# Tender Document for Grid connected Rooftop Solar PV System August 2017

SUPPLY, INSTALLTION, COMMISSIONING & MAINTENANCE OF GRID CONNECTED NET METERING ROOFTOP SOLAR PHOTOVOLTAIC SYSTEM AT WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415

THE DIRECTOR,
WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG,
SANGLI 416415

# THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415

### **TENDER NOTICE**

On behalf of The Director, Walchand College of Engineering, Vishrambag, Sangli 416415 (Maharashtra - INDIA) invites sealed tender on prescribed form, the details are following: 01. RFS Tender No.: WCE/Tender/SPVP/17-18/001 02. Name of the work: DESIGN, ENGINEERING, MANUFACTURE, SUPPLY, ERRECTON & INSTALLTION. TESTING & COMMISSIONING AND MAINTENANCE OF GRID CONNECTED ROOFTOP SOLAR PHOTOVOLTAIC SYSTEM PROJECT IN CAPEX MODEL AT WALLCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 (110 kWp). **03.** Estimated Cost: INR 66,00,000/- **04.** Cost of Tender Documents: INR.10,000/- (non-refundable) **05.** Bid Bond amount (Earnest money deposit): INR 3.30 Lakhs (or calculated based on capacity formula as given in the tender document) whichever is maximum **06.** Period of completion: 12 weeks Working place: Walchand College of Engineering, Vishrambag, Sangli 416415 08. Date & Time for submission of Tender: 24/08/2017 16:00 hrs. 09. How the tender documents can be obtained: www.walchandsangli.ac.in **10.** Minimum Eligibility Criteria: (i) The firm should have physically completed in last three financial years ( i.e. current year and three previous financial years) at least one similar single work for minimum value of 100% of advertised tender value at the time of opening of tender (iii) work experience: Design, Manufacture, supply erection, testing commissioning, operation & Maintenance for INR 50,00,000/- or above (iii) Total contract amount received during the last 3 financial years including the current financial year should be minimum of 1.5 crore value. (iv) Academia having Technology and manufacturing setup with JV for EPC will also be considered 11. Tender Notice RFS No.: WCE/Tender/SPVP/17-18/001 and tender document will be available on the website from 24/08/2017 to 30/09/2017. 12. The Director, WCE, Sangli reserves the right to accept or reject any or all tenders without assigning any reasons.

Prof. Dr. Parishwad G.V. Director, WCE, Sangli 416415

### **HOW TO DOWNLOAD THE TENDER DOCUMENTS:**

Interested bidders can download the full tender document at link www.walchandsangli.ac.in.

E- Tender Notice Document for Grid connected Rooftop Solar PV, Aug 2017 invited by THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415

DESIGN, ENGINEERING, MANUFACTURE, SUPPLY, ERRECTON & INSTALLTION, TESTING & COMMISSIONING AND MAINTENANCE OF GRID CONNECTED ROOFTOP NET METERING SOLAR PHOTOVOLTAIC SYSTEM PROJECT IN CAPEX MODEL NET METERING AT WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415

### **KEY DETAILS:**

- 1) Completion Period 12 (Twelve) weeks (including monsoon period)
- 2) Documents on sale Document can be downloaded from 16:00 hrs. on 24/08/2017 to 17:00 hrs on 30/09/2017 from WCE tender portal.
- 3) Cost of documents INR 10,000/-(Ten Thousand Only) non-refundable (exclusive of applicable taxes) by Demand Draft (DD) drawn on any Nationalised Bank in favour of "Director, Walchand College of Engineering, Vishrambag, Sangli 416415", payable at Sangli. This demand draft should be submitted at the time of bid submission.
- 4) Last date of submission of queries for pre-bid by the bidder Up to 17:00 hrs on 12/09/2017
- 5) Pre-bid Meeting On 12/09/2017 at 11:00 hrs. at the Central office of BENEFICIARY, Walchand College of Engineering, Vishrambag, Sangli 416415
- 6) Tender Bid Bond amount Rs.3,30,000/- (Rupees Three Lakhs Thirty Thousand only) or as calculated as per the formula given (whichever is maximum) to be furnished through Demand Draft (DD) or BG drawn on any Nationalised Bank in favour of "Director, Walchand College of Engineering, Vishrambag, Sangli 416415", payable at Sangli along with Bid.
- 7) Date & Time of Physical tender submission of hard copy up till 14:00 hrs on 21/09/2017 at Walchand College of Engineering, Vishrambag, Sangli 416415.
- 8) Date & Time of Opening of the Tender Technical bid On 21/09/2017 at 15:00 hrs or as decided by the authority at Walchand College of Engineering, Vishrambag, Sangli 416415
- 9) Date & Time of Opening of the Tender Financial bid On 21/09/2017 at 16:00 hrs or as decided by the authority at the Walchand College of Engineering, Vishrambag, Sangli 416415

Sale of document, submission and other details are available on website www.walchandsangli.ac.in

Request for Selection (RFS) of Bidders for Implementation of Grid Connected Roof Top Solar PV System in Sangli District Under the Grid connected Net Metering by MSEDCL for Educational Trusts in State of Maharashtra of India.

### **RFS No**

WCE/Tender/SPVP/17-18/001 Dated: 24th Aug. 2017

# THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415

Telephone No: 9860159944/9970700851/9421837331

Website: www.walchandsangli.ac.in Email: registrar@walchandsangli.ac.in

Aug, 2017

### **Table of Contents**

SECTION - I	12
A. INTRODUCTION, BID DETAILS AND INSTRUCTIONS TO THE BIDDERS	12
B. CONDITIONS OF CONTRACT	27
SECTION-II	. 35
EVALUATION CRITERIA AND SUBSIDY DISBURSEMENT	. 35
SECTION-III	48
TECHNICAL SPECIFICATIONS	. 48
SECTION-IV	. 61
PRICE BID	61
SECTION -V	. 66
FORMATS FOR SUBMITTING RFS	. 66
ANNEXURE-A: DOCUMENTS REQUIRED FOR PROJECT SANCTION	. 89
ANNEXURE-B: LIST OF BANKS	90

Cost of Tender Document (non refundable) Rs.10,000/(Rupees Ten Thousand Only)

## THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415

RFS No: WCE/Tender/SPVP/17-18/001

**Dated:** 24<sup>th</sup> Aug.2017

THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 (hereinafter called "BENEFICIARY"), invites bids from the eligible bidders to participate in the Request for Selection (RFS) of Bidders for Design, manufacture, supply, erection, testing and commissioning including warranty, operation & maintenance of Roof Top Solar PV power system at Sangli in Maharashtra State in India, the location herein after mentioned as "BENEFICIARY"

For the implementation of above mentioned work, bidders should submit their bid proposal/application along with all supporting documents complete in all aspect on or before 21<sup>th</sup> Sept.2017 up to 14:00 hrs in the office of "THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 in prescribed format.

Bidder shall submit bid proposal along with non-refundable Tender fee, complete in all respect as per the Bid Information sheet. Technical bids will be opened on 21<sup>th</sup> Sept. 2017 at 15:00 hrs. Financial bids of the technically successful bidders will be opened on 21<sup>th</sup>Sept.2017 at 16:00 hrs. in presence of authorised representatives of bidders/applicants who wish to be present. Bid proposals received without or lesser than the prescribed Tender fee and Earnest Money Deposit (Bid Bond) can be rejected directly. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.

Bid documents which include Eligibility criteria, "Technical Specifications", various conditions of contract, formats, etc. can be downloaded from website www.walchandsangli.ac.in and cost of tender document Rs. 10,000/- (non-refundable) should be given at the time of submission of bid in the form of Demand Draft. Any amendment (s)/corrigendum/clarifications with respect to this Bid shall be uploaded on www.walchandsangli.ac.in website only. The Bidder should regularly follow up for any Amendment/Corrigendum/Clarification on the above website.

Authenticated By:

(Signature) .....Sd/-.....
The Director,

Walchand College of Engineering, Vishrambag,, Sangli

### **DISCLAMIER:**

(This is an indicative RFS Document / Guidelines for Grid connected Net Metering Rooftop SPVP System. The bidders are requested to contact the concerned officer and carry out site study before submitting the bid offer)

- 1. Though adequate care has been taken while preparing the RFS document, the Bidders/Applicants shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within 5 (five) days from the date of notification of RFS/Issue of the RFS documents, it shall be considered that the RFS document is complete in all respects and has been received/accepted by the Bidder.
- 2. BENEFICIARY reserves the right to modify, amend or supplement this RFS document including all formats and Annexure.
- 3. While this RFS has been prepared in good faith, neither BENEFICIARY nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFS, even if any loss or damage is caused by any act or omission on their part.
- 4. The bidder/applicant is expected to conduct site visit and necessary survey and collect all related data on his own and at his cost including the civil structure, radiation at site etc. The data given in this documents are guiding factors only.

### **BID INFORMATION SHEET**

Document Description	I. This RFS document comprises for "Bidding process for 110 kWp" at site with the following details:: a. 110 kWp bidding is for CAPEX model Bidder can submit bid for CAPEX as per above up to the maximum aggregate bid capacity of 110 kWp at site only as per Clause 2.4.2 of Section-I.		
RFS No. & Date	RFS No: WCE/Tender/SPVP/17-18/xxxxx Dated: 24 <sup>th</sup> Aug.2017		
Broad Scope of Work for Bidding	Design, manufacture, supply, erection, testing and commissioning including warranty, operation & maintenance of Roof Top Grid connected Net Metering Solar PV power system.		
Pre-bid queries submission last date	Up to 17.00 hrs. on 12/09/2017		
Pre-bid Conference/ Clarification Meeting	A pre-bid conference shall be held on 12/09/2017 at 14:00 hrs at THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415		
Last date of submission of the tender	Physical submission of hard copy up till 16.00 hrs on 21/09/2017 in WCE Central Office, Vishrambag, Sangli.		
Date and time of opening of the Tender Technical Bid	On 21/09/2017 at 15.00 hrs or as decided by the authority at the WCE, Central Office, Vishrambag, Sangli.		
Date and Time of opening the Tender Financial Bid	On 21/09/2017 at 16.00 hrs or as decided by the authority at the Central Office, WCE, Vishrambag, Sangli		
Bid Bond (Earnest Money deposit)	Based on the Bid capacity proposed by the bidder in the bid, Bid Bond shall be furnished for Rs. 330,000/-(Rupees Three Lakhs Thirty Thousand only) or as calculated as per the formula given (whichever is maximum) to be furnished through Demand Draft (DD) or BG drawn on any Bank listed in Annex B in favour of "The Director, Walchand College of Engineering, payable at Sangli along with Bid as per Clause 3.12 of Section – I for details		
Performance Security(PBG)	PBG amount shall be furnished by the successful bidder after issue of Letter of Allocation by The Director, Walchand College of Engineering, Vishrambag, Sangli Please refer Clause 3.13 of Section-I for details.		
Name, Designation, Address and other details (For Submission of	I/C Registrar Dr. D. B. Kulkarni Account Section WCE Central Office, Central Office, WALCHAND COLLEGE OF		
	Contract Cinco, Tracer Intro		

Response to RFS)	ENGINEERING, Vishrambag, Sangli 416415

**Important Note:** Prospective Bidders are requested to remain updated for any notices/amendments/clarifications etc. to the RFS document through the website www.walchandsangli.ac.in

No separate notifications will be issued for such notices/amendments/clarification etc. in the print media or individually.

All the information related to this RFS shall be updated on THE DIRECTOR , WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 – website: www.walchandsangli.ac.in

### 1.0. DEFINITIONS & ABBREVIATIONS

In this "Bid / RFS Document" the following words and expression will have the meaning as herein defined where the context so admits:

- 1.1. " Affiliate" shall mean a company that either directly or indirectly
  - a. controls or
  - b. is controlled by or
  - c. is under common control with Bidding Company and "control" means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company.
- 1.2. "B.I.S" shall mean specifications of Bureau of Indian Standards (BIS);
- 1.3. "Bid" shall mean the Techno Commercial and Price Bid submitted by the Bidder along with all documents/credentials/attachments annexure etc., in response to this RFS, in accordance with the terms and conditions hereof.
- 1.4. "Bidder/Bidding Company" shall mean Bidding Company submitting the Bid. Any reference to the Bidder includes Bidding Company / including its successors, executors and permitted assigns as the context may require;
- 1.5. "Bid Bond" shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder under Clause 3.12 of this RFS, in the prescribed Format- 3;
- 1.6. "Bid Deadline" shall mean the last date and time for submission of Bid in response to this RFS as specified in Bid information Sheet;
- 1.7. "Bid Capacity" shall means capacity offered by the bidder in his Bid under invitation.
- 1.8. "CEA" shall mean Central Electricity Authority.
- 1.9. "Chartered Accountant" shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
- 1.10. "Competent Authority" shall mean (Designation of Competent Authority) of BENEFICIARY himself and/or a person or group of persons nominated by MD for the mentioned purpose herein;
- 1.11. "Commissioning" means Successful operation of the Project / Works by the Contractor, for the purpose of carrying out Performance Test(s) as defined in RFS.

- 1.12. "Company" shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013 including any amendment thereto;
- 1.13. "Capacity Utilization Factor" (CUF) shall mean the ratio of actual energy generated by SPV project over the year to the equivalent energy output at its rated capacity over the yearly period.
  CUF = actual annual energy generated from the plant in kWh / (installed plant capacity in kW \* 365 \* 24).
- 1.14. "Eligibility Criteria" shall mean the Eligibility Criteria as set forth in Clause 3.6 of this RFS;
- 1.15. "Financially Evaluated Entity" shall mean the company which has been evaluated for the satisfaction of the Financial Eligibility Criteria set forth in Clause 3.6.3 hereof;
- 1.16. "IEC" shall mean specifications of International Electro-technical Commission;
- 1.17. "kWp" shall mean kilo-Watt Peak;
- 1.18. "kWh" shall mean kilo-Watt-hour:
- 1.19. **"MNRE"** shall mean Ministry of New and Renewable Energy, Government of India:
- 1.20. "Minimum Bid Capacity" shall mean 80 kWp which is the minimum capacity for which the Bidder can submit its Bid. Bidder(s) quoting less the minimum bid capacity shall be out-rightly rejected;
- 1.21. "Maximum Bid Capacity" shall mean 120 kWp which is the maximum capacity for which the Bidder can submit its Bid.;
- 1.22. "O&M" shall mean Operation & Maintenance of Rooftop Solar PV system for 5 years;
- 1.23. "Owner of the project" shall mean anyone who has ownership (including lease ownership also) of the roof and is the legal owner of all equipments of the project. Owner of the project can enter into a PPA with the consumer (s) of power for supply of solar power for at least 25 years from the date of Commissioning of project.
- 1.24. "Project Cost / Project Price" shall mean the price offered by the Bidder for the Scope of work as per RFS document for a State.
- 1.25. "Part-A" Projects size which are from 100 kWp to 500kWp capacity for identified locations of concerned Urban Local Bodies / MSEDCL, etc.

- 1.26. "Part-B" Projects size which are less than 100 kWp for Residential /Household sectors
- 1.27. "Project capacity" means Capacity in 110 kWp offered by the Bidder for each Site consisting of single roof top. The project capacity specified is on "DC" output Side only.

### 1.28. "Performance Ratio" (PR) means

"Performance Ratio" (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured. PR= (Measured output in kW / Installed Plant capacity in kW \* (1000 W/m2/Measured radiation intensity in W/m2).

- 1.29. "Parent" shall mean a company, which holds more than 51% equity either directly or indirectly in the Bidding Company or Project Company or a Member in a Consortium developing the Project
- 1.30. "**Project Company**" shall mean Company incorporated by the bidder as per Indian Laws in accordance with Clause no 3.4
- 1.31. "**Price Bid**" shall mean Envelope III of the Bid, containing the Bidder's quoted Price as per the Section- IV of this RFS;
- 1.32. "Qualified Bidder" shall mean the Bidder(s) who, after evaluation of their Techno Commercial Bid as per Clause 3.1 stand qualified for opening and evaluation of their Price Bid:
- 1.33. "RFS" shall mean Request for Selection (RFS)/Bid document/Tender document
- 1.34. "RESCO" shall mean Renewable Energy Service Companies;
- 1.35. "RESCO model" shall mean where the bidders intend to take a roof top owned by some other entity on mutually agreed terms and conditions from the roof top owner(s) and enters into the PPA with rooftop owner / MSEDCL / others for supply of Solar power for 25 years from the date of Commissioning of project.
- 1.36. "Statutory Auditor" shall mean the auditor of a Company appointed under the provisions of the Companies Act, 1956 or under the provisions of any other applicable governing law;
- 1.37. "Successful Bidder(s) /Contractor/Project Developers(s)" shall mean the Bidder(s) selected by BENEFICIARY pursuant to this RFS for Implementation of Grid Connected Roof Top Solar PV System as per the terms of the RFS Documents, and to whom an Allocation Letter has been issued;

- 1.38. "THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 shall mean actual user as THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 herein after referred to as WCE, Sangli or The Beneficiary.
- 1.39. "SNA" shall mean State Nodal Agency (MEDA).
- 1.40. "Subsidy" shall mean 30% (or latest applicable subsidy as per MNRE) of Project Cost quoted by the Successful Bidder for THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAM BAUGH, SANGLI 416415, sanctioned by MNRE, Govt. of India and disbursed by BENEFICIARY.
- 1.41. "Tendered Capacity" shall mean the Total aggregate capacity in MW as indicated in table of Clause 2.1.3 against each State, proposed to be allocated by BENEFICIARY to the Successful Bidder through this bidding process as per terms and conditions specified therein;
- 1.42. "Ultimate Parent" shall mean a company, which owns at least more than fifty percent (51%) equity either directly or indirectly in the Parent and Affiliates.
- 1.43. "Wp" shall mean Watt Peak.
- 1.44. **1MWp** for the purpose of conversion in **kWp** shall be considered as 1000kWp.

### **INTERPRETATIONS**

- 1. Words comprising the singular shall include the plural & vice versa
- 2. An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
- 3. A time of day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.
- 4. Different parts of this contract are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this contract, they shall be interpreted in a harmonious manner so as to give effect to each part.
- 5. The table of contents and any headings or sub headings in the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.

### SECTION - I A. INTRODUCTION, BID DETAILS AND INSTRUCTIONS TO THE BIDDERS

### 1. INTRODUCTION

1.1 SUPPLY, INSTALLTION, COMMISSIONING AND MAINTENANCE OF GRID CONNECTED ROOFTOP SOLAR PHOTOVOLTAIC SYSTEM AT THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 (Herein after referred to as BENEFICIARY for all purposes) OF WCE, SANGLI (M.S.), INDIA

### 1.2 Bidder can:

- a. Submit bids under CAPEX Model for the Locations mentioned in RFS as per Clause 2.1.2. And 2.1.4.
- 1.3 The scheme targets installation of grid-connected roof top solar PV projects on the roofs of AT WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415 (M.S.),INDIA. The generated solar power may be utilized for captive application and the surplus power will be fed to the grid. The scheme aims to reduce the fossil fuel based electricity load on main grid and make building self-sustainable from the point of electricity, to the extent possible.
- 1.4 BENEFICIARY, which expression shall also include its successors and permitted assigns, hereby invites interested companies to participate in the bidding process for the selection of Successful Bidder(s) for implementation of large scale grid-connected roof top Solar Photovoltaic Projects under <u>JNNSM</u> or related scheme in the Maharashtra indicated herein under.
- 1.5 The Bidder is advised to read carefully all instructions and conditions appearing in this document and understand them fully. All information and documents required as per the bid document must be furnished. Failure to provide the information and / or documents as required may render the bid technically unacceptable.
- 1.6 The bidder shall be deemed to have examined the bid document, to have obtained his own information in all matters whatsoever that might affect the carrying out the works in line with the scope of work specified elsewhere in the document at the offered rates and to have satisfied himself to the sufficiency of his bid. The bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools and labour involved, wage structures and as to what all works he has to complete in accordance with the bid documents irrespective of any defects, omissions or errors that may be found in the bid documents.

### 2.0 BID DETAILS:

- 2.1 Bids in (CAPEX Model): The bidding process under this RFS of the rooftop scheme is for 110 kWp for CAPEX model. Bidder can apply CAPEX Model as tabulated in Clause 2.1.4 below but subject to the maximum aggregate capacity of 110 kWp as per Clause 2.4.2 of RFS.
  - 2.1.1 Bids are invited from the prospective bidders for the tendered capacity as indicated below against above given site based on the Project Cost (CAPEX Model) Based on Project cost quoted for above site by the Successful Bidders, subsidy @ 30 % or as prevailing at the time of execution including MNRE+MEDA of the project cost by the Successful Bidder will be made available to the beneficiary for the allocated capacity subject to Clause 6.3.2 of RFS.
  - 2.1.2 **Maximum allowable Project cost** for CAPEX Model is at the rate of Rs.60/- per Wp (As per latest MNRE Benchmark Cost) and the bids with project cost (bids for total capacity should be less than or equal to Rs 60/Wp) more than Rs.62/- Per Wp will not be considered for evaluation and award.

### 2.1.3 NOT APPLICABLE

2.1.4 The Sangli, Maharashtra, where the project is required to be installed along with the respective capacity for Site is indicated in the table below.

### LIST OF SITE AND CAPACITY

SI. No	Location/State	Tendered Capacity (kWp) 110  CAPEX  capacity (kWp)		
		Α		
1.	Administrative Building Terrace,			
	WALCHAND COLLEGE OF	110		
	ENGINEERING,			
	VISHRAMBAG, SANGLI			
	416415			
Total	Total Tender Capacity: 110 kWp for WALCHAND COLLEGE OF ENGINEERING,			

VISHRAMBAG, SANGLI 416415

### 2.2 EXPECTED GENERATION:

It is expected that considering the annual average radiation at Sangli city area the generation from the roof top SPVP installation must be at least 5kWh/day/kW on annual average generation basis.

### 2.3 SIZE OF THE PROJECTS:

- 2.3.1 The size of project shall be in the range of 80 kWp to 120 kWp for identified location of concerned MSEDCL. One project may however comprise of several rooftop units. Each roof top unit can separately connect with the grid and may have separate meters.
- 2.3.2 The bidder must note that the Solar Power generated by the Rooftop SPVP must be available even in case of total Grid failure and without any DG backup. Use of any kind of batteries will not be allowed for this purpose.
- 2.3.3 Where ever any IPR issue would be concerned it would be total responsibility of the bidder to comply with the related legal provisions. MDWCE will not have any kind of liability for infringement of IPR.

### 2.4 BID CAPACITY

- 2.4.1 Bidder can submit the bid for maximum capacity of 110 kWp only for location indicated in table in Clause 2.1.4 Bidder shall quote in its price bid the capacities accordingly.
- 2.4.2 However, a Bidder can apply and is eligible to apply for a maximum capacity of 110 kWp for the states indicated under CAPEX.

#### **3 INSTRUCTIONS TO THE BIDDERS**

- 3.1 Bidder must meet the eligibility criteria independently as Bidding Company or as a Bidding Consortium with one of the members acting as the Lead Member of the Bidding Consortium.
- 1) Bidder will be declared as a Qualified Bidder based on meeting the eligibility criteria and as demonstrated based on documentary evidence submitted by the Bidder in the Bid.
- 2) In case of a Bidding Consortium the Financial Eligibility criteria like Annual turnover or Net worth as indicated in Clause 3.3.3, shall be fulfilled by the Lead Member or Parent Company of the Lead Member while the Technical Eligibility Criteria shall be fulfilled by consortium member.
- 3) In case bidder submitting bid through consortium, a Consortium Agreement as per the Format-10 shall be furnished along with the bid.
- 4) Financial or Technical Consortium is allowed in this Bidding Process as per Format- 10.

- 5) Further in-case where the bidding company has used the financial eligibility criteria of its parent company then it needs to be ensured that any change in the controlling equity of the Bidding company requires prior approval of THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415
- 6) All members of the consortium should be registered as company only. However, Member of the Consortium may form the Project Company as specified in Clause 3.4
- 7) Bidder including its member of the consortium can submit one bid only.

### 3.2 USE OF TECHNICAL AND/OR FINANCIAL STRENGTH OF PARENT COMPANY

- 3.2.1 Bidder can however use the technical and financial strength of its Parent Company or Affiliate to fulfil the Technical and/or Financial Eligibility criteria mentioned below. Members of consortium can also use the credentials of the parent company or Affiliate to fulfil the eligibility requirement.
- 3.2.2 In above case, Bidders shall submit an Undertaking from the Parent Company as per Format- 9 and also furnish a certificate of relationship of Parent Company or Affiliate with the Bidding Company as per Format-8. Company Secretary Certificate towards shareholding pattern of the Parent Company and the Bidding Company along with a Board resolution from the Parent Company shall also be submitted.
- 3.2.3 Only Technical consortium is allowed for submission of Bids.

### 3.3 ELIGIBILITY CRITERIA

### 3.3.1 **GENERAL**

(a) The Bidder should be either a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto and engaged in the business of Solar Power.

A copy of certificate of incorporation shall be furnished along with the bid in support of above.

### 3.3.2 TECHNICAL ELIGIBILITY CRITERIA:

The Bidder should have installed & commissioned at least one Grid connected Solar PV Power Project having a capacity of not less than 110 kW which should have been commissioned at least six months prior to Techno-Commercial Bid Opening date. The list of project commissioned at least 6 months prior to Techno-Commercial Bid Opening date, indicating

whether the project is grid connected, along with a copy of the Commissioning certificate and Work order / Contract / Agreement/ from the Client/Owner shall be submitted in support of Clause 3.3.2 above. The expected daily generation on annual average basis must be as per clause 2.2

### 3.3.3 FINANCIAL ELIGIBILITY CRITERIA:

- (a) The Bidder should have an Annual Turnover or Net worth as indicated below.
- i. The Annual turnover of Rupees 1.5 Crore per year in the last 3 financial years preceding the Bid Deadline subject to the condition that the Bidder should at least have completed one financial year.

### OR

ii. Net worth equal to or greater than the value calculated at rate of Rs. 2.00 Crore per MW of capacity offered by the Bidder in its Bid. The Computation of Net worth shall be based on unconsolidated audited annual accounts of the last financial year immediately preceding the Bid Deadline. Share premium can be included in the Net-worth calculation in case of listed companies in India only.

In case of more than one Price Bid submitted by the Bidder, the financial eligibility criteria must be fulfilled by such Bidder for the sum total of the capacities being offered by it in its Price Bid.

In case quoted Bid capacity is less than 1 MW, Annual Turnover/Net worth requirements shall be on pro-rata basis.

The formula of calculation of net-worth shall be as follows:

Net-worth = (Paid up share capital) + {(Free reserves - Share premium) +Share premium of listed companies)} - (Revaluation of reserves)-(Intangible assets) - (Miscellaneous expenditure to the extent not written off and carry forward losses).

For the purposes of meeting financial requirements, only unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least twenty six percent (26%) equity in each company whose accounts are merged in the audited consolidated accounts and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of the Bid.

Bidders shall furnish documentary evidence as per the **Format -7**, duly certified by Authorized Signatory and the Statutory Auditor / Practising Chattered Accountant of the Bidding Company in support of their financial capability.

### 3.4 INCORPORATION OF A PROJECT COMPANY

- 3.4.1 In case the Bidder wishes to incorporate a Project Company, in such a case, Bidder if selected as a Successful Bidder can incorporate a Project Company. Bidder shall be responsible to get all clearance required/obtained in the name of the Bidding Company transferred in the name of the Project Company.
- 3.4.2 The aggregate equity share holding of the Successful Bidder in the issued and paid up equity share capital of the Project Company shall not be less than fifty one percent (51%) up to a period of two(2) years from the date of commissioning of the entire Sanctioned Capacity of the Project Developer.

### 3.5 BID SUBMISSION BY THE BIDDER

- 3.5.1 The information and/or documents shall be submitted by the Bidder as per the formats specified in Section-IV & Section V of this document.
- 3.5.2 Strict adherence to the formats wherever specified, is required. Wherever, information has been sought in specified formats, the Bidder shall refrain from referring to brochures /pamphlets. Non-adherence to formats and / or submission of incomplete information may be a ground for declaring the Bid as non-responsive. Each format has to be duly signed and stamped by the authorized signatory of the Bidder.
- 3.5.3 The Bidder shall furnish documentary evidence in support of meeting Eligibility Criteria as indicated in Clause no. 3.3.1, 3.3.2 and 3.3.3 to the satisfaction of BENEFICIARY and shall also furnish unconsolidated/consolidated audited annual accounts in support of meeting financial requirement, which shall consist of balance sheet, profit and loss account, profit appropriation account, auditor's report, etc., as the case may be of Bidding Company or Financially Evaluated Entity for any of the last three(3) financial years immediately preceding the Bid Deadline which are used by the bidder for the purpose of calculation of Annual Turnover or of last Financial Year in case of Net Worth.
- 3.5.4 In case the annual accounts for the latest financial year are not audited and therefore the bidder cannot make it available, the applicant shall give certificate to this effect from their directors. In such a case, the Applicant shall provide the Audited Annual Reports for 3(Three) years preceding the year or from the date of incorporation if less than 3 years for which the Audited Annual Report is not being provided.

### 3.6 BID SUBMITTED BY A BIDDING COMPANY:

The Bidding Company should designate one person to represent the Bidding Company in its dealings with BENEFICIARY, The person should be authorized to perform all tasks including, but not limited to providing information, responding to enquires, signing of Bid etc. The Bidding Company should submit, along with Bid, a Power of Attorney in original (as per Format-6), authorizing the signatory of the Bid.

### 3.7 CLARIFICATIONS AND PRE-BID MEETING

- 3.7.1 The BENEFICIARY will not enter into any correspondence with the Bidders, except to furnish clarifications on RFS Documents, if necessary. The Bidders may seek clarifications or suggest amendments to RFS in writing, through a letter or by fax (and also soft copy by e-mail) to reach BENEFICIARY at the address, date and time mentioned in Bid information sheet.
- 3.7.2 The Bidder(s) or their authorized representative(s) is /are invited to attend pre-bid meeting(s), which will take place on date(s) as specified in Bid information sheet, or any such other date as notified by **BENEFICIARY**.
- 3.7.3 The purpose of the pre-bid meeting will be to clarify any issues regarding the RFS including in particular, issues raised in writing and submitted by the Bidders.
- 3.7.4 BENEFICIARY is not under any obligation to entertain/ respond to suggestions made or to incorporate modifications sought for.

### 3.8 AMENDMENTS TO RFS

- 3.8.1 At any time prior to the deadline for submission of Bids, the BENEFICIARY may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFS document by issuing clarification(s) and/or amendment(s).
- 3.8.2 The clarification(s) / amendment(s) (if any) may be notified on BENEFICIARY website www.walchandsangli.ac.in at least 2 (Two) days before the proposed date of submission of the Bid. If any amendment is required to be notified within 2 (Two) days of the proposed date of submission of the Bid, the Bid Deadline may be extended for a suitable period of time.
- 3.8.3 BENEFICIARY will not bear any responsibility or liability arising out of non-receipt of the information regarding Amendments in time or otherwise. Bidders must check the website for any such amendment before submitting their Bid.

- 3.8.4 In case any amendment is notified after submission of the Bid (prior to the opening of Techno-Commercial Bid. Bids received by BENEFICIARY shall be returned to the concerned Bidders on their request through registered post or courier and it will be for the Bidders to submit fresh Bids as the date notified by the BENEFICIARY for the purpose.
- 3.8.5 All the notices related to this Bid which are required to be publicized shall be uploaded on website www.walchandsangli.ac.in

### 3.9 BIDDING PROCESS

### **3.9.1 BID FORMATS**

3.9.1.1 The Bid in response to this RFS shall be submitted by the Bidders in the manner provided in Clause 3.9.1 & Clause 3.9.1.1 The Bid shall comprise of the following:

### (A). ENVELOP- I (COVERING LETTER, BID BONDS AND BIDDER FORMAT EXCEL SHEET, DEMAND DRAFT)

- i. Covering Letter indicating the Capacity quoted for Site as per the prescribed Format-1.
- ii. Copy of GSTIN, PAN certificates of bidding company.
- iii. Bid Bond, as per the prescribed Format-3 shall be submitted separately for each Site for the offered capacity in a separate envelop as per Clause 3.12
- iv. Checklist for Bank Guarantee submission requirements as prescribed in Format-5
- v. Demand Draft of Rs. 10,000 /- as cost of tender document(non-refundable). Demand Draft should be drawn in any Nationalised Bank in favour of "Director, Walchand College of Engineering, Vishrambag, Sangli 416415", payable at Sangli. This demand draft should be submitted at the time of bid submission

Note: All formats and relevant documents as required in the RFS shall be spiral bounded and should be flagged separately. Details of flag should be mentioned in the covering letter.

### (B). ENVELOP- II TECHNO-COMMERCIAL DOCUMENTS

i. Original power of attorney issued by the Bidding Company in favour of the authorized person signing the Bid, in the form attached hereto as Format-6 or standard power of attorney in favour of authorized person signing the Bid. (Power of Attorney must be supplemented by Board Resolution to above effect for the company). However, BENEFICIARY may accept general Power of Attorney executed in favour of Authorised signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.

- ii. General particulars of bidders as per Format-2
- iii. Shareholding certificate signed by the company secretary of the bidding company and shareholding certificate signed by the company secretary of the Parent company (if parent company credentials are used).
- iv. Document in support of meeting Eligibility Criteria as per Clause no. 3.3.1 & 3.3.2 & 3.3.3
- v. Certificates of incorporation of Bidding company and parent company (if parent company credentials are used)
- vi. Certificates of incorporation of bidding consortium, if technical consortium is envisaged in the bid submitted by bidder.
- vii. Details for meeting Financial Eligibility Criteria as per Clause no. 3.3.3 in the prescribed Format-7 along with documentary evidence for the same.
- viii. If credentials of Parent company are being used by the Bidding company/lead member of the bidding consortium than Format 8 shall be furnished.
- ix. Undertakings from the Financially Evaluated Entity or its Parent Company /Ultimate Parent Company as per Format-9.
- x. Board Resolution of the Parent Company /Ultimate Parent Company of the Bidding Company duly certified by the Company Secretary to provide the Performance Bank Guarantee (PBG) in the event of failure of the Bidding Company to do so.
- xi. Board resolution for Authorised signatory
- xii. Signed and stamped Copy of RFS Documents including amendments & clarifications by Authorised signatory on each page.

### (C) ENVELOPE III- PRICE BID(S) AS PER SECTION-IV FOR BID SUBMISSION UNDER CAPEX

The Bidder shall inter-alia take into account the following while preparing and submitting the Price Bid duly signed by an authorized signatory.

i.) The Bidder shall submit sealed Price Bid for BENEFICIARY separately in the Format-B for CAPEX Model. Envelope shall be superscripted as "Price Bid for 110 kWp capacity for BENEFICIARY Site and CAPEX model. All the Price Bids shall be put in Envelope-III.

### (D) BID DUE DATE

The Bidder should submit the Bids so as to reach the address indicated below by 14:00 hrs (IST) on or before 21<sup>th</sup> Sept.2017 at THE DIRECTOR, WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415

### 3.10 **VALIDITY OF BID**

- 3.10.1 The bid and the Price Schedule included shall remain valid for a period of 12 months from the date of techno-commercial bid opening, with bidder having no right to withdraw, revoke or cancel his offer or unilaterally vary the offer submitted or any terms thereof. In case of the bidder revoking or cancelling his offer or varying any term & conditions in regard thereof or not accepting letter of allocation, BENEFICIARY shall forfeit the Bid Bond furnished by him. Confirmation regarding the Bid offer validity shall be clearly mentioned in the covering letter.
- 3.10.2 In exceptional circumstances when letter of allocation is not issued, the BENEFICIARY may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The Bid Bond provided under Clause 3.12 shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid Bond. A Bidder granting the request will neither be required nor permitted to modify its Bid in any manner.

### 3.10.3 METHOD OF BID SUBMISSION

- 3.10.3.1 Bids are required to be submitted in a single sealed cover envelope containing Envelope-I (Covering letter, Processing fee and Bid Bonds) ,Envelope-II (Techno-Commercial documents) and Envelope III (Price Bid (s)) each one duly sealed separately. Envelope should contain the documents as detailed in Clause 3.9 above.
- 3.10.3.2 In case the Bidder is offering capacity in more than one [location/State] under CAPEX/RESCO, the Price Bid for each [location/State] should be sealed in separate envelope and these envelopes shall be placed in Price bid Envelope.
- 3.10.3.3 All the three individual envelopes shall be kept in a single outermost Envelope. All the envelopes should be superscribed as "Bid for

Implementation of Grid connected Roof Top Solar PV System Scheme in Selected BENEFICIARY Sites at WALCHAND COLLEGE OF ENGINEERING, VISHRAMBAG, SANGLI 416415, Maharashtra State in India" Envelope-I (Covering envelope) / Envelope-II (Techno-Commercial Bid) / Envelope-III (Price Bids) along with the "BID DUE DATE".

- 3.10.4 The Bidders have the option of sending their Bid either by registered post; or speed post; or courier; or by hand delivery, so as to reach BENEFICIARY by the Bid Deadline. Bids submitted by telex/telegram/fax/e-mail shall not be considered under any circumstances. BENEFICIARY shall not be responsible for any delay in receipt of the Bid. Any Bid received after the Bid Deadline shall be returned unopened. It should be noted that except Envelope III, no other envelope shall contain any information/document relating to Price Bid. BENEFICIARY shall not be responsible for premature opening of the Price Bids in case of non-compliance of above.
- 3.10.5 All pages of the Bid, except for the Bid Bond, and any other document executed on non-judicial stamp paper, forming part of the Bid and corrections in the Bid, if any, must be signed by the authorized signatory on behalf of the Bidder. It is clarified that the same authorized signatory shall sign all pages of the Bid. However, any published document submitted with the Bid shall be signed by the authorized signatory at least on the first and last page of such document Bidders shall submit the Bid in original, duly signed by the their authorized signatory of the Bidder. No change or supplemental information to a Bid will be accepted after the Bid Deadline, unless the same is requested for by **BENEFICIARY**.
- 3.10.6 If the outer cover envelope or Envelope I (Covering Envelope) or Envelope-II (Techno-Commercial Envelope) Envelope III (Price Bid(s)) is/are not closed/sealed and not super scribed as per the specified requirement, BENEFICIARY will assume no responsibility for the Bid's misplacement or premature opening.
- 3.10.7 All the envelopes shall be sealed properly & shall indicate the Name & address of the Bidder. The Bid must be complete in all technical and commercial respect and should contain requisite certificates, drawings, informative literature etc. as required in the Bid document. Each page of the Bid document should be signed & stamped. Bids with any type of change or modification in any of the terms/ conditions of this document shall be rejected. If necessary, additional papers may be attached by the Bidder to furnish/ submit the required information. Any term / condition proposed by the Bidder in his bid which is not in accordance with the terms and conditions of the RFS document or any financial conditions, payment terms, rebates etc. mentioned in Price Bid shall be considered as a conditional Bid and will make the Bid invalid.

### 3.11 **COST OF BIDDING**

3.11.1 The bidder shall bear all the costs associated with the preparation and submission of his offer, and the BENEFICIARY will in no case be responsible or liable for those costs, under any conditions. The Bidder shall not be entitled to claim any costs, charges and expenses of and incidental to or incurred by him through or in connection with his submission of bid even though BENEFICIARY may elect to modify / withdraw the invitation of Bid.

#### 3.12 **BID BOND**

As per Format 3, the Bidder shall furnish the Interest free Bid Bond @ Rs.3000/- (Rupees Three Thousand only) per kWp in the form of Bank Guarantee (BG) / Demand Draft drawn in favour of "BENEFICIARY", payable at Sangli. The initial validity of Bid Bond shall be for a period of Twelve Months from the Bid Deadline, which shall be extended by the bidder as per the bid validity. If the bidder fails to extend the bid bond validity as per above on request by BENEFICIARY then entire Bid bond may be forfeited. The Bid Bond of unsuccessful bidders shall be returned within 30 days from the date of issue of Letter of Allocation(s) to successful bidders. Bidder submitting Bid Bond Amount less than that required amount for the tendered capacity" under CAPEX /RESCO than Bid for that location/site shall not be considered.

The formula applicable to calculate the Bid Bond amount under CAPEX will be:

- a) Bid Bond amount = (Rs.3000) X Bid Capacity 110 kWp
   Example: Participating for 110 kWp, the bidder has to submit Bid Bond of Rs.3,000/- x 110 kWp = Rs. 330,000/- (Rupees Three Lakhs Thirty Thousand Only).
- 3.12.1 The Bid Bond shall be denominated in Indian Rupees and shall:
  - i. at the Bidder's option, be in the form of either a demand draft, or a bank guarantee from a List of banks as given in Annexure-B
  - ii. be confirmed for payment by the branch of the bank giving the bank guarantee at SANGLI.
  - iii. be submitted in its original form; copies will not be accepted; and remain valid for a minimum period of 12 months from the date of Techno Commercial bid opening, or beyond any period of extension subsequently requested under Clause 3.13.2.
- 3.12.2 The Successful Bidder shall sign and stamp the Allocation Letter and return the duplicate copy of the same to BENEFICIARY within 30 days from the date of its issue.

- 3.12.3 The Bid Bond shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to BENEFICIARY under following circumstances:
  - a. Hundred percent (100%) of Bid Bond amount, if a Bidder withdraws/revokes or cancels or unilaterally varies his bid in any manner during the period of Bid Validity specified in the RFS document and in accordance with the Clause 3.13.
  - b. Hundred percent (100%) of the Bid Bond amount, if the Successful Bidder fails to unconditionally accept the Allocation letter within 15 days from the date of its issue.
  - c. Hundred percent (100%) of the Bid Bond amount, if the Successful Bidder fails to furnish the "Performance Security" as per the Clause 3.13

### 3.13 PERFORMANCE SECURITY / PERFORMANCE BANK GUARANTEE (PBG)

3.13.1 Within 30 days from the date of issue of Allocation letter, Successful Bidder shall furnish the Performance Security for the amount of Rs.3,500//kWp. *PBG shall be submitted separately for each under CAPEX model. (this will be in addition to Bid Bond amount)* 

The formula applicable to calculate the PBG amount will be:

PBG amount for allocation in a Site= (Rs.3,500/-) X Allocated Capacity 110 kWp.

Example: Allocating for 100kWp in Site WCE, the bidder has to submit PBG of Rs.3,500/- X 110kWp = Rs. 3,85,000/- (Rupees Three Lakhs Eighty Five Thousand Only).

- 3.13.2 The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:
  - a. a demand draft, or a bank guarantee from the List of banks as given in Annexure-B
  - b. be confirmed for payment by the branch of the bank giving the bank guarantee at SANGLI.
- 3.13.3 The PBG shall be forfeited as follows without prejudice to the Bidder being liable for any further consequential loss or damage incurred to **BENEFICIARY**.

- a. If the Successful Bidder is not able to commission the projects to the satisfaction of BENEFICIARY, PBG amount, pro-rata to the capacity not commissioned by the Successful Bidder. However, Hundred percent (100%) PBG amount furnished for the Sanctioned Capacity for the BENEFICIARY identified locations, if the Successful Bidder fails to Commission the Projects(s) to the satisfaction of BENEFICIARY.
- b. In all the above cases corresponding unidentified/non-commissioned capacity shall stand cancelled.
- 3.13.4 The Performance Security/ Performance Bank Guarantee (PBG) shall be release after period of **10 years** from date of commissioning and handing over the project to college authority.

### 3.14 **OPENING OF BIDS**

- 3.14.1 Envelope-I of the Bidders shall be opened at 15:00 hours on 21/09/2017 after Bid Deadline date at BENEFICIARY office, in the presence of one representative from each of the Bidders who wish to be present.
- 3.14.2 Name of the Bidder, capacity offered shall be read out to all the Bidders at the time of opening of Envelope-I and / or Envelope-II.

### 3.15 RIGHT TO WITHDRAW THE RFS AND TO REJECT ANY BID

- 3.15.1 This RFS may be withdrawn or cancelled by the BENEFICIARY at any time without assigning any reasons thereof. The BENEFICIARY further reserves the right, at its complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account.
- 3.15.1.1 The BENEFICIARY reserve the right to interpret the Bid submitted by the Bidder in accordance with the provisions of the RFS and make its own judgment regarding the interpretation of the same. In this regard the BENEFICIARY shall have no liability towards any Bidder and no Bidder shall have any recourse to the BENEFICIARY with respect to the selection process. BENEFICIARY shall evaluate the Bids using the evaluation process specified in Section -I, at its sole discretion. BENEFICIARY decision in this regard shall be final and binding on the Bidders.
- 3.15.1.2 BENEFICIARY reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the Bid before submission. The decision regarding acceptance or rejection of bid by BENEFICIARY will be final.

#### 3.16 ZERO DEVIATION

3.16.1 This is a ZERO Deviation Bidding Process. Bidder is to ensure compliance of all provisions of the Bid Document and submit their Bid accordingly. Tenders with any deviation to the bid conditions shall be liable for rejection.

### 3.17 EXAMINATION OF BID DOCUMENT

- 3.17.1 The Bidder is required to carefully examine the Technical Specification, terms and Conditions of Contract, and other details relating to supplies as given in the Bid Document.
- 3.17.2 The Bidder shall be deemed to have examined the bid document including the agreement/contract, to have obtained information on all matters whatsoever that might affect to execute the project activity and to have satisfied himself as to the adequacy of his bid. The bidder shall be deemed to have known the scope, nature and magnitude of the supplies and the requirements of material and labour involved etc. and as to all supplies he has to complete in accordance with the Bid document.
- 3.17.3 Bidder is advised to submit the bid on the basis of conditions stipulated in the Bid Document. Bidder's standard terms and conditions if any will not be considered. The cancellation / alteration / amendment / modification in Bid documents shall not be accepted by **BENEFICIARY**.
- 3.17.4 Bid not submitted as per the instructions to bidders is liable to be rejected. Bid shall confirm in all respects with requirements and conditions referred in this bid document.

### **B. CONDITIONS OF CONTRACT**

### 3.18 **SCOPE OF WORK**

3.18.1 The scope of work for the bidder include Identification of rooftop of buildings for 25 years, Obtaining No Objection Certificate (NOC)" from Distribution Company (MSEDCL) for grid connectivity, liasoning work incluiding cost of liasoning, complete design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of the grid connected rooftop solar PV project including operation and maintenance (O&M) of the project for a period of Five years after commissioning. The SPVP must carry unconditional replacement warranty of 10 years and operational warranty of 25 years as per the applicable standards of MNRE.

### 3.19 PROJECT COST

- 3.19.1 The Project cost shall include all the costs related to above Scope of Work. Bidder shall quote for the entire facilities on a "single responsibility" basis such that the total Bid Price covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a period of 5 years (under CAPEX Model), goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.
- 3.19.2 The project cost quoted is on lump sum turnkey basis and the bidder is responsible for the total Scope of Work described at Clause 3.18.1 above.
- 3.19.3 The project cost shall remain firm and fixed and shall be binding on the Successful Bidder till completion of work for payment of subsidy amount irrespective of his actual cost of execution of the project. No escalation will be granted on any reason whatsoever. The bidder shall not be entitled to claim any additional charges, even though it may be necessary to extend the completion period for any reasons whatsoever.
- 3.19.4 The project cost shall be inclusive of all duties and taxes, insurance etc. The prices quoted by the firm shall be complete in all respect and no price variation /adjustment shall be payable
- 3.19.5 The operation & maintenance of Solar Photovoltaic Power Plant would include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, invertors / Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 5 years under CAPEX model.

- 3.19.6 The project cost shall be specified in sanction letter based on Successful Bidder's quote for each state. The project cost shall be in accordance with all terms, conditions, specifications and other conditions of the Contract as accepted by the BENEFICIARY and incorporated into the sanction letter.
- 3.19.7 The Bidder shall complete the Price Bid for CAPEX as per (Format-B) for each location Site(Section-IV) furnished in the RFS Documents.

### 3.20 BENEFICIARY SERVICE CHARGES (Not Applicable) 3.21 INSURANCE

- 3.21.1 The Bidder shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period.
- 3.21.2 The Bidder shall also take insurance for Third Party Liability covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/material/equipment/properties during execution of the Contract. Before commencement of the work, the Bidder will ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work or in carrying out the Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.

#### 3.22 WARRANTEES AND GUARANTEES

3.22.1 The Bidder shall warrant that the goods supplied under this contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials. The bidder shall provide system warrantee covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 5 years from the date of commissioning. The SPVP must carry 10 years unconditional warrantee. The total system must carry warrantee of minimum 25 years of operational life. The successful bidder has to transfer all the Guarantees /Warrantees of the different components to the Owner of the project. The responsibility of operation of Warrantee and Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and the owner of the project and BENEFICIARY will not be responsible in any way for any claims whatsoever on account of the above.

#### 3.23 TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

- 3.23.1 The Design, engineering, manufacture, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the Section- III (Technical specifications) of the bid document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE/ MERC / MSEDCL shall be used.
- 3.23.2 The specifications of the components should meet the technical specifications mentioned in Section III.
- 3.23.3 Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, manufacture, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

### 3.24 OPERATION & MAINTENANCE (O&M)

3.24.1 The bidder shall be responsible for Operation and Comprehensive Maintenance of the Roof top Solar PV system for a period of 5 years, during which BENEFICIARY will monitor the project for effective performance in line with conditions specified elsewhere in the bid document. During this period, the bidder shall be responsible for supply of all spare parts as required from time to time for scheduled and preventive maintenance, major overhauling of the plant, replacement of defective modules, inverters, PCU's etc and maintaining log sheets for operation detail, deployment of staff for continuous operations and qualified engineer for supervision of O&M work, complaint logging & its attending.

### 3.25 METERING AND GRID CONNECTIVITY

Metering and grid connectivity of the roof top solar PV system under this scheme would be the responsibility of the Bidder in accordance with the prevailing guidelines of the concerned **MSEDCL** and / or CEA (if available by the time of implementation). **BENEFICIARY** /SNA could facilitate connectivity; however the entire responsibility lies with bidder only.

### 3.26 PLANT PERFORMANCE EVALUATION

The successful bidder shall be required to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the GHI levels of the location during the O&M period. PR should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify for release of 30% subsidy and as per Clause 6.9 of Section-II. Minimum CUF of 30% should be maintained for a period of 5years and 10% for next 5 years. The bidder should send the periodic plant output details to

BENEFICIARY for ensuring the CUF. The PR will be measured at Inverter output level during peak and average radiation conditions.

### 3.27 PROGRESS REPORT

The bidder shall submit the progress report monthly to BENEFICIARY in Prescribed Preformat. BENEFICIARY will have the right to depute his/their representatives to ascertain the progress of contract at the premises of works of the bidder.

### 3.28 PROJECT INSPECTION.

- 3.28.1 The project above 100 kWp progress will be monitored by BENEFICIARY and the projects will be inspected for quality at any time during commissioning or after the completion of the project either by officer(s) from BENEFICIARY or any authorized agency/ experts.
- 3.28.2 Project(s) below 100 kWp shall be inspected by the bidder from the BENEFICIARY list of empanelled experts as per the checklist requirement of BENEFICIARY for release of subsidy, if required by **BENEFICIARY**. All the expenses for inspection in this regard shall be borne be the Bidder only.
- 3.28.2.1 BENEFICIARY reserves the right to do sample inspection checks for the projects commissioned by the Bidder.
- 3.28.3 BENEFICIARY may also depute a technical person(s) from its list of empanelled experts for inspection, Third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufactures facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.

### 3.29 SUBSIDY and PAYMENT TERMS

The successful bidder will be given necessary certificate of payment deduction of subsidy amount based on which bidder can claim direct payment to his account. OR a sanction of subsidy in favour of WCE, Sangli must be obtained by bidder and handed over before final settlement of the bills. BENEFICIARY will release the final amount after deducting the subsidy. After deducting the subsidy, the net final project amount is distributed to bidder as follows:

- a) 50% of the net amount should be paid to successful bidder on receipt of the material and after approval by college authority after inspection at college site.
- b) 30 % of total amount shall be paid after successful installation, testing and commissioning at college site.

c) 20 % of total amount shall be paid after one month from date of commissioning and handing over the project to college authority.

### 3.30 APPLICABLE LAW

The Contract shall be interpreted in accordance with the laws of the Union of India and Maharashtra State Government. Any taxes to be deducted at sources will deducted as per the applicable law.

### 3.31 **SETTLEMENT OF DISPUTE**

- 3.31.1 If any dispute of any kind whatsoever arises between BENEFICIARY and Successful bidder in connection with or arising out of the contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent.
  - 3.31.2 If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 days of its arising, then the dispute shall be referred by either party by giving notice to the other party in writing of its intention to refer to arbitration as hereafter provided regarding matter under dispute. No arbitration proceedings will commence unless such notice is given. Any dispute, in respect of which a notice of intention to commence arbitration has been given in accordance with Sub Clause 3.31.2, shall be finally settled by arbitration.

### 3.31.3 IN CASE THE CONTRACTOR IS A PUBLIC SECTOR ENTERPRISE OR A GOVERNMENT DEPARTMENT.

3.31.3.1 In case the Contractor is a Public Sector Enterprise or a Government Department, the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India incharge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusive. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

### 3.31.4 IN CASE THE CONTRACTOR IS NOT A PUBLIC SECTOR ENTERPRISE OR A GOVERNMENT DEPARTMENT.

- 3.31.4.1 In all other cases, any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.
- 3.31.4.2 The BENEFICIARY and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within Thirty (30) days after the latter of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator which shall be the President, Institution of Engineers or authority from IITB or from MEDA or from MNRE.
- 3.31.4.3 If one party fails to appoint its arbitrator within thirty (30) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.
- 3.31.4.4 If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in Clause 3.30 (Applicable Law) and a substitute shall be appointed in the same manner as the original arbitrator.
- 3.31.4.5 Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be Sangli (Maharashtra).
- 3.31.4.6 The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.
- 3.31.4.7 The arbitrator(s) shall give reasoned award.
- 3.31.5 Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree.
- 3.31.6 Cost of arbitration shall be equally shared between the Successful bidder or Contractor and **BENEFICIARY**.

### 3.32 FORCE MAJEURE

- 3.32.1 Notwithstanding the provisions of clauses contained in this RFS document; the contractor shall not be liable to forfeit (a) Security deposit for delay and (b) termination of contract; if he is unable to fulfil his obligation under this contract due to force majeure conditions.
- 3.32.2 For purpose of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions and fright embargoes etc. Whether a "Force majeure" situation exists or not, shall be decided by BENEFICIARY and its decision shall be final and binding on the contractor and all other concerned.
- 3.32.3 In the event that the contractor is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligations during the force majeure period. In the event that such force majeure extends beyond six months, BENEFICIARY has the right to terminate the contract in which case, the security deposit shall be refunded to him.
- 3.32.4 If a force majeure situation arises, the contractor shall notify BENEFICIARY in writing promptly, not later than 14 days from the date such situation arises. The contractor shall notify BENEFICIARY not later than 3 days of cessation of force majeure conditions. After examining the cases, BENEFICIARY shall decide and grant suitable additional time for the completion of the work, if required.

### 3.33 **LANGUAGE**

3.33.1 All documents, drawings, instructions, design data, calculations, operation, maintenance and safety manuals, reports, labels and any other date shall be in English Language. The contract agreement and all correspondence between the BENEFICIARY and the bidder shall be in English language.

### 3.34 OTHER CONDITIONS

- 3.34.1 The Successful bidder shall not transfer, assign or sublet the work under this contract or any substantial part thereof to any other party without the prior consent of BENEFICIARY in writing.
- 3.34.2 The Successful bidder shall not display the photographs of the work and not take advantage through publicity of the work without written permission of BENEFICIARY and owner of the Rooftop.

3.34.3 The Successful bidder shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract.

#### 3.34.4 SUCCESSORS AND ASSIGNS:

In case the BENEFICIARY or Successful bidder may undergo any merger or amalgamation or a scheme of arrangement or similar re-organization & this contract is assigned to any entity (ies) partly or wholly, the contract shall be binding mutatis mutandis upon the successor entities & shall continue to remain valid with respect to obligation of the successor entities.

#### 3.34.5 **SEVERABILITY:**

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable & in the event of the unenforceability of any paragraph, clause sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule annexure & rest of the contract shall continue to be in full force & effect.

#### 3.34.6 **COUNTERPARTS**:

This contract may be executed in one or more counterparts, each of which shall be deemed an original & all of which collectively shall be deemed one of the same instrument.

#### 3.34.7 RIGHTS & REMEDIES UNDER THE CONTRACT ONLY FOR THE PARTIES:

This contract is not intended & shall not be construed to confer on any person other than the BENEFICIARY & Successful bidder hereto, any rights and / or remedies herein.

#### 3.34.8 PRICE PREFERENCE FOR M.S.M.E.

All benefits are available to MSMEs subject to compliance of provision of MSMED Act.2006 and its amendment thereof.

#### 3.34.9 CORRESPONDENCE

Bidder requiring any clarification on bid documents may contact in writing or by E Mail.

SI. No	Name	Email id
1.	Dr. G V Parishwad Director,	director@walchandsangli.ac.in

2.	Dr.OmPrakash G. Kulkarni – Mentor	kulkarni.omprakash@drogk.com

# SECTION-II EVALUATION CRITERIA AND SUBSIDY DISBURSEMENT

# 4(i)BID EVALUATION AND SUBSIDY DISBURSEMENT

#### i.1. BID EVALUATION

The evaluation process comprises the following four steps:

Step I - Responsiveness check of Techno Commercial Bid

Step II -Evaluation of Bidder's fulfilment of Eligibility Criteria as per Clause 3.3 of Section-I

Step III -Evaluation of Price Bid

Step IV -Successful Bidders(s) selection

## i.2. RESPONSIVENESS CHECK OF TECHNO COMMERCIAL BID

The Techno Commercial Bid submitted by Bidders shall be scrutinized to establish responsiveness to the requirements laid down in the RFS subject to Clause 3.3.1, Clause 3.3.2, and Clause 3.3.3. Any of the following may cause the Bid to be considered "Non-responsive", at the sole discretion of **BENEFICIARY:** 

- a. Bids that are incomplete, i.e. not accompanied by any of the applicable formats inter alia covering letter, power of attorney supported by a board resolution, applicable undertakings, format for disclosure, valid Bid Bond, etc.;
- b. Bid not signed by authorized signatory and /or stamped in the manner indicated in this RFS;
- c. Material inconsistencies in the information /documents submitted by the Bidder, affecting the Eligibility Criteria;
- d. Information not submitted in the formats specified in this RFS;
- e. Bid being conditional in nature;
- f. Bid not received by the Bid Deadline;
- g. Bid having Conflict of Interest;
- h. More than one Member of a Bidding Company using the credentials of the same Parent Company /Affiliate;

- i. Bidder delaying in submission of additional information or clarifications sought by BENEFICIARY as applicable;
- j. Bidder makes any misrepresentation. Each Bid shall be checked for compliance with the submission requirements set forth in this RFS before the evaluation of Bidder's fulfilment of Eligibility Criteria is taken up. Clause 3.3 shall be used to check whether each Bidder meets the stipulated requirement.

#### 5. PRELIMINARY EXAMINATION

- 5.1. The BENEFICIARY will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and stamped and whether the Bids are otherwise in order.
- 5.2. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total Amount that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total amount shall be corrected. If there is a discrepancy between words and figures, the amount written in words will prevail.

#### 6. EVALUATION OF BIDDER'S FULFILMENT OF ELIGIBILITY CRITERIA

6.1. Evaluation of Bidder's Eligibility will be carried out based on the information furnished by the Bidder as per the prescribed Formats and related documentary evidence in support of meeting the Eligibility Criteria as specified in Clause 3.3. Non-availability of information and related documentary evidence for the satisfaction of Eligibility Criteria may cause the Bid to be non-responsive.

#### 6.2. EVALUATION OF PRICE BID

Price Bid (Envelope III) of the Qualified Bidders shall be opened in presence of the representatives of such Qualified Bidders, who wish to be present, on a date as may be intimated by BENEFICIARY to the Bidders through BENEFICIARY website WCE.edu.in The evaluation of Price Bid shall be carried out based on the information furnished in Envelope III (Price Bid). The Price Bid submitted by the Bidders shall be scrutinized to ensure conformity with the RFS. Any Bid not meeting any of the requirements of this RFS may cause the Bid to be considered "Non-responsive" at the sole decision of the BENEFICIARY. The Price bids for the for each Site shall be evaluated separately for CAPEX and RESCO as follows:

## 6.2.1. **CAPEX**

The Price bids for the for each Sites hall be evaluated separately as follows;

- a. The Price bids for each Site shall be evaluated separately on project cost basis quoted for total capacity.
- b. Since the maximum allowable project cost is Rs 60/Wp, so bidder submitting bid above the maximum allowable project cost for total capacity as per the price bid shall be rejected. Subsidy as applicable will passed on to BENEFICIARY from the above cost.

# 6.2.2. RESCO (Not Applicable)

The tariff quoted for the for each location/State shall be evaluated separately as follows:

- a. The tariff for each Site shall be evaluated separately on levellized tariff basis quoted for total capacity only.
- b. Since the maximum allowable levellized tariff for 15; 20; 25 years in this part is Rs.04.5/ kWh, so bidder submitting bid above the maximum allowable project cost for shall be rejected.

# 6.3. SUCCESSFUL BIDDER(S) SELECTION

- 6.3.1. Bids qualifying in Clause 3.3 shall only be evaluated in this stage.
- 6.3.2. The Project Cost requirement for total capacity as well as for CAPEX model project quoted in Price Bid of Qualified Bidders shall be ranked from the lowest to the highest for each location separately under CAPEX.
- 6.3.2.1. Based on the price bid quoted by the bidders for total capacity, BENEFICIARY shall arrange the bids in the ascending order i.e. L1, L2, L3, \_ \_ \_ (L1 being the lowest project cost for total capacity).
- 6.3.2.2. For all the sites and for total capacity, lowest bidder will be declared as the successful bidder. For further allocation, the L2 bidder will be asked to match the price quoted by the L1 bidder. In case the L2 bidder refuses to match the L1 price then L3 bidder shall be offered to match L1 price. The process will continue till the next bidder matches the L1 price. The bidder who matches the L1 price will also be declared Successful bidder for that state. The intent is to have two bidders in a Site for total capacity. However, BENEFICIARY at its own discretion may relax the condition.
- 6.3.2.3. Similar process as per clause 6.3.2 will be adopted for all the States separately and also separately for CAPEX and RESCO model.

- 6.3.2.4. All the qualified bidders of a Site and empanelled companies of the Site except the L1 bidder will be given 10 days from the date of notification of L1 price on BENEFICIARY website to give their consent to execute the work at L1 price failing which it will be assumed that they are not interested to match L1 price. In case of more than one such response is received expressing their consent to match the L1 price and to execute the capacity in the Site then the preference shall be given in the ascending order of the bid quoted by the bidder. i.e. first preference will be given to L2 then L3 and so on until entire capacity is allocated.
- 6.3.3. Letter(s) of Allocation (LOA): The Letter(s) of Allocation (LOA) shall be issued to all such Successful Bidders(s) selected as per the provisions of this Clause 6.3.2
- 6.3.4. Each Successful Bidder shall acknowledge the LOA and return duplicate copy with signature & stamp of the authorized signatory of the Successful Bidder to the BENEFICIARY within Thirty (30) days of issue of LOA.
- 6.3.5. If the Successful Bidder, to whom the Letter of Allocation has been issued does not fulfil any of the conditions specified in Bid document, the BENEFICIARY reserves the right to annul/cancel the award of the Letter of Allocation of such Successful Bidder and forfeit the PBG/Bid Bond.
- 6.3.6. The BENEFICIARY at its own discretion, has the right to reject any or all the Bids without assigning any reason whatsoever, at its sole discretion
- 6.3.7. There shall be no negotiation on the quoted Project cost or Subsidy requirement between the BENEFICIARY and the Bidder(s), during the process of evaluation.

#### 6.3.8. **For total**

The intent has been to have more than one bidder in a Site at L1 rate .So apart from the procedure adopted under clause 6.3.2 of RFS, following methodology shall be adopted to allocate the remaining capacity, *if none* of the qualified bidder of the Site matches the L1 price in a State:

6.3.8.1. In such cases, the details of the remaining capacity under each Site and the L1 price of that Site will be notified through BENEFICIARY website for information to all the qualified bidders. All qualified bidders on State-India basis within 10 days from the date of notification on BENEFICIARY website or against individual intimation shall give their consent along with the Bid bond of equivalent amount to BENEFICIARY for execution of the remaining capacity at L1 rate of the Site they are interested.

6.3.8.2. In case of more than one such response is received expressing their consent to execute the capacity in the Site they are interested then the preference shall be given in the alphabetical order of their names.

#### 6.4. INCREASE/DECREASE OF BIDDER ALLOCATED CAPACITY IN A Site

- 6.4.1. BENEFICIARY reserves the right to increase upto twenty five percent (25%) of the Bidder Allocated Capacity at its sole discretion and at the request of the Bidder at L1 price of the Site only.
- 6.4.2. In case bidder has requested for reduction in Allocated capacity, then upto 25% reduction of allocated capacity in a Site for total capacity only can be accepted by BENEFICIARY without forfeiture of PBG at BENEFICIARY sole discretion subject to the condition that bidder has received at least sanction of 75% of allocated capacity for total capacity for that project.
- 6.4.3. In case capacity is modified by BENEFICIARY as per Clause 6.4.1 & 6.4.2 above, Successful bidder shall submit the equivalent amount of PBG/Amended PBG to BENEFICIARY within 30 days from the date of issue of allocation letter /sanction letter.

#### 6.5. TRANFER OF CAPACITY

- 6.5.1. At sole discretion of **BENEFICIARY**, BENEFICIARY may allow transfer of allocated capacity in full or part. However, such transfer shall generally be allowed as per Bidder request, if agreed by **BENEFICIARY**.
- 6.5.2. RESCO capacity shall be non-transferrable. However, competent authority of BENEFICIARY at its own discretion can relax the condition.
- 6.5.3. Inter-state transfer of allocated capacity as per the request may be allowed; subject to above clause 6.5.1 at the price quoted by Successful bidder of the transfer or Site or at the L1 price of the new Site, whichever is lower. Transfer of capacity as per Clause 6.5.1 and Clause 6.5.2 shall be done within the states indicated in table of Clause 2.1.3.
- 6.5.4. Amended Performance security (PBG pertaining to additional capacity allocated or capacity transferred shall be submitted by bidder within 30 days from the date of issue of such notification.

**Note:** Increase/decrease/transfer of the Successful Bidder Capacity at the time of Allocation will be at the sole discretion of **BENEFICIARY**.

#### 6.6. NOTIFICATION TO SUCCESSFUL BIDDERS

6.6.1. The name of Successful Bidders shall be notified indicating the allocated capacity and the awarded project price in a Site on BENEFICIARY website and also shall be notified individually through letter of allocation.

# 6.7. MAXIMUM CHARGEABLE TARIFF FOR ENERGY SALE UNDER CAPEX MODEL WITH PPP.

Energy sale will be allowed under CAPEX model also and the maximum chargeable levellized tariff (per year) is up to Rs.07.00/kWh for 15, 20 or 25 years.

#### 6.8. PROJECT ALLOCATION AND SANCTION

- 6.8.1. The identification of the projects (roof tops) at time of bidding is not mandatory. The Bidders, however, in their own interest are advised to make a preliminary survey of availability of roof tops in the cities of the States for which they intend to Bid, as well as issue of Grid connectivity, as non-availability of roof tops and non-completion of other formalities after allocation of project will result in forfeiture of Bid Bond/PBG amount submitted by them.
- 6.8.2. The Successful Bidders selected as described in Clause 6.3 above shall be issued Letter of Allocation (LOA) indicating the allocated capacity under CAPEX..
- 6.8.3. The bidders who have been notified as Successful Bidders shall be given 12 weeks from the date of issue of Letter of Allocation for commissioning of the allocated capacity in which roofs identification is also in the bidder's scope.
- 6.8.3.1. Preference should be given to BENEFICIARY identified roofs first. In the event of offer given by BENEFICIARY to the Bidder to execute the project in the BENEFICIARY identified roof, the time for submission of project sanction documents by the bidder to BENEFICIARY will be 30 days from the date of issue of allocation letter which can be extended depending upon the merit of the case. Failure of non- compliance of same shall lead to forfeiture of PBG for that Site in proportion to the capacity allocated in the BENEFICIARY identified location.
- 6.8.3.2. Further, Successful Bidders can start submitting their Project sanction documents to MSEDCL for Net-metering as soon as they receive LOA from BENEFICIARY. Copy of Project sanction documents shall be submitted to BENEFICIARY with minimum Project size of allocated capacity. If after 12 weeks, the successful bidder could not identify and commission the rooftop(s) capacity up to the allocated capacity and submit Project sanction documents, in such case PBG for unidentified allocated capacity may be forfeited and the unidentified allocated capacity gets cancelled and bidder

- including its affiliates/GROUP COMPANIES/ Parent / Ultimate parent company may be debarred to participate in **BENEFICIARY**'s future tenders for a period as decided by the competent authority of **BENEFICIARY**.
- 6.8.3.3. Successful bidders shall share the time and date stamping photographs of the roofs and location details with BENEFICIARY before entering into any legal agreement with the Owner. This has to ensure that the location identified by the Successful bidder is freshly identified and strictly complying the norms provided in Clause 13.2 below.
- 6.8.4. For identification of projects, BENEFICIARY or Site nodal agency (SNA) may provide help. However the entire responsibility of finding the buildings lies with the Bidder.
- 6.8.5. Onus of identifying the buildings/rooftops and completing the other documentation like finalizing the Project report and entering into agreements with the buildings/rooftops owners lies with the Successful Bidder within the above mentioned time frame even for the buildings/rooftops identified by BENEFICIARY for preferential installation.
- 6.8.6. After the Project Sanctioned Document have been submitted by the Successful Bidder/ Project Developer and accepted by BENEFICIARY ", BENEFICIARY will issue the Sanction Letter(s) for the Project (s) indicating the subsidy amount(s) which will be disbursed in line with the provisions of the RFS document. The Bidder shall complete the design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of each project within 9 months from the date of issue of allocation Letter.
- 6.8.7. If the Bidder fails to commission the project within specified time, penalty on per day basis calculated for the Performance Security on a 6 month's period would be levied. After 6 months, the project will get cancelled and the total PBG would be forfeited. Please refer Clause 8& 9 below for details.

#### 6.9. SUBSIDY DISBURSEMENT:

- 6.9.1. BENEFICIARY will pass on 30% or as per ruling from MNRE and MEDA of the L1 Project Cost awarded to the Successful Bidder in Price Bid for that Site as subsidy. The bidder must absorb the subsidy amount while quoting the offer. i.e. Offer cost = Cost of project - Subsidy amount.
- 6.9.2. The Project cost awarded to the bidder through letter of allocation shall be considered as the Project Cost for this purpose. Total liability of BENEFICIARY under this contract shall be limited to release of this 30% subsidy on the L1 Project awarded to the Bidder through letter of allocation.

- 6.9.3. The subsidy of deducted as follows.
  - a) 100 %Subsidy will be deducted at the time of release of first payment

If any extra facilities are agreed between the Successful Bidder and the owner beyond the scope of this allocation letter/ RFS document than extra payment shall be made by the Owner on mutually decided (Owner & Successful Bidder) terms and conditions. In any case, BENEFICIARY shall neither interfere in their business affairs nor shall be liable for extra claim by Successful Bidder or Owner.

- 6.9.4. BENEFICIARY may consider to release as case to case basis depending on the actions taken by the Successful Bidder and the progress achieved in the process, the subsidy amount indicated at Clause 6.9.3 (a) above in case Grid connectivity of the Project has not been done although the Project is otherwise ready for the commissioning. However, the PBG shall not be released till the project is connected with the Grid. No "NOC" from MSEDCL is required for the grid connectivity for the projects (RESCO) However, this does not exempt the project requirement for grid connectivity. For avoidance of doubts on grid connectivity respective SERC and MSEDCL norms must be followed.
- 6.9.5. In case the Successful Bidder/ Project Developer is not the Owner of the Project, subsidy shall be released to Successful Bidder/ Project Developer after written consent of Owner only.

# 7. OTHER CONDITIONS

- 7.1. Bidder has to obtain all the necessary approvals/Consents/Clearances required for Erection, Testing, Commissioning and O&M of the project including Grid connectivity. BENEFICIARY shall not have any responsibility in this regard.
- 7.2. Bid bond and processing fee submission:

Bid bond shall be submitted for Site for the offered capacity in a separate envelop (along with Processing fee) superscripted with name of Site for which Bid is being quoted & other details.

#### 7.3. TAX EXEMPTIONS:

Price bids are invited inclusive of Taxes and duties. However, Tax exemptions including certificates of any sort, if available may be dealt with the concerned Dep't of Govt. of India by the bidder. BENEFICIARY in no case will be responsible for providing any tax exemptions to the bidder.

#### 7.4. ELIGIBILITY OF STANDALONE SYSTEM:

7.4.1. Standalone system is not allowed under this scheme. The system should be grid connected.

## 7.5. REQUIREMENT OF APPROVALS ON MAKES OF THE COMPONENTS:

7.5.1. The modules should be manufactured in India only. Rest of the components can be procured from any source. However these items should meet the Technical specification and standards mentioned in RFS confirming to MNRE.

# 7.6. OPERATION OF THE SYSTEM DURING WEEKENDS AND GENERAL HOLIDAYS AND CALCULATION OF CUF:

7.6.1. During grid failure, the SPV system must not stop generating. Any instances of grid failure need to be mentioned in the monthly report and those instances need to be authorised by local **MSEDCL**. If the generation does not supply the load then the period will be excluded in calculation of CUF.

#### 8. PENALTY FOR DELAY IN PROJECT IMPLEMENTATION

- 8.1. BENEFICIARY will issue the sanction letter(s) for the Project (s) indicating the subsidy amount(s) which will be disbursed in line with the provisions of the RFS document. The Bidder shall complete the project identification, design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of each project within 12 Weeks from the date of issue of allocation letter. In addition to above water spray cleaning system should be provided.
- 8.2. If the bidder fails to commission the allocated capacity within 12 Weeks from date of issue of allocation letter, Penalty on per day basis calculated for the Performance Security on a 6 months period would be levied. After 6 months allocated capacity will get cancelled and the PBG amount pro-rata to noncommissioned capacity would be forfeited.

**Example:** If a project of 110 kW is delayed by 36 days then the LD will be levied as given below.

PENALTY = ((Performance Security)/180 days)\*delayed days = (3,85,000 /180)\*36 = Rs.77000

#### 9. TIME OF COMPLETION OF ALLOCATED CAPACITY:

9.1 Project completion shall be 12 Weeks from the date of issue of allocation letter. Failure of non- compliance of same shall lead to forfeiture of PBG for that Site in proportion to the capacity not identified.

- 9.2 For any additional capacity, bidder shall complete/commission the capacity within 3 months from the date of issue of allocation letter/sanction letter. This will include submission of project sanction documents to the satisfaction of BENEFICIARY.
- 9.3 The period of construction given in Time Schedule includes the time required for mobilisation as well as testing, rectifications if any, retesting and completion in all respects to the entire satisfaction of the Engineer-in-Charge.
- 9.4 A joint programme of execution of the Work will be prepared by the Engineer-in-Charge or its representative nominated for the purpose and Successful bidders based on priority requirement of this project. This programme will take into account the time of completion mentioned in clause 9.1 above and the time allowed for the priority Works by the Engineer-in-Charge.
- 9.5 Monthly/Weekly implementation programme will; be drawn up by the Engineer-in-Charge jointly with the Successful bidder, based on availability of Work fronts as per Clause 9.4 above. Successful bidder shall scrupulously adhere to these targets /programmes by deploying adequate personnel, tools and tackles and he shall also supply himself all materials of his scope of supply in good time to achieve the targets/programmes. In all matters concerning the extent of targets set out in the weekly and monthly programmes and the degree of achievements, the decision of the Engineer-in-Charge will be final and binding.

# 10. USER ID FOR UPDATING THE PROJECT PROGRESS ON BI-WEEKLY BASIS

Successful bidder authorised representative in whose name PoA has been executed and submitted along with the bid shall be provided Password and User id for updating the project progress on **monthly** basis in the sanction letter/Allocation letter for the State. Successful bidder should update the info as per the requirement of the software tool .Non updating of the progress shall be considered as no progress and shall attract punitive actions as per the relevant provision of the Contract. However, the decision of Engineer –in –charge shall be final in this regard.

# 11. INSPECTION AND AUDIT BY THE GOVERNMENT

11.1. The Successful bidder shall permit the BENEFICIARY to inspect the Successful bidder's site, accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the **BENEFICIARY**, if so required by the BENEFICIARY any time.

#### 12. COMMISSIONING /COMPLETION CERTIFICATE:

# 12.1. Application for completion/commissioning certificate:

When the Successful bidder fulfils his obligation under the Contract, he shall be eligible to apply for Completion Certificate. The Engineer-in-Charge shall normally issue to the Successful bidder the Completion Certificate within one month after receiving any application therefore from the Successful bidder after verifying from the completion documents and satisfying himself that the Work has been completed in accordance with and as set out in Contract documents. The Successful bidder, after obtaining the Completion Certificate, is eligible to avail the subsidy as per the Clause 6.9

# 12.1.1 DOCUMENT SUBMISSION FOR ISSUE COMMISSINONING/ COMPLETION CERTIFICATE:

For the purpose of Clause 12.1 above the following documents will be deemed to form the completion documents:

- a. Checklist for inspection of Roof top SPV power plants as per BENEFICIARY format.
- b. Project completion report from successful bidder as per BENEFICIARY format
- c. Project completion/satisfaction certificate from roof top owners/project developers.

#### 12.1.2. FINAL DECISION AND FINAL CERTIFICATE:

12.1.2.1. Upon completion of 5 years of O&M and subject to the Engineer-in-Charge being satisfied, the Engineer-in-Charge shall (without prejudice to the rights of the BENEFICIARY to retain the provisions of relevant Clause hereof) otherwise give a certificate herein referred to as the Final Certificate to that effect and the Successful bidder shall not be considered to have fulfilled the whole of his obligations under Contract until Final Certificate shall have been given by the Engineer-in-Charge notwithstanding any previous entry upon the Work and taking possession, working or using of the same or any part thereof by the Owner of Roof/ **BENEFICIARY**.

#### 12.2. **DEDUCTIONS FROM THE CONTRACT PRICE:**

12.2.1. All costs, damages or expenses which BENEFICIARY may have paid or incurred, which under the provisions of the Contract, the Successful bidder is liable/will be liable, will be claimed by the BENEFICIARY. All such claims shall be billed by the BENEFICIARY to the Contractor within 15 (fifteen) days of the receipt of the payment request and if not paid by the Successful bidder

within the said period, the BENEFICIARY may, then, deduct the amount from any moneys due i.e., Performance Security or becoming due to the contractor or Successful bidder under the contract or may be recovered by actions of law or otherwise, if the Successful bidder fails to satisfy the BENEFICIARY of such claims.

#### 12.3. CORRUPT OR FRAUDULENT PRACTICES

The BENEFICIARY requires that Successful Bidders/ Contractors should follow the highest standard of ethics during the execution of contract. In pursuance of this policy, the **BENEFICIARY**:

- 12.3.1. Defines, for the purposes of this provision, the terms set forth as follows:
- 12.3.2. "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the bid process or in contract execution; and
- 12.3.3. "fraudulent practice" means a misrepresentation of facts in order to influence a bid process or the execution of a contract to the detriment of the BENEFICIARY /Govt scheme, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the BENEFICIARY of the benefits of free and open competition;
- 12.3.4. Will declare a firm ineligible/debarred, either indefinitely or for a specific period of time, a GOVT contract if at any time it is found that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government/ BENEFICIARY schemes.

# 13. DEBARRED FROM PARTICIPATING IN BENEFICIARY 'S ROOF TOP TENDER

- 13.1. BENEFICIARY reserves the right to carry out the performance review of each Bidder from the time of submission of Bid onwards. In case it is observed that a bidder has not fulfilled its obligations in meeting the various timelines envisaged, in addition to the other provisions of the RFS, such Bidders may be debarred from participating in BENEFICIARY's any future tender for a period as decided by the competent authority of BENEFICIARY.
- 13.2. The Successful bidder must ensure that the ROOF TOP SOLAR PV SCHEME-PHASE-IV-Part-2 subsidy is available for newly commissioned projects i.e. for the projects whose construction/despatch of equipment's have been started only after the issue of sanction letter/allocation letter. Any roofs on which projects has been installed or commissioned before the issue of allocation letter/sanction letter shall be construed as fraudulent activity in which case Successful bidder(s) may be debarred from

participating in **BENEFICIARY**'s future tender for a period as decided by the Competent authority. However, such locations may be used for installation of additional capacity with the prior approval of competent authority.

# **TECHNICAL SPECIFICATIONS**

The proposed projects shall be commissioned as per the technical specifications given below. Any shortcomings will lead to cancelation of subsidy in full or part as decided by BENEFICIARY &Competent Authority's decision will be final and binding on the bidder.

## 14. **DEFINITION**

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

Solar PV system shall consist of following equipments/components.

- Solar PV modules consisting of required number of Crystalline PV modules.
- Grid interactive Power Conditioning Unit with Remote Monitoring SCADA System
- Mounting structures
- · Junction Boxes.
- Earthing and lightening protections.
- IR/UV protected PVC Cables, pipes and accessories
- Instrumentation as per guidelines of MNRE/MEDA/MERC/MSEDCL

## 14.1. SOLAR PHOTOVOLTAIC MODULES:

- 14.1.1. The PV modules used should be made in India.
- 14.1.2. The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-2- requirements for construction & Part 2 requirements for testing, for safety qualification or equivalent IS.
  - a) For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701
  - b) The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum **250**

- Wp and above wattage. Module capacity less than minimum **250** watts would not be accepted
- c) Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- d) PV modules must be tested and approved by one of the IEC authorized test centres.
- e) The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- f) The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. BENEFICIARY /owners shall allow only minor changes at the time of execution.
- g) Other general requirement for the PV modules and subsystems shall be the Following:
  - I. The rated output power of any supplied module shall have tolerance of +/- 3% or as per Indian electricity rules.
  - II. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
  - III. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
  - IV. I-V curves at STC should be provided by bidder.
- 14.1.3. Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).
  - a) Name of the manufacturer of the PV module
  - b) Name of the manufacturer of Solar Cells.
  - c) Month & year of the manufacture (separate for solar cells and modules)
  - d) Country of origin (separately for solar cells and module)
  - e) I-V curve for the module Wattage, Im, Vm and FF for the module
  - f) Unique Serial No and Model No of the module
  - g) Date and year of obtaining IEC PV module qualification certificate.
  - h) Name of the test lab issuing IEC certificate.
  - i) Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001

#### 14.1.4. Warranties:

- a) Material Warranty:
  - i. Material Warranty is defined as: The manufacturer/ successful bidder should warranty the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than Ten (10) years from the date of sale to the end purchaser.
  - ii. Defects and/or failures due to manufacturing
  - iii. Defects and/or failures due to quality of materials
  - iv. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option
  - b) Performance Warranty:
  - i. The predicted electrical degradation of power generated not exceeding -10% of the minimum rated power over the 25 year period and not more than -5% after ten years period of the full rated original output.

#### 15. ARRAY STRUCTURE

- a) Hot dip galvanized MS mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements. Aluminium allow structure would be given preference.
- b) The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (like wind speed of 150 km/ hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to **BENEFICIARY**. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
- c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
- d) Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization. Aluminium alloy fabrication material will be given preference.
- e) The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be

- so designed that it will occupy minimum space without sacrificing the output from the SPV panels
- f) Regarding civil structures the bidder need to take care of the load baring capacity of the roof and need arrange suitable structures based on the quality of roof.
- g) The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m2.
- h) The minimum clearance of the structure from the roof level should be 300 mm.

# 16. JUNCTION BOXES (JBs)

- a) The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JBs shall be such that input & output termination can be made through suitable cable glands.
- b) Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single / double compression cable glands. Provision of earthings. It should be placed at 5 feet height or above for ease of accessibility.
- c) Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.
- d) Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification

#### 17. DC DISTRIBUTION BOARD:

- a) DC Distribution panel to receive the DC output from the array field.
- b) DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

#### 18. AC DISTRIBUTION PANEL BOARD:

- a) AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- b) All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- c) The changeover switches, cabling work should be undertaken by the bidder as part of the project.

- d) All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz.
- e) The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- g) Should conform to Indian Electricity Act and rules (till last amendment).
- h) All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

Variation in supply voltage	+/- 5 %
Variation in supply frequency	+/- 3 Hz

i) Provision should be made for separate panel/unit for synchronising 125 kVA generator set available with the institute in case of power supply failure from MSEDCL with Roof top PV system proposed to be install at Institute site. This work also shall be included in the tender. Generator and solar PV system should work in tandem with each other to supply power uninterruptedly.

#### 19. PoCU/ARRAY SIZE RATIO:

- a) The combined wattage of all inverters should not be less than rated capacity of power plant under STC.
- b) Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

#### 20. PCU/ Inverter:

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

• Switching devices : IGBT/MOSFET

Control : Microprocessor /DSP

- Nominal AC output voltage and frequency: 415V, 3 Phase, 50 Hz (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
- Output frequency: 50 Hz
- Grid Frequency Synchronization range: + 3 Hz or more
- Ambient temperature considered : -20° C to 50° C
- Humidity: 95 % Non-condensing
- Protection of Enclosure : IP-20(Minimum) for indoor.
- : IP-65(Minimum) for outdoor.
- Grid Frequency Tolerance range: + 3 or more
- Grid Voltage tolerance: 20% & + 15 %
- No-load losses: Less than 1% of rated power
- Inverter efficiency(minimum): >93% (In case of 10kW or above)
- Inverter efficiency (minimum): > 90% (In case of less than 10 kW)
- THD : < 3%</li>
- PF: > 0.95
- a) Three phase PCU/ inverter shall be used with each power plant system (10kW and/or above) but In case of less than 10kW single phase inverter can be used.
- b) PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- c) The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- d) Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- e) The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068- 2(1,2,14,30) /Equivalent BIS Std.
- f) The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS std. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.

g) The PCU/ inverters should be tested from the MNRE approved test centres / NABL /BIS /IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

#### 21. INTEGRATION OF PV POWER WITH GRID:

The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the DG set comes into service PV system shall again be synchronized with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided. In case the power generated by Solar is adequate to cater the load then the Solar power must be available for use during grid failure without switching ON the DG set. This facility must not use any storage batteries.

#### 22. DATA ACQUISITION SYSTEM / PLANT MONITORING

- i. Data Acquisition System shall be provided for each of the solar PV plant.
- ii. Data Logging Provision for plant control and monitoring, time and date stamped system data logs for analysis with the high quality, suitable PC. Metering and Instrumentation for display of systems parameters and status indication to be provided.
- iii. Solar Irradiance: An integrating Pyranometer / Solar cell based irradiation sensor (along with calibration certificate) provided, with the sensor mounted in the plane of the array. Readout integrated with data logging and remote monitoring SCADA system.
- iv. Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readouts integrated with the data logging system
- v. The following parameters are accessible via the operating interface display in real time separately for solar power plant:
- a. AC Voltage.
- b. AC Output current.
- c. Output Power
- d. Power factor.
- e. DC Input Voltage.
- f. DC Input Current.
- g. Time Active.
- h. Time disabled.
- i. Time Idle.
- j. Power produced

- k. Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage.
- vi. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
- vii. PV array energy production: Digital Energy Meters to log the actual value of AC/ DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class.
- viii. Computerized DC String/Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/array combiner box or separately.
- ix. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
- x. Computerized AC energy monitoring shall be in addition to the digital AC energy meter.
- xi. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
- xii. All instantaneous data shall be shown on the computer screen.
- xiii. Software shall be provided for USB download and analysis of DC and AC parametric data for individual plant.
- xiv. Provision for Internet monitoring and download of data shall be also incorporated.
- xv. Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.
- xvi. Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis.
- xvii. Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.
- xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at the owner / BENEFICIARY location with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and operation and maintenance/control to be ensured by the supplier. Provision for interfacing these data on BENEFICIARY server and portal in future shall be kept.

#### 23. **METERING**:

- a) The bidirectional electronic energy meter (0.5 S class) approved by MSEDCL shall be installed for the measurement of import/Export of energy in WCE generator room.
- b) The bidder must take approval/NOC from the Concerned **MSEDCL** for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to BENEFICIARY before commissioning of SPV plant.
- c) Reverse power relay shall be provided by bidder (if necessary), as per the local **MSEDCL** requirement.
- d) Necessary arrangement of cabling from solar panels to generator room (for SCADA panels) should be provided separately.

#### 24. POWER CONSUMPTION:

a) Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid. Finalization of tariff is not under the purview of BENEFICIARY or MNRE. Decisions of appropriate authority like MSEDCL, Site regulator may be followed.

#### 25. PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

# 25.1. LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

#### 25.2. SURGE PROTECTION

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

#### 25.3. EARTHING PROTECTION

i. Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. In addition the lighting arrester/masts should also be earthed inside

- the array field. Earth Resistance shall be tested in presence of the representative of Department/ BENEFICIARY as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly.
- ii. Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

#### 25.4. GRID ISLANDING:

- i. In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.
- ii. A manual disconnect 4 pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel

#### 26. CABLES

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

- i. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- ii. Temp. Range: -10°C to +80°C.
- iii. Voltage rating 660/1000V
- iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- v. Flexible
- vi. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- vii. Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- viii. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25years.
- ix. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant provided by the bidder. Any change in cabling sizes if desired by the bidder/approved after citing

- appropriate reasons. All cable schedules/layout drawings approved prior to installation.
- x. Multi Strand, Annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V ,UV resistant for outdoor installation IS /IEC 69947.
- xi. The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- xii. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

#### 27. CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code of theSiteand amended from time to time. Following criteria have been suggested for selection of voltage level in the distribution system for ready reference of the solar suppliers.

Plant Capacity	Connecting voltage
Above 100kW and up to 500 kW	415V – three phase

- i. The maximum permissible capacity for rooftop shall be 0.5 MW for a single net metering point.
- ii. Utilities may have voltage levels other than above, **MSEDCL** may be consulted before finalization of the voltage level and specification be made accordingly.
- iii. For large PV system (Above 100 kW) for commercial installation having large load, the solar power must be appropriately configured and interfaced with the grid. The protection system, islanding system and associated switchgear would require to be provided by the SPV bidders.

#### 28. TOOLS & TACKLES AND SPARES:

i. After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose. List of tools and tackles to be supplied by the bidder for approval of specifications and make from **BENEFICIARY** / owner. ii. A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc along with spare set of PV modules be indicated, which shall be supplied along with the equipment. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation & Maintenance which upon its use shall be replenished

#### 29. DANGER BOARDS AND SIGNAGES:

Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Three signage shall be provided one each at battery –cum- control room, solar array area and main entry from administrative block. Text of the signage may be finalized in consultation with **BENEFICIARY** / owner.

# **30. FIRE EXTINGUISHERS:**

The fire fighting system for the proposed power plant for fire protection shall be consisting of:

- a) Portable fire extinguishers in the control room for fire caused by electrical short circuits
- b) Sand buckets in the control room
- c) The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed.

#### 31. DRAWINGS & MANUALS:

- i. Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- ii. Approved ISI and reputed makes for equipment be used.
- iii. For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to BENEFICIARY /owners before progressing with the installation work

## 32. PLANNING AND DESIGNING:

i. The bidder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labour. The bidder should submit the array layout drawings along with Shadow Analysis Report to BENEFICIARY /Owner for approval.

- ii. BENEFICIARY reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements.
- iii. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder submits three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

#### 33. DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT

- i. The Contractor shall furnish the following drawings Award/Intent and obtain approval
- ii. General arrangement and dimensioned layout
- iii. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- iv. Structural drawing along with foundation details for the structure.
- v. Itemized bill of material for complete SV plant covering all the components and associated accessories.
- vi. Layout of solar Power Array
- vii. Shadow analysis of the roof

# 34. SOLAR PV SYSTEM ON THE ROOFTOP FOR MEETING THE ANNUAL ENERGY REQUIREMENT

The Solar PV system on the rooftop of the selected buildings will be installed for meeting upto maximum percentage of the annual energy requirements depending upon the area of rooftop available and the remaining energy requirement of the office buildings will be met by drawing power from grid at commercial tariff of **MSEDCL**.

# 35. **SAFETY MEASURES**:

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc.

## 36. Cleaning System:

Automatic Water spray cleaning system should be provided for dust accumulated on panels. This cleaning system should work as per the beneficiary requirement time intervals ( depending on seasons) and every week.

# PRICE BID

Sr. No	Description	Name of the Site		Project cost for the Scope of work as per Bid document		
			Total Bid Capacity in kWp	Q Unit Rate (Rs/Wp) total	R Total Project cost for total capacity=	
1.	Design, Engineering, Manufacturing, Storage, Civil Work, Supply, Erection, Testing & Commissioning including trail Operation, Operation & Maintenance and	Walchand College of Engineering, Vishrambag, Sangli 416415	110 kWp	Capacity	{1000 * P * Q} =	
Rupe	other requirements as per the RFS.	Canig				
Rupe	ees in words					

# Note:

- 1. Unit Rate (Rs/Wp) for Part-A Capacity and Unit Rate (Rs/Wp) for Part-B capacity shall not exceed Rs ...../Wp (*Insert latest MNRE Benchmark Price*).
- 2. For Special category States of RFS, subsidy is available @ 30% (or applicable as per latest MNRE guidelines) of L1 project cost quoted by the Successful Bidder
- 3. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total Amount that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total amount shall be corrected. If there is a discrepancy between words and figures, the amount written in words will prevail.

Yours faithfully
Date: Signature:
Place:Printed Name
Business Address: Designation:
Country of Incorporation: (Common Seal)
(State or Province to be indicated)

# SECTION-IV PRICE BID FOR RESCO (Not Applicable) (PART-B)

(To be submitted in a separate envelope for different Sites super scribing name of the Site)

RFS No:	dated
---------	-------

Year 1 w.e.f. date of commercial operation to 31st March of immediately succeeding financial year Year 2 w.e.f 1st April to 31st March of immediately succeeding financial year Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year	Year of Operation	Tariff Discount Factor at 11% (or as applicable)		Discounted Tariff (Rs/kWh)		
commercial operation to 31st March of immediately succeeding financial year Year 2 w.e.f 1st April to 31st March of immediately succeeding financial year Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year	(1)	(2)	(3)	4=(2)X(3)		
31st March of immediately succeeding financial year Year 2 w.e.f 1st April to 31st March of immediately succeeding financial year Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year	Year 1 w.e.f. date of					
31st March of Immediately succeeding financial year Year 2 w.e.f 1st April to 31st March of immediately succeeding financial year Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately 31st March of immediately 32st April to 31st March of immediately 32st April to 31st March of immediately 32st March	commercial operation to		1 000	¥1		
Year 2 w.e.f 1st April to 31st March of immediately succeeding financial year Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately	31st March of immediately		1.000	X1		
March of immediately succeeding financial year  Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year						
succeeding financial year Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately	•					
Year 3 w.e.f 1st April to 31st March of immediately succeeding financial year Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately  O 391  X3  X4  SX  SX  SX  SX  SX  SX  SX  SX  SX	March of immediately		0.901	X2		
March of immediately succeeding financial year  Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately 0.535  X7  Succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately 0.482  Year 9 w.e.f 1st April to 31st March of immediately 0.434  Year 9 w.e.f 1st April to 31st March of immediately 0.434  Year 10 w.e.f 1st April to 31st March of immediately 0.434  Year 10 w.e.f 1st April to 31st March of immediately						
succeeding financial year  Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately	-					
Year 4 w.e.f 1st April to 31st March of immediately succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately Succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately Year 10 w.e.f 1st April to 31st March of immediately Year 10 w.e.f 1st April to 31st March of immediately	,		0.812	X3		
March of immediately succeeding financial year  Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately						
succeeding financial year Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately Succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately Year 8 w.e.f 1st April to 31st March of immediately Year 9 w.e.f 1st April to 31st March of immediately Year 9 w.e.f 1st April to 31st March of immediately Succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately Year 10 w.e.f 1st April to 31st March of immediately	-					
Year 5 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately	,		0.731	X4		
March of immediately succeeding financial year  Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately 0.535 X7  succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately 0.482 X8  succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately 0.434 X9  succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately 0.434 X9  succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately						
Succeeding financial year  Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately Year 8 w.e.f 1st April to 31st March of immediately Succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately Year 9 w.e.f 1st April to 31st March of immediately Succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately Succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately	-					
Year 6 w.e.f 1st April to 31st March of immediately succeeding financial year Year 7 w.e.f 1st April to 31st March of immediately succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately	,		0.659	X5		
31st March of immediately succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately 0.535  March of immediately 0.535  Year 8 w.e.f 1st April to 31st March of immediately 0.482  Year 9 w.e.f 1st April to 31st March of immediately 0.434  Year 10 w.e.f 1st April to 31st March of immediately 0.434  Year 10 w.e.f 1st April to 31st March of immediately 0.434  Year 10 w.e.f 1st April to 31st March of immediately 0.391  Year 10 w.e.f 1st April to						
Succeeding financial year  Year 7 w.e.f 1st April to 31st March of immediately Succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately Succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately Succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately	-		0.500	\/o		
Year 7 w.e.f 1st April to 31st March of immediately Succeeding financial year Year 8 w.e.f 1st April to 31st March of immediately Succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately Succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately	-		0.593	X6		
March of immediately succeeding financial year  Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately 0.434 X9 succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately 0.391 X10						
succeeding financial year  Year 8 w.e.f 1st April to  31st March of immediately succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  Year 10 w.e.f 1st April to 31st March of immediately  O 391  X8  X8  X8  X8  X9  X9  X9  X10			0.505	V7		
Year 8 w.e.f 1st April to 31st March of immediately succeeding financial year Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year Year 10 w.e.f 1st April to 31st March of immediately 0.391  X8  X8  X8  X9  X9  X9  X10	_		0.535	Χ/		
31st March of immediately succeeding financial year  Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  31st March of immediately  0.482  X8  0.482  X8  0.482  X8  X9  X9  X10						
succeeding financial year  Year 9 w.e.f 1st April to  31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  0.391  X10	_		0.400	Vo		
Year 9 w.e.f 1st April to 31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  0.434  X9  X10	3		0.482	λ8		
31st March of immediately succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately 0.391 X10						
Succeeding financial year  Year 10 w.e.f 1st April to 31st March of immediately  0.391  X10	•		0.424	Vo		
Year 10 w.e.f 1st April to 31st March of immediately  0.391  X10	_		0.434	<b>∧</b> 9		
31st March of immediately						
	•					
Succeeding infancial year			0.391	X10		
	Successing intancial year					

Year 11 w.e.f 1st April to		
31st March of immediately	0.352	X11
succeeding financial year		
Year 12 w.e.f 1st April to		
31st March of immediately	0.317	X12
succeeding financial year		
Year 13 w.e.f 1st April to		
31st March of immediately	0.286	X13
succeeding financial year		
Year 14 w.e.f 1st April to		
31s March of immediately	0.258	X14
Succeeding financial year		
Year 15 w.e.f 1st April to		
31st March of immediately	0.232	X15
succeeding financial year		
Year 16 w.e.f 1st April to		
31st March of immediately	0.209	X16
succeeding financial year		
Year 17 w.e.f 1st April to		
31st March of immediately	0.188	X17
succeeding financial year	01.00	7117
Year 18 w.e.f 1st April to		
31st March of immediately	0.170	X18
succeeding financial year	00	71.0
Year 19 w.e.f 1st April to		
31st March of immediately	0.153	X19
succeeding financial year	0.100	7110
Year 20 w.e.f 1st April to		
31st March of immediately	0.138	X20
succeeding financial year	0.100	7120
Year 21 w.e.f 1st April to		
31st March of immediately	0.124	X21
succeeding financial year	0.121	/\ <u>_</u>
Year 22 w.e.f 1st April to		
31st March of immediately	0.112	X22
succeeding financial year	0.112	<i>//</i>
Year 23 w.e.f 1st April to		
31st March of immediately	0.101	X23
succeeding financial year	0.101	AZU
Year 24 w.e.f 1st April to		
31st March of immediately	0.091	X24
succeeding financial year	0.091	// <del>/ 1</del>
Year 25 w.e.f 1st April to	0.000	Vas
31st March of immediately	0.082	X25
succeeding financial year		

	+X25
Levellized Tariff for 25 years (in Rs /kWh)=X / 9.351	
Levellized Tariff for 25 years in words	

# Note:

a.	The levellized tariff shall be calculated up to	three	decimal	places.	However
	in case of a tie it may be expanded to break the	he tie.			

- b. Tariff stream quoted by the bidder shall be levellized with a discounting rate of 11% (*or* as applicable) only.
- c. Maximum allowable levellized tariff for this part is Rs\_\_\_\_\_ Per kWh.
- d. Bids not in conformity with above provisions will be rejected.

Date: Signature:	
Place:Printed Name	
Business Address:	
Designation:	
(Company Stamp)	

# FORMATS FOR SUBMITTING RFS Format-1 Covering Letter

(The covering letter should be on the Letter Head of the Bidding Company)

Ref. No	Date:		
From:	(Insert na	ame and ad	Idress of Bidding Company)
Tel.#:		Fax#:	E-mail address# :
To THE DIRECTOR, WALCHAND COL CENTRAL OFFICE VISHRAMBAG, SANGLI 416415		NGINEERIN	NG,

Sub: Bid for "Implementation of Grid connected Roof Top Solar PV System Scheme in Selected Sites in WCE institutes' campus"

Dear Sir,

We, the undersigned....[insert name of the 'Bidder'] having read, examined and understood in detail the RFS Document for Implementation of Grid connected Roof Top Solar PV System Scheme in Selected States in India hereby submit our Bid comprising of Price Bid and Techno Commercial Bid. We confirm that neither we nor any of our Parent Company / Affiliate/Ultimate Parent Company has submitted Bid other than this Bid directly or indirectly in response to the aforesaid RFS.

We give our unconditional acceptance to the RFS, dated.......and RFS
Documents attached thereto, issued by BENEFICIARY, as amended. This
shall also be construed as a token of our acceptance to the RFS Documents
including all its amendments and clarifications uploaded on BENEFICIARY
website.

We shall ensure that we execute such RFS Documents as per the provisions of the RFS and all provisions of such RFS Documents shall be binding on us.

## 2. Bid Capacity

We have bid for the following capacities at the following site (Name the model CAPEX) and have accordingly submitted our Price Bids for the same.

SI.No	Sites	Bid Capacity in kWp				
1	Walchand College of Engineering, Vishrambag,Sangli 416415					
	CAPEX					
	TOTAL: (SHALL NOT EXCEED 110 kWp)					

# **Bid Bond**

We have enclosed a Bid Bond of Rs........(Insert Amount), in the form of bank guarantee no......(Insert number of the bank guarantee) dated..........[Insert date of bank guarantee] as per Format ......from .........(Insert name of bank providing Bid Bond) and valid up to ........in terms of Clause .......of this RFS. The offered quantum of power by us is.......kWp . (Insert total capacity offered). (add details as per above for more than one Bid Bonds as applicable)

## 4. Processing Fee

Included in above

- 5. We have submitted our Price Bid strictly as per Section IV of this RFS, without any deviations, conditions and without mentioning any assumptions or notes for the Price Bid in the said format(s).
- 6. In case we are a Successful Bidder, we shall furnish a declaration at the time of commissioning of the Project to the affect that neither we have availed nor we shall avail in future any subsidy other than received from BENEFICIARY for implementation of the project.

## Acceptance

7. We hereby unconditionally and irrevocably agree and accept that the decision made by BENEFICIARY in respect of any matter regarding or arising out of the

RFS shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfil our obligations with regard to execution of projects of capacity offered by us.

# 8. Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this Bid and execute the RFS Documents, in the event of our selection as Successful Bidder. We further undertake and agree that all such factors as mentioned in RFS have been fully examined and considered while submitting the Bid.

9. We are enclosing herewith the Envelope-I (Covering letter, Processing fee and Bid Bonds) Envelope-II (Techno-Commercial documents) and Envelope III (Price Bids) containing duly signed formats, each one duly sealed separately, in one original as desired by you in the RFS for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RFS and subsequent communications from **BENEFICIARY**. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RFS and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid. We confirm that all the terms and conditions of our Bid are valid for acceptance for a period of 12 month from the Bid deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the		aay	y ot	,	20				
Thanking	you,								
We remai	n,								
Yours faith	nfully,								
Name, [	Designation	and s	Signature	of	Authorized	Person	in	whose	name

Power of Attorney/Board Resolution as per Clause.....is issued.

# **GENERAL PARTICULARS OF THE BIDDER**

Name of the Company	
Registered Office Address	
Telephone, Telex, Fax No	
E-mail	
Web site	
Authorized Contact Person(s) with	
name, designation Address and Mobile	
Phone No., E-mail address/ Fax No. to	
whom all references shall be made	
Year of Incorporation	
Bidding company PAN Number	
Bidding company TAN Number	
Have the bidder/Company ever been	
debarred By any Govt. Dept. /	
Undertaking for undertaking any work.	
Reference of any document information	
attached by the Bidder other than	
specified in the RFS.	
Whether the Bidder wishes to form a	Yes/No/May be
Project Company for execution of work	
Bidding company is listed in India	Yes/No
Details of the Ownership structure	
(Details of persons owning 10% or more	
of the Total Paid up equity of the	
Bidding Company in the Format as	
below	
Bid Bond Bank guarantee No	
Validity of Bid Bond	
Banker E-mail ID,	
<ul> <li>FAX No of the banker</li> </ul>	
Correspondence address & Pin Code	

(Signature of Authorized Signatory)
With Seal

## Format-A(Shareholding Certificate)

Name of the Equity holder	Type and Number of shares owned	% of equity holding	Extent of Voting rights

(Signature of Authorized Signatory & Company Secretary)
With Seal

**Stamp and Signature of the Company Secretary / Chartered Accountant** 

#### FORMAT FOR BID BOND

(To be submitted separately for each State and for each Model viz CAPEX/RESCO)
(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant
to place of execution.)
RefDate:
In consideration of the[Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RFS inter alia for selection of the Project for the capacity of kWp [Insert Capacity] in the State(insert name of the
State) in response to the RFS Nodated issued by
BENEFICIARY (hereinafter referred to as <b>BENEFICIARY</b> ) and BENEFICIARY
considering such response to the RFS of[insert the name of the Bidder] as
per the terms of the RFS, the [insert name & address of bank]
hereby agrees unequivocally, irrevocably and unconditionally to pay to
BENEFICIARY at [Insert Name of the Place from the address of <b>BENEFICIARY</b>
forthwith on demand in writing from BENEFICIARY or any Officer authorized by it in
this behalf, any amount upto and not exceeding Rupees[Insert amount not less
than that derived on the basis of Rs Lakhs per MW of cumulative capacity
proposed in a State(name of the State) ] only, on behalf of M/s.
[Insert name of the Bidder] .
This guarantee shall be valid and binding on this Bank up to and including[insert date of validity in accordance with Clause 3.15 of this RFS] and
shall not be terminable by notice or any change in the constitution of the Bank or the
term of contract or by any other reasons whatsoever and our liability hereunder
shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or
between parties to the respective agreement.
Our liability under this Guarantee is restricted to Rs (Rs.
only). Our Guarantee shall remain in force until
[insert date of validity in accordance with Clause 3.15 of this RFS]. BENEFICIARY shall be entitled to invoke this Guarantee till [Insert date which is 30 days after the date in the preceding sentence]. The Guarantor Bank hereby agrees and acknowledges that the BENEFICIARY
shall have a right to invoke this BANK GUARANTEE in part or in full, as it may
deem fit.
The Guarantor Bank hereby expressly agrees that it shall not require any proof in

addition to the written demand by **BENEFICIARY**, made in any format, raised at

the above mentioned address of the Guarantor Bank, in order to make the said payment to **BENEFICIARY**.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by ----- [Insert name of the Bidder and/or any other person. The Guarantor Bank shall not require BENEFICIARY to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against BENEFICIARY in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Delhi shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly BENEFICIARY shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by BENEFICIARY or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

3 , 3	hereinabove, our liability under this Guarantee
	Rs only) and it
shall remain in force until	[Date to be inserted on the basis of Clause
3.15 of this RFS] with an additional	claim period of thirty (30) days thereafter. We
<del>-</del>	amount or any part thereof under this Bank
Guarantee only if BENEFICIARY ser	rves upon us a written claim or demand.
Signature	
Name	
Power of Attorney No	
Email ID	
For[Insert Name of the Bank]	]
Banker's Stamp and Full Address.	

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_

## Format-4

## FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)

{To be submitted separately for each Site}

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)
In consideration of the [Insert name of the Bidder] (hereinafter referred to as
selected Successful Bidder(SB)) submitting the response to RFS inter alia for
selection of the Project for the capacity of MW in the state[Insert
name of the state] under Roof Top scheme in response to the RFS No
dated issued by BENEFICIARY (hereinafter referred to as <b>BENEFICIARY</b>
) and $$ BENEFICIARY considering such response to the RFS of $\dots \dots [insert \ the$
name of the Successful Bidder] (which expression shall unless repugnant to the
context or meaning thereof include its executers, administrators, successors and
assignees) and selecting the Solar Power Project of the Solar Power Developer and
issuing Letter of allocation Noto(insert the name of the
Successful Bidder(SB)) as per terms of RFS and the same having been accepted
by the selected SB or a Project Company, M/s {a Special Purpose
Vehicle (SPV) formed for this purpose}, if applicable ]. As per the terms of the RFS,
the [insert name & address of bank] hereby agrees
unequivocally, irrevocably and unconditionally to pay to BENEFICIARY
at [Insert Name of the Place from the address of the
<b>BENEFICIARY</b> ] forthwith on demand in writing from BENEFICIARY or any Officer
authorised by it in this behalf, any amount upto and not exceeding Rupees
[Total Value] only, on behalf of M/s [Insert name of the selected
Successful Bidder(SB)/ Project Company]
This guarantee shall be valid and binding on this Bank up to and
including[insert date of validity in accordance with Clause 3.16.6 of this
RFS]. and shall not be terminable by notice or any change in the constitution of the
Bank or the term of contract or by any other reasons whatsoever and our liability
hereunder shall not be impaired or discharged by any extension of time or variations
or alternations made, given, or agreed with or without our knowledge or consent, by
or between parties to the respective agreement.
Our liability under this Guarantee is restricted to Rs (Rs.
only).

Our Guarantee shall remain in force until BENEFICIARY shall be entitled to invoke this Guarantee till
The Guarantor Bank hereby agrees and acknowledges that BENEFICIARY shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.
The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by <b>BENEFICIARY</b> , made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to <b>BENEFICIARY</b> .
The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by[Insert name of the Successful Bidder(SB)/ Project Company as applicable] and/or any other person. The Guarantor Bank shall not require BENEFICIARY to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against BENEFICIARY in respect of any payment made hereunder.
This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Delhi shall have exclusive jurisdiction.
The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.
This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.
This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly BENEFICIARY shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Successful Bidder(SB) / Project Company , to make any claim against or any demand on the Successful Bidder(SB)/ Project Company or to give any notice to the Successful Bidder(SB)/ Project Company or to enforce any security held by BENEFICIARY or to exercise, levy or enforce any distress, diligence or other process against the Successful Bidder(SB)/ Project Company .
Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs (Rs only) and it shall remain in force until

Signature \_\_\_\_\_

Name
Power of Attorney No
Email ID
For[Insert Name of the Bank]
Banker's Stamp and Full Address.
Dated this day of, 20
Witness:
1Signature Name and Address
2 Signature Name and Address

## **Notes:**

- 1. The Stamp Paper should be in the name of the Executing Bank and of appropriate value.
- 2. The Performance Bank Guarantee(PBG) shall be executed by any of the Bank from the List of Banks enclosed as per Annexure-B

## Format-5

## **CHECK LIST FOR BANK GUARANTEES**

SI.No.	Details of checks	YES/NO.
a)	Is the BG on non-judicial Stamp paper of appropriate value,	
	as per applicable Stamp Act of the place of execution	
b)	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of	
	execution of BG).	
c)	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
d)	Is each page of BG duly signed / initialled by executant and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?	
e)	Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?	
f)	Are the factual details such as Bid Document No. / Specification No., / LOA No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
i)	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executant?	

#### **POWER OF ATTORNEY**

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

(a) Power of Attorney to be provided by the Bidding Company in favour of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We
(name and address of the registered office of the Bidding Company as applicable)
do hereby constitute, appoint and authorize Mr./Ms
(name & residential address) who is presently employed with us and holding the
position of as our true and lawful attorney, to do
in our name and on our behalf, all such acts, deeds and things necessary in
connection with or incidental to submission of our Bid for implementation of grid
connected Roof top solar PV scheme in selected States in India in response to the
RFS. No dated issued by BENEFICIARY (
BENEFICIARY ), New Delhi including signing and submission of the Bid and all
other documents related to the Bid, including but not limited to undertakings, letters,
certificates, acceptances, clarifications, guarantees or any other document which
the BENEFICIARY may require us to submit. The aforesaid Attorney is further
authorized for making representations to the BENEFICIARY, New Delhi and
providing information / responses to <b>BENEFICIARY</b> , New Delhi representing us in
all matters before <b>BENEFICIARY</b> , New Delhi and generally dealing with
BENEFICIARY, New Delhi in all matters in connection with this Bid till the
completion of the bidding process as per the terms of the above mentioned RFS.
We hereby agree to ratify all acts, deeds and things done by our said attorney
pursuant to this Power of Attorney and that all acts, deeds and things done by our
aforesaid attorney shall be binding on us and shall always be deemed to have been
done by us.
All the terms used herein but not defined shall have the meaning ascribed to such
terms under the RFS.
Signed by the within named
(Insert the name of the executants
company)
through the hand of

Mr
duly authorized by the Board(vide Board resolution No) to issue such Power of Attorney
Dated this day of
Accepted
Signature of Attorney (Name, designation and address of the Attorney)
Attested
(Signature of the executant) (Name, designation and address of the executant)
Signature and stamp of Notary of the place of execution
Common seal of
WITNESS
1
Designation
2
Designation
Notes:

The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and the same should be under common seal of the executant affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executant(s) in this regard.

The person authorized under this Power of Attorney, in the case of the Bidding Company / Lead Member being a public company, or a private company which is a subsidiary of a public company, in terms of the Companies Act, 1956, with a paid up share capital of more than Rupees Five crores, should be the Managing Director / whole time director/manager appointed under section 269 of the Companies Act, 1956. In all other cases the person authorized should be a director duly authorized by a board resolution duly passed by the Company.

Also, wherever required, the executant(s) should submit for verification the extract of the chartered documents and documents such as a Board resolution / power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

## FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT (AS PER CLAUSE 3.3.3) (To be submitted on the letterhead of Bidding Company / Lead Member/)

_	
- 1	$\sim$
- 1	().

The Director
Walchand College of Engineering,
Vishram baugh,
Sangli 415416

Dear Sir,

Sub: Bid for Implementation of Grid connected Roof Top Solar PV System scheme in selected States in India in response to the RFS No: \_\_\_\_\_dated: \_\_\_\_\_a. We submit our Bid(s) for the total capacity of ...kWp (Insert total offered capacity in kWp and submit details of our Financial Eligibility Criteria as follows:

#### **Bid Details**

SL.NO	CAPEX	BID CAPACITY IN KWP *
1		
TOTAL	(SHALL NOT EXCEED 110 kWp)	

Note: 1MWp=1000kWp

We certify that the Financially Evaluated Entity(ies) had an Annual Turnover as follows:

The maximum Annual turnover of Rupees ......Crore per MW in any one of the last 3 financial years preceding the Bid Deadline subject to the condition that the Bidder should at least have completed one financial year.

OR

Net worth of Rs......Crore computed as per instructions provided in Clause 3.6.3. (*Strike Out whichever Is Not Applicable*)

#### Financial eligibility criteria

Name of Financially Evaluated Entity*	Relationshi p with Bidding Company**	Financial year	Year of Incorporati on of the Bidding company	***Total Maximum Annual Turnover (Rs. Crore)	Net worth as per Clause 3.6.3 (in Rs. Crore)

\*\*\* Bidder shall furnish maximum annual turnover in any of the last three financial years.

Yours faithfully
(Signature and stamp (on each page) of Authorized Signatory of Bidding Company.

Name:

Date:

Place:

(Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidding Company.

Date: .....

Name: .....

Notes:

<sup>\*</sup> The Financially Evaluated Entity may be the Bidding Company itself.

<sup>\*\*</sup> The column for "Relationship with Bidding Company" is to be filled only in case financial capability of Parent Company and/or Affiliate has been used for meeting Qualification Requirements.

Audited consolidated annual accounts of the Bidder may also be used for the purpose of financial criteria provided the Bidder has at least 26% equity in each company whose accounts are merged in the audited consolidated accounts and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of the Bid.

# Format for certificate of relationship of Parent Company or Affiliate with the

	Bidding Co	mpany.	
To,			
Dear Sir,			
Sub: Bid for Impler in selected States in	mentation of Grid connectin India.	ted Roof Top Solar I	PV System Scheme
the Affiliate(s) /Pa Affiliate/Parent Co holding as on seve The details of equ	that M/s, rent Company of the Bio mpany as provided in th n (7) days prior to the Bid uity holding of the Affiliate even (7) days prior to the	Iding Company as pilonia is RFS and based IDeadline.  Perent Company/B	per the definition of on details of equity idding Company or
Name of Bidding Company/ applicant company	Name of the Affiliate of the Bidding Company/Applicant company/ Name of the Parent Company of the Bidding Company	Name of the Company having common control on the Affiliate and the Bidding Company	Percentage of Equity Holding of Parent Company in the Bidding Company/ Applicant company

*Strike out whichever is not applicable	
---	--

(Insert Name and Signature of Statutory Auditor or practising Company **Secretary of the Bidder)** 

# Undertaking from the Financially Evaluated Entity or its Parent Company/ Ultimate Parent Company

(On the Letter Head of the Financially Evaluated Entity or its Parent Company/Ultimate Parent Company)

Name:
Full Address:
Telephone No.:
E-mail address:
Fax/No.:
То,
Dear Sir,
We refer to the RFS Nodatedfor "Implementation of Grid connected Roof Top Solar PV System Scheme in selected Cities/States in India".
"We have carefully read and examined in detail the RFS, including in particular, Clauseof the RFS, regarding submission of an undertaking, as per the prescribed Formatof the RFS.
We confirm that M/s(Insert name of Bidding Company/) has been authorized by us to use our Technical and or financial capability for meeting the Technical and or Financial Eligibility as specified in Clauseof the RFS referred to above.
We have also noted the amount of the Performance Guarantee required to be submitted as per Clauseof the RFS the(Insert the name of the Bidding Company) in the event of it being selected as the Successful Bidder.
In view of the above, we hereby undertake to you and confirm that in the event of failure of(Insert name of the Bidding Company) to submit the Performance Guarantee in full or in part at any stage, as specified in the RFS, we shall submit the Performance Guarantee not submitted by(Insert name of the Bidding Company)".

We have attached hereto certified true copy of the Board Resolution Whereby the Board of Directors of our Company has approved issue of this Undertaking by the Company.

All the terms used herein but not defined, shall have the meaning as ascribed to the said terms under the RFS.

Signature of Managing Director/Authorised signatory
Common seal ofhas been affixed in my/our presence pursuant
to Board of Director's Resolution dated
WITNESS
(Signature)
Name
Designation
(Signature)
Name
Designation

#### **CONSORTIUM AGREEMENT**

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

THIS Concertium Agreement ("Ag	rroomont")	ovocuto	d on thic			dov
THIS Consortium Agreement ("Ago of 2014 b						
Member]incorporated under the laws of			anc	 I having it	s Reniste	ared ared
Office at						
expression shall include its succe						
	and		рот	- a a - a - a - a - a - a - a - a - a -	,	
M/s			Compar	v incorno	orated un	nder
the laws of						
Office at						
"Technical Member", which expre						
permitted assigns), which expres						
permitted assigns)						
WHEREAS, each Member indivi	dually sha	ll be ref	ferred to	as the "N	/lember"	and
both the Members shall be co	ollectively r	referred	to as th	ne "Memb	oers" in	this
Agreement.						
WHEREAS the BENEFICIA						
BENEFICIARY ) ,a section						
1956 has invited response to						
manufacture, supply, erection,	_			_	_	-
operation & maintenance for a pe	-				-	ıaer
RESCO of Roof Top Solar PV por	wer system	ı in sele	cied State	s in india.	•	
WHEREAS the RFS documents	etinulatae t	hat the	Load Mai	mher may	onter in	to a
Technical Consortium Agreement	•			•		
the Technical Eligibility Criteria as				•	•	
the Bidding Consortium will ha	•					
Agreement in a format enclosed v				TOTOCADIC	00113011	IUIII
rigiociniciii iii a format chelecca v	vidir di O i Ki	o accan	110111.			
NOW THEREFORE, THIS AGRE	EMENT W	ITNESS	TH AS U	NDER:		
In consideration of the above pr					nbers in	this
Consortium do hereby mutually a		•				
, , ,	,					
1. We, the Members of the	Consortiur	m and I	Members	to the Ag	greement	do
hereby unequivocally agre	e that (M	/s		), shal	ll act as	the
Lead Member as defined i						
Technical Member	.•					

- The Lead Member is hereby authorized by the Technical Member of the Consortium to bind the Consortium and receive instructions for and on their behalf.
- 3. The Lead Member shall be liable and responsible for ensuring the individual and collective commitment of each of the Members of the Consortium in discharging all of their respective obligations. Each Member further undertakes to be individually liable for the performance of its part of the obligations without in any way limiting the scope of collective liability envisaged in this Agreement.
- 4. Subject to the terms of this Agreement, the Technical member shall be responsible for providing technical knowledge for "Design, Manufacture, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a defined period as per RFS of Roof Top Solar PV power system in selected Cities/States in India to the lead member.
- 5. In case of any breach of any commitment by any of the Consortium Members, the Lead Member shall be liable for the consequences thereof.
- 6. This Agreement shall be construed and interpreted in accordance with the Laws of India and courts at Delhi alone shall have the exclusive jurisdiction in all matters relating thereto and arising there under.
- 7. It is hereby further agreed that in case of being shortlisted, the Members do hereby agree that they shall abide by the terms & conditions of the RFS document.
- 8. It is further expressly agreed that this Agreement shall be irrevocable and shall form an integral part of the RFS submitted to BENEFICIARY and shall remain valid till completion of the job assigned to the Contractor.
- 9. The Lead Member is authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Members respectively from time to time in the response to RFS.
- 10. It is hereby expressly understood between the Members that no Member at any given point of time, may assign or delegate its rights, duties or obligations under this agreement without the explicit permission of **BENEFICIARY**.

#### 11. This Agreement

Has been duly executed and delivered on behalf of each Member hereto and constitutes the legal, valid, binding and enforceable obligation of each such Member;

- (b) Sets forth the entire understanding of the Members hereto with respect to the subject matter hereof; and
- (c) May not be amended or modified except in writing signed by each of the Members and with prior written consent of **BENEFICIARY**.

IN WITNESS WHEREOF, the Members have, through their authorised representatives, executed these present on the Day, Month and Year first mentioned above.

For M/s[Lead	Memberj
	the person authorized vide Board Resolution
Dated [●])	
Witnesses: 1) Signature	2) Signature
	Name:
Name:	Address:
Address:	
For M/s[Techn	ical Member]
(signature, Name & Designation of the	person authorized vide Board Resolution
Dated [●])	
Witnesses:	

#### ANNEXURE-A: DOCUMENTS REQUIRED FOR PROJECT SANCTION

Following documents will be required to be submitted for project sanction:

1. Project Report (As per TOC provided by **BENEFICIARY**)

(Project report should contain the following TOC)

- Context / background / Introduction
- Project objectives
- Target beneficiaries
- Project strategy / Approach of work & methodology
- Environmental Impact Assessment, if required.
- Site details including photographs with date & time stamping
- Solar resource assessment
- Technology selection (Module, Inverter and BOS)
- Design, Simulation, BOM and layout of SPV plant
- Grid connectivity and metering scheme
- Means of financing and project budget
- Financial, Economic & Risk Analysis
- Time frame / schedule of implementation
- 2. Agreement between the bidder and the owner of the Project and Building/Roof top (Notarised original agreement on stamp paper of appropriate value should be enclosed).

All Agreement shall generally have reference to the **BENEFICIARY**'s RFS No. and Letter of Allocation and provisions as per terms and conditions, technical specification and performance parameter in line with the **BENEFICIARY**'s RFS Document against witch Letter of Allocation has been issued. In addition, it shall indicate the price payment terms, completion period along with other conditions of contract like insurance, warranty, force majeure, arbitration, jurisdiction, governing law, site access for the developer, and, site access for BENEFICIARY officials for the entire plant life, obligation of the roof top owner regarding providing of data to BENEFICIARY as per the RFS Document etc.

3. No Objection Certificate from the concerned **MSEDCL** for grid connectivity.

(Not mandatory during project identification, however mandatory for project commissioning/operation.

## **ANNEXURE-B: LIST OF BANKS**

	NATIONALISED BANKS
1	State Bank of India
2	State Bank of Bikaner & Jaipur
3	State Bank of Hyderabad
4	State Bank of Indore
5	State Bank of Mysore
6	State Bank of Patiala
6	State Bank of Travancore
7	Allahabad Bank
8	Andhra Bank
9	Bank of India
10	Bank of Maharashtra
11	Canara Bank
12	Central Bank of India
13	Corporation Bank
14	Dena Bank
15	Indian Bank
16	Indian Overseas Bank
17	Oriental Bank of Commerce
18	Punjab National Bank
19	Punjab & Sind Bank
20	Syndicate Bank
21	Union Bank of India
22	United Bank of India
23	UCO Bank
24	Vijaya Bank
25	Bank of Baroda

#### **INDICATIVE ROOF TOP LAYOUT**

# (BIDDER IS EXPECTED TO VISIT THE SITES AND CARRYOUT OWN SURVEY)

## AT Walchand College of Engineering, Vishrambag, Sangli 416415

**ROOF TOP OF Walchand College of Engineering, Sangli**