Tele: 080-23455069/63

Air Force School, Jalahalli
AF Stn Jalahalli East
Bengaluru-560 014

JAL/513/1/5/AFS/ED 14 Jul 22

M/s …….

…….

…….

…….

Sir,

REQUEST FOR PROPOSAL/ INVITATION OF QUOTATION FOR ON-GRID ROOF TOP SOLAR PV SYSTEM AT AIR FORCE SCHOOL

1. Air Force School, Jalahalli invites quotations for On-Grid Roof Top Solar PV System at Air Force School, Jalahalli.

2. The tender form addressed to your firm is attached to this letter. You may quote your minimum rates on the tender form and put your firm's seal with signature on the same. Last date of receipt of duly filled in tender/ quotations at this School is **12 Sep 22** before 0900hrs in person or by post in a sealed envelope on the mailing address as mentioned in tender form duly marked on top in CAPITAL LETTERS "ON-GRID ROOF TOP SOLAR PV SYSTEM AT AIR FORCE SCHOOL" and underlined.

Thanking you,

Yours faithfully,

//sd///
(Parwinderjit kaur)
Squadron Leader
Executive Director
Air Force School, Jalahalli

Annexure: As stated.

REQUEST FOR PROPOSAL(RFP)

AIR FORCE SCHOOL, JALAHALLI
AIR FORCE STATION JALAHALLI EAST
BENGALURU -14TELE:080-23455069/63

Invitation of Bidsfor supply of 'QUOTATIONS for ON-GRID ROOF TOP SOLAR PV SYSTEM AT AIR FORCE SCHOOL.

Request for Proposal (RFP) No JAL/513/1/5/AFS/ED Dated 14 Jul 22

1. Bids in sealed cover are invited for On-Grid Roof Top Solar PV System as listed in part II RFP. Please superscribe the above mentioned title, RFP number and date of opening of the bids on the sealed cover to avoid the bid being declared invalid.

2. The address and contact numbers for sending bids or seeking clarifications regarding this RFP are given below-

(a) Bids/queries to be addressed to	:	**Executive Director, AF School, Jalahalli**
(b) Postal address for sending the Bids	:	**As Mentioned above**
(c)Name /designation of the contact personnel	:	**Executive Director, AF School, Jalahalli**
(d) Telephone numbers of contact personnel	:	**080-23455069/63**
(e) e-mail ids of contact personnel	:	**afsjal@rediffmail.com**

3. This RFP is divided into five parts as follows:

(a) Part I- Contains general information and instruction for the Bidders about the RFP such as the time, place of submission and opening of tenders, Validity period, Mode of tenders etc.

(b) Part II- Contains essential details of the items/services required, such as the Schedule of Requirements (SOR), Technical specifications, Delivery and Consignee details.

(c) Part III – Contains Standard Conditions of RFP, which will form part of the Contract with the successful Bidder

(d) Part IV – Contains special Conditions applicable to this RFP and which will also form part of the contract with the successful Bidder.

(e) Part V-Contains Evaluation Criteria and Format for Price Bids.

4. This RFP is being issued with no financial commitment and the Buyer reserves the right to Change or vary any part thereof at stage. Buyer also reserves the right to withdraw the RFP, should it become necessary at any stage.

Cont'd……02/-

Part I- General information

1. Last date and time for depositing the Bids : 12 Sep 22 at 0900 hrs
(Date to be mentioned in terms of DD MM YEAR)
The sealed Bids (both technical and Commercial, in case two bids are called for) should be deposited/reach by the due date and time. The responsibility to ensure this lies with the Bidder.

2. Manner of depositing the Bids : Sealed Bids should be either dropped in the Tender Box marked as '**Quotations for On-Grid Roof top Solar PV system at Air Force School Jalahalli'** or sent by registered post at the address given above so as to reach by the due date and time. Late tenders will not be considered. No responsibility will be taken for postal delay or non –delivery /non receipt of Bid documents. Bids sent by FAX or e-mail will not be considered (unless they have been specifically called for by these modes due to urgency).

3. Time and date for opening of Bids: 1000 Hrs on 13 Sep 22
(If due to any exigency, the due date for opening of the bids is declared a closed holiday, the Bids will be opened on the next working day at the same time or on any other day/time, as intimated by the Buyer).

4. Location of the tender Box : Sub Guard Room East, (near E&ITI)Air Force Station Jalahalli East (Only those Bids that are found in tender box will be opened. Bids dropped in the wrong Tender Box will be rendered invalid).

5. Place of opening of the Bids: Air Force School Jalahalli (East), Bangalore-14. The Bidders may depute their representative, duly authorized in writing, to attend the Bids on the due date and time Rates and important commercial/technical clauses quoted by all Bidders will be read out in the presence of the representatives of all the Bidders. This event will not be postponed due to non-presence of your representative.

6. Forwarding of Bids . Bids must be forwarded by bidders under their original memo/letter pad inter alia furnishing details like TIN number, GST number, Bank address with EFT Account if applicable, etc and complete postal & e-mail address of their office. All copies of the RFP received/downloaded to be signed by vendor/bidder (with seal of the firm) and the same to be submitted along with bid.

7. Two Bid System . The sealed tenders are to be submitted in a two bid system (Technical & Commercial). The technical bid would be opened on the time and date mentioned above. Date of opening of the Commercial Bid will be intimated after acceptance of the Technical Bids. Commercial Bids of only those firms will be opened, whose Technical Bids are found complaint /Suitable after Technical evaluation is done by the Buyer/Technical Evaluation committee. The technically qualifying firms shall be intimated about the same prior to opening of Commercial Bids.

8. Clarification regarding contents of the RFP: A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the Buyer in writing about the clarification sought not later than 7(Seven) days prior to the date of the Bids. Copies of the query and clarification by the purchaser will be sent to all prospective bidders who have received the bidding documents.

9. Clarification regarding contents of the Bids: During evaluation and comparison of bids, the Buyer may, at its discretion, ask the bidder for clarification of his bid. The request for clarification will be given in writing and no change in prices or substance of the bid will be sought, offered or permitted. No post-bid clarification on the initiative of the bidder will be entertained.

10. **Rejection of Bids**: Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. Conditional tender will be rejected.

11. **Unwillingness to quote**: Bidders unwilling to quote should ensure that intimation to this effect reaches before the due date and time of opening of the Bid, failing which the defaulting Bidder may be delisted for the given range of items as mentioned in this RFP.

12. **Validity of Bids**: The Bids should remain valid for 120 days from the last date of submission of the Bids.

13. Other standard condition of RFP given as part III Appx 'C' to DPM 2009 is applicable. These conditions can be viewed at http:www.mod.nic.in

14. **Earnest Money Deposit**. Bidders are required to submit Earnest Money Deposit (EMD) amounting Rs. 1,00,000/- (Rupees One Lakh Only) along with the Bid. The EMD may be submitted in the form of an Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee form any of the commercial bank or online payment of EMD in an acceptable form safeguarding the purchase interest in all respects may be made in Account No. 37080287462 IFSC SBIN0008042 "Executive Director Air Force School". EMD is to remain valid for a period of forty-five days beyond the final bid validity period. EMD of the unsuccessful bidders will be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30th day after the award of contract. The bid security of the successful bidders would be returned, without any interest whatsoever, after the receipt of Performance Security from them as called for in the contract. EMD is not required to be submitted by those Bidders who are registered with the Central Purchase Organization (e.g. DGS&D), National Small industries corporation (NSIC), MSME or any Department of MoD or MoD itself. The EMD will be forfeited if the bidder withdraws or amends/ impairs or derogates from the tender in any respect within the validity period of their tender. E-receipt in case of online payment must be attached along with tender documents. MSEs and firms registered with concerned Ministries/ Departments are exempted from subsission of Bid Security. Further, in lieu of Bid Security "Bid Security Declaration" accepting that if firms withdraw or modify their bids and period of validity, they will be suspended for the time specified in the tender documents may be submitted by the bidder along with their bids.

Part II-Essential Details of items/Services

Request for Proposal (RFP) No JAL/513/1/5/AFS/ED Dated 08 Jul 22

1. Schedule of Requirements – List of items/services required is as follows:

(a) Design Assumptions. Assumptions that are considered for calculating the energy yield (DC) are listed below.

Sl.No.	Parameters	Values
(i)	Tilt Angle–Fixed	15 Deg
(ii)	Mounting on	RCC Roof Top
(iii)	Shading	No Shading
(iv)	Normal Operating Collector Temperature (NOCT)	46°C
(v)	Global Wiring resistance in loss fraction at STC	1.5%
(vi)	Module Quality–Module efficiency loss	0%
(vii)	Mismatch losses–Power loss at MPP	2%
(viii)	Array soiling loss	1.5%

(b) Proposed Technology. The Grid connected solar photovoltaic power plant to be proposed shall be consisting of Poly Crystal line Solar modules with fixed tilt angle mounting systems and the solar inverters shall be on grid connected.

(c) Benefits of Proposed Technology. The benefit of crystalline technology as compared to other existing technologies is as follows:

(i) It occupies less area when compared to other thin film technologies
(ii) Proven technology over years
(iii) Proven Long-term performance (25Years)
(iv) Abundant semiconductor materials to support high volume production and demand.
(v) High volumes of production facilities throughout world
(vi) Higher efficiency of crystal line modules reduces the impact of the higher BOS costs

(d) Design summary

Total Installing capacity	**33 KWp**
PV Module	Poly Crystalline Modules
Grid Interactive String Inverter rating	33 KW
Total numbers of Inverters	1
Approximate Average Units generated per day	120 Units/day
Module Tilt angle	12 to 15 degree
Module orientation	True South

(e) Solar PV Grid Connected System. A grid connected system is connected to a large independent grid (typically the public electricity grid) and feeds power into the grid. This is a form of decentralized electricity generation. The feeding of electricity into the grid requires the transformation of DC into AC by a special, grid-controlled inverter. A Central Inverter is a special type of Inverter (electrical) that is used in a renewable energy power system to convert direct current into alternating current and fed it into the utility grid. The technical name for a central inverter is "grid-inter active inverter". They may also be called synchronous inverters. Grid-interactive inverters typically cannot be used in standalone applications where utility power is not available. The Central Inverter is designed to convert solar electric (photovoltaic or PV) power into utility- grade electricity that can be used by the local load or sold to the local power company. In order to operate, the inverter must have grid power available and connected. It will not provide backup power if the AC grid fails. The inverter will automatically synchronize itself to grid. The inverter is provided with the isolation transformer internally with basic insulation.

(f) System Configuration The major components of the proposed power plant are as follows:

Sl. No.	Item	Description
(i)	Solar Module	IEC approved Crystalline solar modules
(ii)	Module Mounting Structure	Fixed Mounting
(iii)	Inverters Capacity	String inverters of 33 KW
(iv)	Junction box	DC Combiner Box (DCCB) (if required)
		AC Distribution Box(ACDB) (if required)
(v)	Cables	PVC Cu Cables
(vi)	Lightning Protection	Lightning Protection Units (Optional)
(vii)	Earthing Kit	Conventional or Chemical Earthing Kit
(viii)	Accessories	Accessories for cable interconnection &installation kit &conduits

(g) Solar PV Modules: Solar cells produce direct current electricity from light, which can be used to power equipment or to recharge a battery. Cells require protection from the environment and are usually packaged tightly behind a glass sheet. When more power is required than a single cell can deliver, cells are electrically connected together to form photo voltaic modules, or solar panels. A photovoltaic module is a packaged interconnected assembly of photovoltaic cells, which converts sunlight into electrical power. The cells are hermitically sealed between glass and back cover (Tedlar) to protect them from harsh environments. The detail technical specification of crystalline module is provided below.

(h) Crystalline modules:

Technical Specifications for Crystalline Modules	
Output power–Pmax (Watts)	Eg. 335Wp (varies as per the availability)
Voltage at Pmax	37.20V
Current at Pmax	7.88A
Open-circuit voltage	37.23V
Short circuit current	8.46A
Maximum system voltage(Volts)	IEC: DC 1000V
Weight (approximate)	19.5kg

Type of solar PV cell	Multi Crystalline silicon cell
Suitability	For on/ off grid connected system
Module output	Tyco electronics plug (male and female)
Certification	IEC61215,IEC 61730,UL1703
Power warranty for SPV Manufacturer	•25-yearlimitedwarrantyon power output & 5- year product warranty •25-yearperformancewarranty by Manufacturer -10 years:90% minimum performance -25years:80% minimum performance

(j) Module Mounting Structures: The module mounting structure will be designed for holding suitable number of modules in series. The frames and leg assemblies of the module mounting structures is of Mild Steel hot dip galvanized of suitable sections of Angle, Channel, Tubes or any other sections conforming to IS:2062 to meet the design criteria. All hardware considered for fastening modules with this structure are of very good quality of Stainless Steel (SS304). The module mounting structure will be designed in such a way that it will occupy minimum space without sacrificing the output from SPV panel sat the same time it will with stand severe wind speed up to a maximum 120kmph.

Technical Specification – Module Mounting Structures	
Material	MS powder coated/MS Galvanized or Aluminum
Overall dimension	As per design
Coating	Hot dip Galvanized with 80 microns for MS
Wind rating	120km/hr
Tilt angle	Fixed tilt angle
Fixing type	SS 304 fasteners

(k) Junction Boxes: The junction boxes are of dust, vermin, and water proof and made of Thermo Plastic. The terminals will be connected to copper bus-bar arrangement of proper sizes. The junction boxes will have suitable cable entry points fitted with cable glands of appropriate sizes for both incoming and outgoing cables.

Technical Specification – Junction Boxes if required	
Material	Thermoplastic
Type	Dust, Vermin & Waterproof
Hardware	SS 304
Cable Gland	Thermoplastic
Protection	IP65

(l) String Inverter. **BESCOM approved Grid Tie Solar Inverter** combinations will be used in this project to convert DC power into AC and also to export the generated power into public grid. The Grid Tie Solar Inverter is designed to convert solar electric (photovoltaic or PV) power into utility-grade electricity that can be sold to the local power company. In order to operate, the inverter must have grid power available and connected. It will not provide backup power if the AC grid fails. The inverter will automatically synchronize itself to grid. The inverter is provided with the isolation transformer internally with basic insulation.

With the latest high frequency technology the electrically isolated central inverters achieve peak efficiencies up to 95.6%. Highly efficient and reliable with intelligent MPP Ttracking gets maximum performance from solar modules under all operating conditions.

With the MPPT concept, PV modules connected in series (strings) or strings at the same voltage connected in parallel are always connected to the central inverter so that the amount of wiring in the photovoltaic plant is substantially reduced. The photovoltaic plant can also be optimized to the input voltage range of the central inverter by the interconnection in the strings. The compact design of the central inverter takes into account the market requirements for efficient inverter solutions with higher output ranges.

(m) Inverter salient features:

(i) Wider input DC Voltage range and AC Frequency range.
(ii) De-rating of inverters has been customized to Indian temperatures
(iii) Efficiencies are higher when it is designed at the maximum input DC Voltage
(iv) Has the ESCOM (Electricity Services Company) letter on confirmation of certifications.
(v) Has been checked in the field at various test sites across India under rugged conditions.
(vi) Would be the first to get certified by SEC (Solar Energy Centre).

(n) Cables: The size of the cables between array inter connections, array to junction boxes, junction boxes to inverter etc is so selected to keep the voltage drop and losses to the minimum. DC cables are solar rated and suitable for the interconnection of the various elements of PV systems. The bright annealed 99.97% pure bare copper conductors that offer low conductor resistance, they result in lower heating thereby increase in life and savings in power consumption. These wires are insulated with a special grade PVC compound formulated and manufactured in-house. The skin coloration offers high insulation resistance and long life.

Technical Specification – Cables	
Type	PV Insulated, sheath & UV resistance
Material	Copper
Voltage	Max. 1100V
Test Voltage	650V/1.1V
Temperature	10–70°C
Color	Red /Black /Green

(o) Earthing & Lightning Protection:

(i) Earthing: The array structure of the PV yard, metal cable tray, metal elements in electrical cabinets and inverters will be grounded properly using adequate number of earthing kits. All metal casing/shielding of the plant shall be thoroughly grounded to ensure safety of the power plant. The earthing system design will be according to the IS-3043, Indian electricity rules.

(ii) Lightning Protection: The SPV Power Plant shall be provided with lightning & over voltage 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. Protection system will be based on Early Streamer Emission lightning conductor air terminals. By using galvanized iron tapes all air terminals will be connected to respective stations and an earthing grid.

(p) Description of Material. The brief bill of material for the Solar PV Power Plant is provided below as ready reference.

S/N	Description	33 KW
(i)	Crystalline Modules	30KWp +/- 50W
(ii)	Module Mounting Structures	1Set
(iii)	DC Combiner Boxes	As required
(iv)	String Inverters	33 KW
(v)	DC Cable	As required
(vi)	AC Cable	As required
(vii)	Earthing	3 Set
(viii)	Accessories	1 Set
Supply, installation & Commissioning of 33 KWp On-Grid Solar roof top PV(Battery Less) System including all the necessary accessories with GST		One Set

Terms & Conditions:

2. **Technical Details: (Detail Tech Specification of item to be purchased/Service)**: Clear details of items are mentioned in the schedule of requirements. The items supplied should be of best quality and should confirm to the standard specification laid in Para 1 Part II of RFP.

3. **Delivery period**. Delivery/Installation period for supply of items would be 60 days from the effective date of Supply Order. Please note that Supply Order can be cancelled unilaterally by the Buyer in case items are not received within the Supply Ordered delivery period. Extension of Supply Ordered delivery period will be at the sole discretion of the Buyer, with Applicability of LD clause.

4. **Eligibility Criteria.** Bidding Firms fulfilling the following criteria which are mandatory will be eligible for consideration:-

(a) The bidder firm shall have preferably **03 years** experience in the field. That the bidder shall submit details of organizations, where he has undertaken such similar services. The details should include Name and Address of the Organisation, Contact number of the organisation and period of contract.

(b) The bidder/Infrastructure provider may be a proprietary firm, Public Sector firm partnership firm, Private/Public Limited Company, Corporate body legally constituted as per law with valid registration with the competent on the last date of submission of the bid.

(c) The bids shall be valid and open for acceptance of the Competent Authority of Buyer for a period of 180 days of opening of the tenders and no request for any grounds by successful bidder will be entertained.

(d) The bidder shall submit the specifications/details as per Appendix ‘A’ of this RFP.

(e) The bidder shall submit the commercial bids as per Appendix ‘B’ of this RFP.

(f) The bidder shall submit the other required details as per Appendix 'C' with required documents.

(g) The bidder should provide documents listed at Appendix 'D' to this RFP.

5. **Consignee details –** Goods / Items contracted by Buyer are required to be delivered as per the quantity as well as the quality at the consignee address as per the details mentioned below:

AIR FORCE SCHOOL, JALAHALLI
AIR FORCE STATION JALAHALLI EAST
BENGALURU -14

6. **Mode of dispatch -** The store shall be dispatched to the consignee by supplier and installed under his own arrangement and cost.

7. Container Pack – (**As per requirement**)

Part III – Standard Conditions of RFP

The Bidder is required to give confirmation of their acceptance of the Standard Conditions of the Request for Proposal mentioned below which will automatically be considered as part of the contract concluded with the successful Bidder as selected by Air Force School Jalahalli, Bengaluru-14. Failure to do so may result in rejection of the Bid submitted by the Bidder.

1. **Law.** The contract shall be considered and made in accordance with the laws of the Republic of India. The contract shall be governed by and interpreted in accordance with the laws of India.

2. **Jurisdiction of Courts.** The courts of the place from where the acceptance of tender has been issued i.e. Bengaluru shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract.

3. **Arbitration.** Any dispute or differences/disagreement arising between the parties hereto, touching the subject matter of this agreement or respective rights and duties (except as to any matter the decision or determination whereof is provided for by these conditions), which cannot be settled amicably, shall within sixty (60) days or such longer period as may be mutually agreed upon, from the date on which either party informs the other in writing by a notice that such dispute or differences/ disagreement exists, will be referred for sole arbitration of a person from outside the organization who is/was neither an employee, consultant, advisor nor has any past or present financial/business/professional or other kind of relationship with a party…".

4. **Penalty for Use of Undue Influence.** The Infrastructure Provider (IP-I) / Service Provider undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or in document to any person in service of Air Force School Jalahalli, Bengaluru or otherwise in procuring the Contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present contract or any other contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the present Contract or any other Contract with the Government of India. Any breach of the aforesaid undertaking by the Seller or any one employed by him or acting on his behalf (whether with or without the knowledge of the Service Provider) or the commission of any offers by the Service Provider or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act 1986 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the contract and all or any other contracts with the Service Provider and recover from him the amount of any loss arising from such cancellation. A decision of Competent Authority of Air Force School Jalahalli or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Service provider. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the Service Provider towards any officer / employee of the Buyer or to any other person in a position to influence any officer /

employee of Air Force School Jalahalli, Bengaluru for showing any favour in relation to this or any other contract, shall render the Service Provider to such liability / penalty as Competent Authority of Air Force School Jalahalli may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Infrastructure Provider.

5. **Agents / Agency Commission.** The seller confirms and declares to the Buyer, that he is the only Infrastructure / Service provider referred to in this Contract and has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries whether officially or unofficially, to the award of the contract to him, nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that the Infrastructure Provider has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, seller will be liable to refund that amount to Air Force School Jalahalli. The seller will also be debarred from entering into any other supply contract with the Buyer for a minimum period of five years. Competent Authority of Air Force School Jalahalli, Bengaluru will also have a right to consider cancellation of the Contract either wholly or in part without any entitlement of compensation to the Infrastructure Provider.

6. **Access to Books of Accounts.** In case it is found to the satisfaction of the Buyer that the Infrastructure Provider has engaged an Agent or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents / Agency Commission and penalty for use of undue influence the seller on a specific request of Air Force School Jalahalli, Bengaluru, shall provide necessary information/ inspection of the relevant financial documents / information.

7. **Non-disclosure of Contract Documents.** Except with the written consent of Competent Authority of Air Force School Jalahalli / Seller, other party shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

8. **Termination of the Contract.** The Buyer shall haveshall have the right to terminate this contract in part or in full in any of the following cases: -

(a) The delivery of the material is delayed for causes not attributable to Force Majeure for more than (01 month) after the scheduled date of delivery.
(b) The Seller is declared bankrupt or becomes insolvent.
(c) The delivery of material is delayed due to causes of Force Majeure by more than (1 month).
(d) The Buyer has noticed that the Seller has utilized the services of any Indian/foreign agent in getting this Supply Order and paid any commission to such individual/company etc.
(e) As per decision of the Arbitration Tribunal.

9. **Notices.** Any notice required or permitted by the Supply Order shall be written in the English Language and may be delivered personally or may be sent by FAX or registered pre-paid mail/ airmail, addressed to the last known address of the party to whom it is sent.

10. **Transfer and Sub-letting.** The seller has no right to give, bargain, sell, assign or sublet or otherwise dispose off the Contract or any part thereof to any third party.

11. **Patents and other Industrial Property Rights.** The prices stated in the present contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payment for any other industrial property rights. The seller shall indemnify Air Force School Jalahalli, Bengaluru against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use.

12. **Amendments.** No provision of present contract shall be changed or modified in any way (including this provision) either in whole or in part except by an instrument in writing made after the date of this contract and signed on behalf of both the parties and which expressly states to amend the present contract.

13. **Taxes and Duties**

(a) If it is desired by the Bidder to ask for GST to be paid as extra, the same must be specifically stated. In the absence of any such stipulation in the bid, it will be presumed that the prices quoted by the Bidder are inclusive of GST and no liability of GST will be developed upon the Buyer.

(b) The taxes will be paid on basic price, sellers are not to be charge GST on service charges and other taxes unless permitted by law for which a copy of notification should be attached with invoice/Bill

(c) Remaining clauses as given in DPM refer http:www.mod.nic.in

14. **Liquidated damages:** In the event of the seller's failure to submit the bonds, guarantees and documents, supply the stores/goods and conduct trials, installation of equipment, training, etc as specified in this supply order, the buyer may, at his discretion, withhold any payment until the completion of the supply order. The buyer may also deduct from the seller as agreed, Liquidated Damages to the sum of 0.5% of the supply order price of the delayed/undelivered stores/ services mentioned above for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than 10% of the value of delayed stores.

Part IV – Special Conditions of RFP

The bidder is required to give confirmation of their acceptance of special Conditions of the Request for Proposal mentioned below which will automatically be considered as part of the contract concluded with the successful bidder as selected by the authority (i.e. Seller in the contract) as selected by the Buyer. Failure to do so may result in rejection of the bid submitted by thebidder.

1. **Performance Bank Guarantee:** The successful bidder will be required to furnish a Performance Guarantee by way of bank guarantee through any commercial bank for an amount of **3% of contract value within thirty days** of receipt of the confirmed order. Performance bank guarantee should be valid **up to 60 days beyond the date of warranty**.

2. **Option Clause:** This contract has an option clause, wherein the Buyer can exercise an option to procure an additional 50% of original contracted quantity in accordance with the same terms and conditions of the present contract. This will be applicable within the currency of the contract. It will be entirely the discretion of the Buyer to exercise this option ornot.

3. **Repeat Order Clause:** This contract has a repeat order clause, wherein the Buyer can order upto 50% quantity of the items under the present contract within six months from the date of successful completion of this contract, cost, terms & condition remaining the same. IT will be entirely the discretion of the Buyer to place the repeat order or not.

4. **Tolerance Clause :** To take care of any change in the requirement during the period starting from issue of RFP till replacement of the contract, Buyer reserve the right to 10% plus/minus increase/decrease the quantity of the required goods up to that limit without any change in the terms and conditions and process quoted by the Seller. While awarding the contract, the quantity ordered can be increased or decreased by the Buyer within this tolerance limit.

5. **Payment terms for Indigenous Sellers:** It will be mandatory for the bidders to indicate their bank account numbers and other relevant e-payment details so that payments could be made through RTGS/NEFT mechanism or payment through cheques, wherever feasible.100 % payment shall be made through Cheque or RTGS/NEFT on satisfactory service certificate issued by user. A copy of the model mandate form prescribed by RBI to be submitted by bidders for receiving payments through RTGS/NEFT is at from DPM-11. The payment will be made as per the following terms, on production of the requisite documents.

(a) **Stage-I** 30 % of SO after supply of materials on site.
(b) **Stage-II** 30 % of SO after installation & Commissioning of the system
(c) **Stage-III** 40 % of SO after completion of the work on site.

6. **Advance Payments:** No advance payment (s) Shall be made.

7. **Paying Authority:** Chairman, AF School Jalahalli (East), Air Force Station Jalahalli, Bangalore– 560 013. The payment of bills will be made on submission of the following documents by the Seller to the paying authority along with the bill.

(a) Ink-signed copy of contingent bill / Seller's bill.
(b) Ink signed of commercial invoice / Seller's bill.
(c) Copy of supply order /contract.
(d) Inspection note.
(e) Claim for statutory and other levies to be supported with requisite documents / proof of payment such as GST challan, customs duty clearance certificate etc as applicable.
(f) Exemption certificate for GST / customs duty, if applicable.
(g) Performance Bank Guarantee.
(h) Guarantee / Warranty certificate.
(j) Details for electronic payment viz. Account holder's name, Bank name, Branch name and address, Account type, Account number, IFSC code, MICR code.
(k) Any other document / certificate that may be provided for in the supply order / contract.
(l) User Acceptance.
(m) GST certificates.

8. **Fall Clause:** The following Fall Clause will form part of the job placed on successful bidder:

(a) The price charged for the stores supplied by the Seller shall in no event exceed the lowest prices at which the Seller sells the stores or offer to sell stores or identical description to any persons / organization including the purchaser or any department of the Central Govt or any department of state Govt. or any statutory undertaking the central or state Govt. as the case may be during the period till performance of all supply order placed during the currency of the rate contract is completed.
(b) If at any time, during the said period the Seller reduces the sale price, sells or offer to sell such stores to any person/ organization including the Buyeror any dept, of Central Govt. or any department of the state Govt. or any statutory undertaking of the central or state Govt. as the case may be at a price lower than the price chargeable under the contract, the shall forthwith notify such reduction or sale or offer of the sale to the addressee and the price payable under the contract for the stores of such reduction of sale or offer of the sale shall stand correspondingly reduced.

9. **Exchange rate Variation clause:** N/A

10 **Risk & Expense Clause:**

(a) Should the stores or any installment thereof not be delivered within the time or times specified in the contract documents, or if defective delivery is made in respect of the stores or any installment thereof, the Buyer shall after granting the Seller 45 days to cure the breach, be at liberty, without prejudice to the right to recover liquidated damages as a remedy for breach of contract, to declare the contract as cancelled either wholly or to the extent of such default.

(b) Should the stores or any installment thereof not perform in accordance with the specifications / parameters provided by the Seller during the heck proof tests to be done in the Buyer's country, the Buyer shall be at liberty, without prejudice to any other remedies for breach of contract, to cancel the contract wholly or to the extent of such default.

(c) In case of material breach that was not remedied within 45 days the Buyer shall having given the right of first refusal to the Seller be at liberty to purchase, manufacture or procure from any other source as he thinks fit other stores of the same or similar description to make good:-

(i) Such default

(ii) The event of the contract being wholly determined the balance of the stores remaining to be delivered thereunder.

(d) Any excess of the purchase price, cost of manufacturer, or value of any stores procured from any the supplier as the case may be, over the contract price appropriate to such default

or

Balance shall be recoverable from the Seller. Such recoveries shall not exceed the value of the contract.

(e) Warranty to the affect that they will make available the blue prints of drawings of the spares of and when required in connection with the main equipment.

11. Force Majeure Clause:

(a) Neither party shall bear responsibility for the complete or partial non performance of any of its obligations (except for failure to pay any sum which has become due on account of receipt of goods under the provisions of the present contract). If the non-performance results from such Force Majeure circumstances as flood, fire, earth quake and other acts of God as well as War, Military operation, blockade, Acts or actions of State authorities or any other circumstances beyond the parties control that have arisen after the conclusion of the present contract.

(b) In such circumstances the time stipulated for the performance of an obligation under the present job is extended correspondingly for the period of time of action of these circumstances and their consequences.

(c) The party for which it becomes impossible to meet obligations under this job due to Force Majeure conditions, is to notify in written form the other party of the beginning and cessation of the above circumstances immediately, but in any case not later than 10 (Ten) days from the moment of their beginning.

(d) If the impossibility of complete or partial performance of obligation lasts for more than 03 (three) months, either party hereto reserves the right to terminate the job totally or partially upon giving prior written notice of 30 (Thirty) days to the other party of the intention to terminate without any liability other than reimbursement on the terms provided in the agreement for the goods received.

12. Specification: The following specification clause will form part of the job placed on successful bidder:

(a) The Seller guarantees to meet the specifications as per Part II of RFP and to incorporate the modifications to the existing design configuration to meet the specific requirement of the Buyer services as per modifications / requirements recommended after the Maintenance Evaluation Trials at no additional cost.

(b) The Seller in consultation with the Buyer may carry out technical up gradation / alterations in the design, drawings and specifications due to change in manufacturing procedures, or obsolescence. This will, however, not in way, adversely affect the end specification of the equipment. Changes in technical details, drawings, repair and maintenance techniques along with necessary tools as a result of up-gradation / alterations will be provided to the Buyer free of cost within 60 days of affecting such up-gradation /alterations.

13. Earlier Year of Manufacture Clause : Items should be manufactured in the same year as of RFP i.e. **Year 2021**. Quality / Life certificate needs to be enclosed with the bill. The supplied items should be of latest update i.e. manufactured in the **year 2021** and conform to the current production standards.

14. **OEM Certificate:** In case the bidder is not the OEM, the agreement certificate with the OEM for sourcing the spares and support for entire, contracted period shall be mandatory. Ink signed copy of authorization letter from OEM, certifying the authorized / registered re-Seller / dealer/partner of OEM to be produced along with technical bid. However, where OEMs do not exist, minor aggregates and spares can be sourced from authorized vendors subject to qualify certification.

15. **Packing and Marking:** The following packing and marking clause will form the part of the job placed on successful bidder:-

(i) The Seller should provide packing and preservation of the equipment and spares / goods contracted so as to ensure their safety against damage in the condition of land, sea and air transportation, transhipment, storage and weather hazards during transportation, subject to proper cargo handling.

16. **Inspection Authority:** The Inspection will be carried out by a **BOO detailed by Chairman, SMC for the items received as per technical specifications enumerated in the RFP and post installation of the project.**. The mode of inspection will be User Inspection. The items will be subjected to detailed Acceptance Testing Procedure (ATP) to test individual components and successful integration of all components. The vendor and the user will work out the details of the procedure jointly. The specification of the equipment should be in conformity with the details provided by the vendor and as per the given specifications. The user would issue an acceptance certificate on successful completion of acceptance testing after delivery. The date of issuing the acceptance certificate would be deemed to be the date on which the warranty will commence.

17. **Quality:** The quality of the stores delivered according to the present job shall correspond to the technical conditions and standards valid for the deliveries of the same stores for in Seller's country or specifications enumerated as per RFP and also shall also include therein modification to the stores suggested by the Buyer. Such modifications will be mutually agreed to. The Seller confirms that the stores to be supplied under this contract shall be new i.e. not manufactured before **Year 2021**and shall incorporate all the latest improvements and modifications thereto and spares of improved and modified equipment are backward integrated and interchangeable with same equipment supplied by the Seller in the past if any. The Seller shall supply an interchangeability certificate along with the changed part numbers wherein it should be mentioned that items would provide as much life as the original item.

18. **Franking Clause:** The following franking clause will form part of the job placed on successful bidder: -

(a) **Franking clause in the case of acceptance of goods:** The fact that the goods have been inspected after the delivery period and passed by the inspecting Officer will not have the effect of keeping the contract alive. The goods are being passed without prejudice to the rights for the Buyer under the terms & conditions of the contract.

(b) **Franking clause in the case of rejection of goods:** The fact that the goods have been inspected after the delivery period and rejected by the Inspecting Officer will not bind the Buyer in any manner. The goods are being rejected without prejudice to the rights of the Buyer under the terms & conditions of the contract.

19. **Claims:** The following claims clause will form part of the job placed on successful bidder:

(a) The claims may be presented either (a) on quantity of the stores, where the quantity does not correspond to the quantity shown in the Packing List/ Insufficiency in packing or (b) on quality of the stores, where quality does not correspond to the quality mentioned in the specifications.

(b) The quantity claims for deficiency of quantity shall be presented within 45 days of completion of inspection and acceptance of goods.

(c) The quality claims for defects or deficiencies in quality noticed during the inspection shall be presented within 45 days of completion of inspection and acceptance of goods. Quality claims shall be presented for defects or deficiencies in the quality noticed during warranty period earliest but not later than 45 days after expiry of the guarantee period.

(d) The description and quantity of the stores are to be furnished to the Seller along with concrete reasons for making the claims. Copies of all the justifying documents shall be enclosed to the presented claim. The Seller will settle the claims within 45 days from the date of the receipt of the claim at the Seller's office, subject to acceptance of the claim by the Seller. In case no response is received during this period the claim will be deemed to have been accepted.

(e) The Seller shall collect the defective or rejected goods from the location nominated by the Buyer and deliver the repaired or replaced goods at the same location under Seller's arrangement.

(f) Claims may also be settled by reduction of cost of goods under claim from bonds submitted by the Seller or payment of claim amount by Seller through demand draft in favour of Executive Director, Air Force School Jalahalli.

(g) The quality claims will be raised solely by the Buyer and without any certification / countersignature by the Seller's representative stationed in India.

20 <u>Warranty / Guarantee Clause</u>: The following warranty will form part of the contract placed on the successful bidder:-

(a) The Seller warrants that the material supplied to the Buyer shall be of the best quality and new in all respects and shall be strictly in accordance with the specification prescribed.

(b) The Seller hereby guarantees that the materials supplied to the Buyer shall be free from all types of defects /failures. If, within the period of warranty of comprehensive **60 months**, items supplied are reported by the Buyer to have failed to perform or discovered not to conform to the description and quality aforesaid, the Buyer shall be entitled to call upon the Seller to return the goods or such portion thereof as is found to be defective, by the Buyer within a maximum period of **<u>seven working days</u>**. The Seller shall either replace or rectify the same free of charge.

(i) The spares required for warranty repairs shall be provided free of cost by Seller. Rectification mentioned in warranty thereof, otherwise the Seller shall pay to the Buyer such compensation as may arise by reason of the breach of the warranty therein contained.

(ii) The wood materials should be Borer and termite proof, Superior strength.

21. <u>Product Support</u>: The product support clause will form part of the job placed on successful bidder that Seller should agree to provide product support for items supplied by the Seller for a **maximum period of 5 years (60 months) and 01 year onsite maintenance.**

Part V – Other Details

PART V – EVALUATION CRITERIA & PRICE BID ISSUES

1. **Evaluation Criteria.** The broad guidelines for evaluation of bids will be as follows:-

(a) Only those bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the RFP.

(b) The successful bidder will be decided upon the lowest price quoted by the particular bidder as per the price format given at Para 2 below.

(c) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected. If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

(d) The lowest acceptable bid will be considered for grant of Work Order after complete clarification and price negotiations as decided by Competent Authority.

(e) Any other criteria as applicable to suit a particular case.

2. **Pre-conditions.** The following pre-conditions prevail in this project: -

(a) Any clarifications in respect of the items are to be clarified with Air Force School, Jalahalli, Bengaluru represented by Executive Director.

(b) The interested bidder is required to bid for supply of items.

3. **Price Bid Format.** The price bid format is given at Appendix ‘B’ and bidders are required to fill this up correctly with full details.

4. **TDS.** Statutory TDS amount will be deducted from the invoice for the proposal labour/work services.

5. **LEGAL ADDRESSES OF BUYER AND SELLER.**

SELLER

BUYER

Air Force School, Jalahalli
Air Force Station, Jalahalli
Bengaluru-14
TELE: 080-24455069/63

Appendix A
(Ref to Para 4 (d)
of Part-II of RFP

TECHNICAL SPECIFICAITON FOR ON-GRID ROOF TOP SOLAR PV SYSTEM AT AIR FORCE SCHOOL, JALAHALLI

1. Schedule of Requirements – List of items/services required is as follows:

(a) Design Assumptions. Assumptions that are considered for calculating the energy yield (DC) are listed below.

Sl.No.	Parameters	Values
1	Tilt Angle–Fixed	15 Deg
2	Mounting on	RCC Roof Top
4	Shading	No Shading
5	Normal Operating Collector Temperature (NOCT)	46°C
6	Global Wiring resistance in loss fraction at STC	1.5%
7	Module Quality–Module efficiency loss	0%
8	Mismatch losses–Power loss at MPP	2%
9	Array soiling loss	1.5%

(b) Proposed Technology. The Grid connected solar photovoltaic power plant to be proposed shall be consisting of Poly Crystal line Solar modules with fixed tilt angle mounting systems and the solar inverters shall be on grid connected.

(c) Benefits of Proposed Technology. The benefit of crystalline technology as compared to other existing technologies is as follows:

(i) It occupies less area when compared to other thin film technologies
(ii) Proven technology over years
(iii) Proven Long-term performance (25Years)
(iv) Abundant semiconductor materials to support high volume production and demand.
(v) High volumes of production facilities throughout world
(vi) Higher efficiency of crystal line modules reduces the impact of the higher BOS costs

(d) Design summary

Total Installing capacity	**33 KWp**
PV Module	Poly Crystalline Modules
Grid Interactive String Inverter rating	33KW as per availability
Total numbers of Inverters	1
Approximate Average Units generated per day	120 Units/day

Module Tilt angle	12 to 15 degree
Module orientation	True South

(e) Solar PV Grid Connected System. A grid connected system is connected to a large independent grid (typically the public electricity grid) and feeds power into the grid. This is a form of decentralized electricity generation. The feeding of electricity into the grid requires the transformation of DC into AC by a special, grid-controlled inverter. A Central Inverter is a special type of Inverter (electrical) that is used in a renewable energy power system to convert direct current into alternating current and fed it into the utility grid. The technical name for a central inverter is "grid-inter active inverter". They may also be called synchronous inverters. Grid-interactive inverters typically cannot be used in standalone applications where utility power is not available. The Central Inverter is designed to convert solar electric (photovoltaic or PV) power into utility- grade electricity that can be used by the local load or sold to the local power company. In order to operate, the inverter must have grid power available and connected. It will not provide backup power if the AC grid fails. The inverter will automatically synchronize itself to grid. The inverter is provided with the isolation transformer internally with basic insulation.

(d) System Configuration The major components of the proposed power plant are as follows:

Sl.	Item	Description
1	Solar Module	IEC approved Crystalline solar modules
2	Module Mounting Structure	Fixed Mounting
3	Inverters Capacity	String inverters 33 KW
4	Junction box	DC Combiner Box (DCCB) (if required)
		AC Distribution Box(ACDB) (if required)
5	Cables	PVC Cu Cables
6	Lightning Protection	Lightning Protection Units (Optional)
7	Earthing Kit	Chemical Earthing Kit
8	Accessories	Accessories for cable interconnection &installation kit &conduits

(e) Solar PV Modules: Solar cells produce direct current electricity from light, which can be used to power equipment or to recharge a battery. Cells require protection from the environment and are usually packaged tightly behind a glass sheet. When more power is required than a single cell can deliver, cells are electrically connected together to form photo voltaic modules, or solar panels. A photovoltaic module is a packaged interconnected assembly of photovoltaic cells, which converts sunlight into electrical power. The cells are hermitically sealed between glass and back cover (Tedlar) to protect them from harsh environments. The detail technical specification of crystalline module is provided below.

(f) Crystalline modules:

Technical Specifications for Crystalline Modules	
Output power–Pmax (Watts)	Eg. 335Wp (varies as per the availability)
Voltage at Pmax	37.20V
Current at Pmax	7.88A
Open-circuit voltage	37.23V

Short circuit current	8.46A
Maximum system voltage(Volts)	IEC: DC 1000V
Weight (approximate)	19.5kg
Type of solar PV cell	Multi Crystalline silicon cell
Suitability	For on/ off grid connected system
Module output	Tyco electronics plug (male and female)
Certification	IEC61215,IEC 61730,UL1703
Power warranty for SPV Manufacturer	•25-yearlimitedwarrantyon power output & 5- year product warranty •25-yearperformancewarranty by Manufacturer -10 years:90% minimum performance -25years:80% minimum performance

(g) Module Mounting Structures: The module mounting structure will be designed for holding suitable number of modules in series. The frames and leg assemblies of the module mounting structures is of Mild Steel hot dip galvanized of suitable sections of Angle, Channel, Tubes or any other sections conforming to IS:2062 to meet the design criteria. All hardware considered for fastening modules with this structure are of very good quality of Stainless Steel (SS304). The module mounting structure will be designed in such a way that it will occupy minimum space without sacrificing the output from SPV panel sat the same time it will with stand severe wind speed up to a maximum 120kmph.

Technical Specification – Module Mounting Structures	
Material	MS Galvanized
Overall dimension	As per design
Coating	Power coating or Hot dip Galvanized with 80microns for MS
Wind rating	120km/hr
Tilt angle	Fixed tilt angle
Fixing type	SS 304 fasteners

(h) Junction Boxes: The junction boxes are of dust, vermin, and water proof and made of Thermo Plastic. The terminals will be connected to copper bus-bar arrangement of proper sizes. The junction boxes will have suitable cable entry points fitted with cable glands of appropriate sizes for both incoming and outgoing cables.

Technical Specification – Junction Boxes if required	
Material	Thermoplastic
Type	Dust, Vermin & Waterproof
Hardware	SS 304
Cable Gland	Thermoplastic
Protection	IP65

(j) String Inverter. **BESCOM approved Grid Tie Solar Inverter** combinations will be used in this project to convert DC power into AC and also to export the generated power into public grid. The Grid Tie Solar Inverter is designed to convert solar electric (photovoltaic or PV) power into utility-grade electricity that can be sold to the local power company. In order to operate, the inverter must have grid power available and connected. It will not provide backup power if the AC grid fails. The inverter will automatically synchronize itself to grid. The inverter is provided with the isolation transformer internally with basic insulation.

With the latest high frequency technology the electrically isolated central inverters achieve peak efficiencies up to 95.6%. Highly efficient and reliable with intelligent MPP Ttracking gets maximum performance from solar modules under all operating conditions.

With the MPPT concept, PV modules connected in series (strings) or strings at the same voltage connected in parallel are always connected to the central inverter so that the amount of wiring in the photovoltaic plant is substantially reduced. The photovoltaic plant can also be optimized to the input voltage range of the central inverter by the interconnection in the strings. The compact design of the central inverter takes into account the market requirements for efficient inverter solutions with higher output ranges.

(k) Inverter salient features:

- Wider input DC Voltage range and AC Frequency range.
- De-rating of inverters has been customized to Indian temperatures
- Efficiencies are higher when it is designed at the maximum input DC Voltage
- Has the ESCOM (Electricity Services Company) letter on confirmation of certifications.
- Has been checked in the field at various test sites across India under rugged conditions.
- Would be the first to get certified by SEC (Solar Energy Centre).

(l) Cables: The size of the cables between array inter connections, array to junction boxes, junction boxes to inverter etc is so selected to keep the voltage drop and losses to the minimum. DC cables are solar rated and suitable for the interconnection of the various elements of PV systems. The bright annealed 99.97% pure bare copper conductors that offer low conductor resistance, they result in lower heating thereby increase in life and savings in power consumption. These wires are insulated with a special grade PVC compound formulated and manufactured in-house. The skin coloration offers high insulation resistance and long life.

Technical Specification – Cables	
Type	PV Insulated, sheath & UV resistance
Material	Copper
Voltage	Max. 1100V
Test Voltage	650V/1.1V
Temperature	10–70°C
Color	Red /Black /Green

(m) Earthing & Lightning Protection:

(i) Earthing: The array structure of the PV yard, metal cable tray, metal elements in electrical cabinets and inverters will be grounded properly using adequate number of earthing kits. All metal casing/shielding of the plant shall be thoroughly grounded to ensure safety of the power plant. The earthing system design will be according to the IS-3043, Indian electricity rules.

(ii) Lightning Protection: The SPV Power Plant shall be provided with lightning & over voltage 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. Protection system will be based on Early Streamer Emission lightning conductor air terminals. By using galvanized iron tapes all air terminals will be connected to respective stations and an earthing grid.

(n) Description of Material. The brief bill of material for the Solar PV Power Plant is provided below as ready reference.

S/N	Description	33 KW
1	Crystalline Modules	30KWp +/- 50W
2	Module Mounting Structures	1Set
3	DC Combiner Boxes	As required
4	String Inverters	33KW
5	DC Cable	As required
6	AC Cable	As required
7	Earthing	3 Set
8	Accessories	1 Set
Supply, installation & Commissioning of 33 KWp On-Grid Solar roof top PV(Battery Less) System including all the necessary accessories with GST		One Set

Appendix 'B'
(Ref to Para 4 (e)
of Part – II of RFP

COMMERCIAL BID FOR ON-GRID ROOF TOP SOLAR PV SYSTEM AT AIR FORCE SCHOOL, JALAHALLI

Sl No	Description with feature & Specifications	Quantity Required	Unit price	Taxes	Total price
1	Supply, installation & Commissioning of 33 KWp On-Grid Solar Roof Top PV (Battery Less) System including all the necessary accessories	One Set			
Includes: • Project Design, Planning, Engineering, Documentation, Supervision of Installation and Commissioning work • SGA cost including Govt. Approval related work, material procurement, material quality inspection & project management. • Transportation & Insurance (if required) • **5 years Warranty for the complete system, 1 year onsite maintenance.**					
				Total	

Appendix 'C'
(Ref to Para 4 (f)
of Part – II of RFP

DETAILS OF BIDDER FIRM BIDDING FOR ON-GRID ROOF TOP SOLAR PV SYSTEM AT AIR FORCE SCHOOL, JALAHALLI

1	Nature of Service Provider	
2	Year of Establishment	
3	Registered Postal Address with Telephone No	
4	Name and mobile No of Contact person	
5	Address of Branch (Local or in State)	
6	Name and address of Directors, in case of Company	
7	Name and Address of sole Proprietor	
8	Name and address of partners in case of a partnership firm	
9	Name of Bankers and Branch with full address	
10	Type of Account & Number	

Signature of Authorised person with date

Appendix 'D'
(Ref to Para 4 (g)
of Part – II of RFP

DETAILS OF BIDDER FIRM BIDDING FOR ON-GRID ROOF TOP SOLAR PV SYSTEM AT AIR FORCE SCHOOL, JALAHALLI

1. The following documents are to be submitted by the bidders for above mentioned work along with Technical/ Financial bids: -

(a) A copy of Registration of firm.

(b) Copy of valid PAN card in the name of the firm or in the name of Proprietor of the firm and Income Tax return of the firm or Proprietor for the last three years.

(c) Copy of complete RFP with ink signature of authorised person of the bidder firm on each page of RFP.

(d) Attested copies of Service Tax Registration Certificate along withlatest receipt of premium paid should be attached failing which the certificate/receipt will be considered invalid.