	<p>A suitable SPV charge controller having following features, specifications be provided</p> <ul style="list-style-type: none"> • Pulse width modulation (PWM) charge controller • Both calibrated scales and test points to allow precise adjustments and setting verification • Electronics protection for <ul style="list-style-type: none"> - Short circuit - Overload - Over temperature - Reverse polarity • Auto resetting electronic over current protection • LCD Digital display with back lighting and continue display of <ul style="list-style-type: none"> - Battery voltage - DC Current - Cumulative AH - Separating resettable “trip” AH measurement - Integrated charge controller and Invertor will be preferred.
Junction boxes	<ul style="list-style-type: none"> • The junction boxes shall be dust and water proof and made of thermoplastic the terminals will be connected to copper lugs or bus-bar of proper sizes. The junction boxes will have suitable cable entry points fitted with the cables. Suitable markings shall be provided on the lugs or bus-bars for easy identification at cable ferrules will be fitted at the cable terminations points for identification. Each main junction box shall be fitted with appropriate rating reverse blocking diode. The junction boxes shall be of reputed make. • The junction boxes shall have suitable arrangement for the following: <ol style="list-style-type: none"> a) Combine groups of modules into independent charging sub-arrays that will be wired into the controller. b) Provide arrangement for disconnection for each of the groups. c) Provide a test point for each sub group for quick fault location. d) To provide group array isolation. e) The rating of the JBS shall be suitable with adequate safety factor to inter connect the Solar PV array.
Structure for module frame	<p>Modules shall be mounted on supporting structure made out of galvanized MS angle of required structural strength. (hot dip/galvanized) either on the roof top or at ground as per the site requirement Structure : -</p> <ol style="list-style-type: none"> 1. The size of M.S. (Galvanized) angle should be 50 x 50 x 6 mm. The structures are to be fitted either on the roof top or at ground properly and south faced. It should withstand wind speed up to 200 Km/hour. 2. Foundation – The legs of the structure made with hot dip GI angles will be fixed and grouted in the RCC foundation columns of size 300mmx300mm made with 1:2:4 cement concrete. The minimum ground clearance from the lowest part of any module shall be 500 MM. While making foundation design due consideration will be given to wait of module assembly, maximum wind speed of 200 km per hour. 3. The work includes necessary excavation, concreting, back filling, shoring and shuttering etc.

	4. Brick paving of first class bricks with cement mortar (1:6) as per PWD specifications on edge type plate form is to be provided under the modules structure area with minimum 1 meter more than structure.
Connecting cables	PVC insulated copper cables (ISI marked) for : <ul style="list-style-type: none"> • Module interconnections (4.0 mm² copper single core multi strand) • Module parallel interconnection (6 mm² copper single core multi strand) • Array or AJB to charge controller (10 mm² copper two cores). • Charge controller to battery (10 mm² copper two core multi strand) • Battery to PCU (10 mm² copper single core multi strand) might be double cables if required • PCU to load / change over (Single core copper cable 6.0 mm² multi strand) and for further distribution points (Single core copper cable 4.0 mm² and 2.5 mm² multi strand) <ul style="list-style-type: none"> - All cables to be supplied should be as per BIS and should have proper current carrying capacity and should not be heated. - All cables shall be adequately supported. - Outside of terminal/panels/enclosures shall be protected by conduits. Cables shall be provided with dry type compression glands wherever they enter junction boxes, panels, enclosures.
Indoor wiring	All indoor wiring is to be done in a casing capping system. As and when required flexible pipe may also be used.
Lighting protection	Suitable nos. of lighting arrestors shall be provided in the array field.
Earthing protection	Each array structure and all metal casings of the plant etc. shall be earthed properly.
Tool Kit and Spares	One necessary tools kit and spares will have to be provided by the supplier which should have compulsory one RFID Tag Meter so as to read the RFID Tag of SPV modules supplied.
Display Board	A display board of size 2.5 ft x 1,5 ft made of MS 40mmx40mm square pipe and flexes is to be erected at the plant site indicating; <p>Capacity of Solar Power Plant : 1.0 Kw Promoted by : HAREDA with Logo Name of the Supplier : M/s..... Contact numbers :</p>

2. CODES AND STANDARDS

The BOS items / components of the SPV power plant must conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

BOS item / component	Standard Description	Standard Number
Power Conditioning Unit Inverter	Efficiency Measurements Environmental Testing	IEC61683 and must additionally conform to the relevant national/international Electrical Safety Standards IEC60068 2 (6, 21, 27, 30, 75, 78)

Charge controller/ MPPT units*	Design Qualification Environmental Testing	IEC 62093 IEC 60068 2 (6, 21, 27, 30, 75,78)
Storage Batteries	General Requirements & Methods of Test Tubular type	IEC 61427 IS 1651/ IS 13369
Cables	General Test and Measuring Methods PVC insulated cables for working voltages upto and including 280 V, UV resistant for outdoor installation	IEC 60189 IS 694 / IS 1554 IS/IEC 69947
Switches / Circuit Breakers / Connectors	General Requirements Connectors-safety	IS/ IEC 60947 part I, II & III EN 50521
Junction Boxes/ Enclosures	General Requirements	IP 65 (for outdoor) / IP/21 (for indoor) IEC 62208
SPV System design	PV Stand-alone Systems design verification	IEC 62124
Installation Practices	Electrical Installations of buildings-requirements for SPV power supply systems	IEC 60364-7-712

*Must additionally conform to the relevant national/ International Electrical Safety Standards.

3. IDENTIFICATION AND TRACEABILITY

Each PV modules used must use a RF identification tag (RFID), which must contain the following information. The RFID can be inside or outside the module laminate, but must be able to withstand harsh environmental conditions.

- (i) Name of the Manufacturer of PV Modules
- (ii) Name of the Manufacturer of Solar Cells
- (iii) Month and year of the manufacturer (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 FF for the module
- (vii) Unique Serial No and Model No of the module
- (viii) Date and year of obtaining IEC PV 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.

TECHNICAL BID FOR SUPPLY OF SOLAR POWER PLANT OF 1 KW

1.	Name & address of the firm/supplier complete with telephone, fax nos. & E-mail etc.	
2.	Name & designation of the authorized signatory to whom reference shall be made	
3.	Present activities/business of the firm i. Module Manufacturer ii. PCU Manufacturer iii. Battery manufacture iv. other activities	
4.	Type of organisation - Sole proprietor - Partnership firm - Private Ltd. Company - Public Ltd. Company	
5.	Sale tax registration number	
6.	Detail of any existing service network in Haryana (name & address of service centre, year of opening)	
5.	EMD of Rs.	Attached/ not attached DD No. _____ dated _____ Bank _____ Payable at _____
6.	Approval of SPV module from NABL/MNRE/GOI approved test centre along with Proforma-II	Attached at page no.....
7.	Annual turnover of the last two year with return of the income tax file.	Attached at page no..... Turn over during 2010-11 : Rs. Turn over during 2011-12 : Rs.
8.	Copies of work orders executed during the last three years along with satisfactory completion certificate from the concerned agency in proforma –III	Attached at page no.....
9.	Authority letter from company for signing the papers on behalf of company with seal	Attached at page no.....

(Signatures of the authorized signatory)

Name:

Designation:

Company seal:

FINANCIAL BID FOR SUPPLY OF SOLAR POWER PLANT OF 1 KW

1.	Description	Supply, installation and commissioning of Solar Power Plant of 1 KW capacity in health centers of Rohtak district of Haryana with 5 years warranty of complete systems including battery and 25 years warranty for solar panel 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.
2.	Cost of each system FOR destination including transportation / packaging / installation / commissioning inclusive of all taxes/octroi/VAT etc.	Rs. _____ (Rupees _____ _____)

(Signatures of the authorized signatory)
Name _____
Designation _____
Company seal