

**Maharashtra State Electricity Distribution Co. Ltd.**

**REQUEST FOR SELECTION (RfS)**

**FOR PROCUREMENT OF 88 MW (AC) SOLAR POWER FROM PROJECTS TO BE DEVELOPED IN NAGPUR REGION OF MAHARASHTRA THROUGH COMPETITIVE BIDDING PROCESS (FOLLOWED BY E-REVERSE AUCTION)**

**RfS No. MSEDCL/CE/RE/2023/Solar/Decentralised/T-25 dated 10.04.2023**

**ISSUED BY**

**Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL),  
Renewable Energy Section, 5th Floor, 'Prakashgad', Bandra (East), Mumbai - 400 051  
Website: [www.mahadiscom.in](http://www.mahadiscom.in)**

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**DISCLAIMER:**

1. Though adequate care has been taken while preparing the RfS document, the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within **four (04) 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 by the Bidder.
2. Maharashtra State Electricity Distribution Company Limited (MSEDCL) reserves the right to modify, amend or supplement this RfS document including the draft PPA and Annexures.
3. While this RfS has been prepared in good faith, neither MSEDCL 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.

Place: Mumbai

Date: 10.04.2023

### Bid Information Sheet

<b>Document Description</b>	RfS Document for procurement of 88 MW (AC) solar power from projects to be developed in Maharashtra through competitive bidding process (Followed By e - Reverse Auction).
<b>RfS No.&amp; Date</b>	MSEDCL/CE/RE/2023/Solar/Decentralized/T-25 dated 10.04.2023
<b>Downloading of tender documents</b>	10.04.2023
<b>Pre-bid Conference / Clarification Meeting Date &amp; Location</b>	Date: 19.04.2023 (Through VC) Prebid queries shall be mailed 2 days prior to prebid meeting on mail id –skvytendermsedcl@gmail.com Website –www.mahadiscom.in (VC link will be notified later)
<b>Last date &amp; Time for</b> a) Online Submission of Response to RfS and b) All documents as per Section 3.21 A physically at MSEDCL office, Mumbai	Date: 08.05.2023 Time 16:00 Hrs
<b>Technical Bid Opening</b>	Date : 08.05.2023 Time 18:00 Hrs
<b>Financial Bid Opening</b>	Will be informed to eligible bidders
<b>Ceiling Tariff</b>	Rs. 3.20 per unit
<b>e- Reverse Auction</b>	Will be informed to eligible bidders
<b>Cost of RfS Document (non-refundable)</b>	Rs. 15000 + 18% GST to be paid through online payment.
<b>Processing Fee (non-refundable)</b>	Rs. 10,000 per MW + 18% GST to be paid through online payment.
<b>EMD</b>	Rs. 1 Lakh / MW is to be submitted in the form of Bank Guarantee or paid through online payment along with response to RfS.
<b>Name, Designation, Address and other details (For Submission of Response to RfS)</b>	Chief Engineer (Renewable Energy) Maharashtra State Electricity Distribution Co. Ltd., Renewable Energy Section, 5th Floor, 'Prakashgad', Bandra (East), Mumbai - 400 051 Tel No. 022-26474211 (Extn. 2208) Email – skvytendermsedcl@gmail.com

Details of persons to be contacted in case of any assistance required	Mr. Nikhil Meshram Superintending Engineer (RE) Ph: 7045271284 Mr. V.M. Shinde Executive Engineer (RE) Ph: 7021762073	
<b>Bank Details of MSEDCL</b>	Name of Bank	BANK OF INDIA
	Branch Name	MUMBAI LARGE CORPORATE BRANCH
	Account No.	016020110000033
	Name of Account Holder by Designation	Director Finance, MSEDCL
	IFSC Code	BKID0000160
	TYPE OF ACCOUNT	CURRENT ACCOUNTS
	Address	MUMBAI LARGE CORPORATE, 70/80, MG ROAD, FORT, FORT, MUMBAI - 400023, MAHARASHTRA
<p>Important Note: Prospective Project Developers are requested to remain updated for any notices/amendments/clarifications etc. to the RfS document through the <a href="http://www.mahadiscom.in">www.mahadiscom.in</a>. No separate notifications will be issued for such notices/amendments/clarifications etc. in the print media or individually. Intimation regarding notification/amendments/clarifications etc. shall be updated on <a href="http://www.mahadiscom.in">www.mahadiscom.in</a> and the details will only be available from e-tendering portal of mahadiscom.</p>		

1. The Notice Inviting Tender (NIT), the RfS (Request for Selection) and the draft PPA are given in the tender document. The intending firms are required to go through the same carefully and note that all terms and conditions mentioned therein shall form the part of the contract agreement. The set of contracts will neither be issued manually nor be sent by post or courier; the same can be viewed and downloaded from MSEDCL E-Tender Portal w.e.f. 10.04.2023.
2. The applications are to be submitted electronically through <https://www.mahadiscom.in/solar-mskvy/index.html> at e-tendering portal of mahadiscom and other mode of submission of bids shall not be accepted. The procedure for filling the bid is given in RfS.
3. The corrigendum and amendments if any shall be uploaded on [www.mahadiscom.in](http://www.mahadiscom.in). Therefore, all bidders are requested to frequently visit the web sites at least till the schedule date of opening of bids.
4. The Tender Documents shall also be available on [www.mahadiscom.in](http://www.mahadiscom.in).

## **SECTION 1: INTRODUCTION**

## **Section 1: Introduction**

### **1.1 INTRODUCTION:**

- 1.1.1 The erstwhile Maharashtra State Electricity Board was looking after Generation, Transmission & Distribution of Electricity in the State of Maharashtra barring Mumbai. But after the enactment of Electricity Act 2003, MSEB was restructured into 4 Companies viz. MSEB Holding Co. Ltd., Maharashtra State Electricity Distribution Co. Ltd. (Mahavitaran / MSEDCL), Maharashtra State Power Generation Co. Ltd. (Mahagenco/MSPGCL) and Maharashtra State Electricity Transmission Co. Ltd. (Mahatransco/MSETCL) on 6th June 2005. Mahavitaran distributes electricity to consumers across the State except some parts of Mumbai.
- 1.1.2 The Government of Maharashtra vide GR dated 17.03.2018 appointed MSEDCL as a implementing agency for 'Mukhyamantri Saur Krishi Vahini Yojna(MSKVY)' for giving day time power to Agricultural consumers.
- 1.1.3 MSEDCL intends to undertake development of 88 MW (AC) Solar PV ground mounted power plants in Maharashtra to be implemented only on Government lands as displayed in the list of land (annexed as Annexure-G) in various District of Maharashtra. MSEDCL has decided to carry out a Competitive Bidding Process (conducted through electronically facilitated online web based portal i.e. MSEDCL Electronic Tender) (followed by e-reverse auction). MSEDCL shall enter into Power Purchase Agreement (PPA) with the Bidders selected based on this RfS for purchase of solar power for a period of 25 years from the Commercial Operation Date of the solar power projects based on the terms, conditions and provisions of the RfS.
- 1.1.4 Bidders are allowed to Bid for one or more Project(s) based on the Eligibility Criteria stipulated in the Clause 3.6 of this RfS.
- 1.1.5 The Solar Power Generator shall be responsible for design, finance, engineering, procurement, construction, operation and maintenance of the Project(s) under and in accordance with the provisions of the PPA to be entered into between the Solar Power Generator and MSEDCL.
- 1.1.6 MSEDCL's role w.r.to land is to acquire possession of government lands being offered under tender and hand it over to successful bidder. MSEDCL won't carry out any technical evaluation nor incur any expense on development of these lands.

### **1.2 Details of Power Procurement:**

- 1.2.1 The bidders selected by MSEDCL based on this RfS, shall set up Solar Power Projects in accordance with the provisions of this RfS document and Draft Power Purchase Agreement (PPA). The Draft PPA format has been enclosed and can be downloaded from [www.mahadiscom.in/www.https://mahadiscom.in/solar-mskvy/](http://www.mahadiscom.in/www.https://mahadiscom.in/solar-mskvy/).

1.2.2 MSEDCL shall enter into Power Purchase Agreement (PPA) with the Bidders selected based on this RfS for purchase of solar power for a period of 25 years from the Commercial Operation Date of the solar power projects based on the terms, conditions and provisions of the RfS. The tariff payable to Selected Bidder shall be fixed for 25 years as discovered through the e-bidding and e-reverse auction conducted vide this RfS. The bidders will be free to avail fiscal incentives like Accelerated Depreciation, Tax Holidays, benefits from trading of carbon credits, etc. as available for such projects, if applicable. The same will not have any bearing on comparison of bids for selection. As equal opportunity is being provided to all bidders at the time of tendering itself, it is up to the bidders to avail various tax and other benefits. No claim shall arise on MSEDCL for any liability if bidders are not able to avail fiscal incentives and this will not have any bearing on the applicable tariff.

1.2.3 In case of import of energy during a month, the successful bidder shall be required to make payment to MSEDCL at prevailing HT Industrial Tariff rate as determined by MERC from time to time.

### **1.3 ELIGIBLE PROJECTS:**

1.3.1 The Projects to be selected for aggregate capacity of 88 MW provide for deployment of Solar PV Technology. However, the selection of projects would be technology agnostic within the technology mentioned hereinafter. Crystalline silicon or thin film etc., with or without trackers can be installed. Only commercially established and operational technologies can be used, to minimize the technology risk and to achieve the timely commissioning of the Projects. The trackers shall fulfill the criteria as specified under Annexure-H.

1.3.2 The Successful bidders shall develop ground mounted solar PV power projects of capacity as quoted by the bidder in the bidding process subject to the conditions specified in Section 3.2 of this RfS.



## **SECTION 2: DEFINITIONS**

## Section 2: Definitions

Following terms used in the document will carry the meaning and interpretations as described below:

### 2.1 Definitions

**"Act" or "Electricity Act, 2003"** shall mean the Electricity Act, 2003 and include any modifications, amendments and substitution from time to time;

**"Affiliate"** shall mean a Bidder or a Bidding Entity that, directly or indirectly,

- i. controls, or
- ii. is controlled by, or
- iii. is under the common control with such Company.

The expression 'control' shall mean the ownership, directly or indirectly, of more than 50% of the voting shares of such Company or right to appoint majority Directors.

**"Appropriate Commission"** shall mean as defined in the PPA;

**"Bidder" or "Bidding Entity"** shall mean Bidding Company or a Limited Liability Company (LLC) or a Bidding Consortium submitting the Bid. Any reference to the Bidder includes Bidding Company / LLC/Bidding Consortium/ Consortium Member of a Bidding Consortium including its successors, executors and permitted assigns and Lead Member of the Bidding Consortium jointly and severally, as the context may require.;

**"Bidding Consortium" or "Consortium"** shall mean the reference to the group of Bidders or Bidding Entities, each being a Member in a Bidding Consortium, if the Bid has been submitted jointly by more than one Bidder.

**"Capacity Utilisation Factor (CUF)"** shall have the same meaning as provided in CERC (Terms & Conditions for tariff determination from renewable energy sources) Regulations, 2009 as amended from time to time. However for avoidance of any doubt, it is clarified that the CUF shall be calculated on the Contracted Capacity; In any Contract Year, if 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity,  $CUF = (X \text{ MWh} / (Y \text{ MW} * 8766)) * 100\%$ ;

**"Chartered Accountant"** for bidders or its Parent, Affiliate or Ultimate Parent or any Group Company incorporated in India, "*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; For bidders or its Parent, Affiliate or Ultimate Parent or any Group Company incorporated in countries other than India, "*Chartered Accountant*" shall mean a person or a firm practicing in the respective country and designated / registered under the corresponding Statutes/laws of the respective country.;

**“Company”** shall mean a body incorporated in India under the Companies Act, 1956 or the Companies Act, 2013, as applicable;

**“Commissioning”** with respect to the Project/ Unit as certified by SLDC / MSEDCL shall mean when all equipment’s as per rated capacity has been installed and energy has flown into the grid.

**“Commercial Operation Date”** with respect to the Project/ Unit shall mean the date on which the Project / Unit is fully commissioned (certified by SLDC / MSEDCL) and available for commercial operation and such date as specified in a written notice given at least 30 days in advance by the Successful Bidder to MSEDCL.”

**“Conflict of Interest”** A Bidder may be considered to be in a conflict of interest with one or more Bidders in the same bidding process if they have a relationship with each other,

**“Contracted Capacity”** shall mean the capacity (in MW AC) contracted with MSEDCL for supply by the successful bidder at the Delivery Point from the Solar Power Project.

**“Contract Year”** shall mean, with respect to the initial Contract Year, the period beginning on the Commercial Operation Date and ending at 12.00 midnight on 31st March of that Fiscal Year. Each successive Contract Year shall coincide with the succeeding Fiscal Year, i.e., a period of twelve months commencing on April 1 and ending on following March 31, except that the final Contract Year shall end on the date of expiry of the Term or on Termination of this Agreement whichever is earlier.

**“Control”** shall mean holding not less than 51% of voting rights or of paid up share capital.

**“Controlling shareholding”** shall mean not less than 51% of the voting rights or paid up share capital in the Company/Consortium.

**“Co-Operative Society”** shall mean a body registered in India under the Co-operative Societies Act, 1912;

**“Day”** shall mean calendar day.

**“Delivered Energy”** means the kilowatt hours of energy actually fed and measured by the energy meters at the Delivery Point and as certified by SLDC / MSEDCL.

**“Delivery Point”** shall mean the point(s) of connection(s) at which energy is delivered into the Grid System i.e. the Interconnection Point.

**“Electricity Laws”** shall mean the Electricity Act, 2003 and the relevant rules, notifications, and amendments issued there under and all other Laws in effect from time to time and applicable to the development, financing, construction, ownership, operation or maintenance or regulation of electric generating companies and Utilities in India, the rules, regulations and amendments issued by CERC/ MERC from time to time.

**“Effective Date”** shall mean the date of handing over of government land to successful bidder for development of solar project;

**“Financial Closure” or “Project Financing Arrangements”** means as mentioned in Clause 3.13 of this RfS document.

**“Financing Documents”** mean the agreements and documents (including asset leasing

arrangements) entered/to be entered into between the bidder and the Financing Parties relating to the financing of the Project.

**“Financing Parties”** means Parties financing the Project, pursuant to Financing Documents.

**“Group Company”** of a Company means

- (i) a Company which, directly or indirectly, holds 10% (ten percent) or more of the share capital of the company, or
- (ii) a company in which the company, directly or indirectly, holds 10% (ten percent) or more of the share capital of such company, or
- (iii) a company in which the company, directly or indirectly, has the power to direct or cause to be directed the management and policies of such company whether through the ownership of securities or agreement or any other arrangement or otherwise, or
- (iv) a company which, directly or indirectly, has the power to direct or cause to be directed the management and policies of the Company whether through the ownership of securities or agreement or any other arrangement or otherwise, or
- (v) a company which is under common control with the company, and control means ownership by one company of at least 10 % (Ten ) of the share capital of the other company or power to direct or cause to be directed the management and policies of such company whether through the ownership of securities or agreement or any other arrangement or otherwise.

Provided that a financial institution, scheduled bank, foreign institutional investor, nonbanking financial company, and any mutual fund shall not be deemed to be Group Company, and its shareholding and the power to direct or cause to be directed the management and policies of a company shall not be considered for the purposes of this definition unless it is the Project Company or a Member of the Consortium developing the Project.

**“Group Business Entity”** shall mean;

- a) A Business Entity, which directly or indirectly holds not less than 26% of voting securities in the Bidder; or
- b) A Business Entity in which the Bidder directly or indirectly holds not less than 26% of voting securities.

**“Handing over of land”** shall mean the date on which handing over & taking over letter is signed by both the parties.

**“Interconnection Point”** shall mean the point(s) of connection(s) at which the project is connected to the grid i.e. it shall be at 11 / 22 kV bus bar level of substation of MSEDCL.

**“Lead Member of the Bidding Consortium” or “Lead Member”:** There shall be only one Lead Member, having shareholding more than 51% in the Bidding Consortium, which cannot be changed till 1 year from the Commercial Operation Date (CoD) of the Project.

**“Letter of Award” or “LOA”** shall mean the letter issued by Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) to the Selected Bidder for award of contract.

**“LLC”** shall mean Limited Liability Company.

**“Member in a Bidding Consortium” or “Member”** shall mean each Company in a Bidding Consortium. In case of a Technology Partner being a member in the Consortium, it has to be a Company.

**“MERC”** shall mean Maharashtra Electricity Regulatory Commission.

**“Metering Point”** Metering shall be at 11 / 22 kV level substation of MSEDCL.

**“Month”** shall mean calendar month.

**“Net-Worth”** means the Net-Worth as defined in Section 2 of the Companies Act 2013.

**“Paid-up share capital”** means the paid-up share capital as defined in Section 2 of the Companies Act, 2013.

**“Parent”** means a company, which holds not less than 51% equity either directly or indirectly in the Project Company or a Member in a Consortium developing the Project;

**“Performance Bank Guarantee”** shall mean the irrevocable unconditional bank guarantee to be submitted by the successful bidder as per Section 3.9.

**“PPA”** shall mean the Power Purchase Agreement signed between the successful bidder and MSEDCL according to the terms and conditions of the standard PPA enclosed with this RfS;

**“Project”** shall mean a Solar Photovoltaic Grid Interactive Power Station to be established by the successful bidder comprising of number of units at single/multiple locations with cumulative capacity of 88 MW, and shall include land, buildings, plant, machinery, ancillary equipment, material, switch-gear, transformers, protection equipment and the like necessary to deliver the Electricity generated by the Project to MSEDCL at the Delivery Point.

**“Project Site”** means any and all parcels of real property, rights-of-way, easements and access roads, upon which the Project and its related infrastructure will be located.

**“Project Capacity”** means 88 MW AC capacity of the project at the generating terminal(s) and to be contracted with MSEDCL for supply from the Solar Power Project.

**“RfS Document”** shall mean the bidding document issued by MSEDCL including all attachments, clarifications and amendments thereof.

**“SCADA”** means the Supervisory Control and Data Acquisition System (SCADA) installed for recording and transferring the online data.

**“SCOD” or “Scheduled Commercial Operation Date”** shall mean the date which shall not exceed 12 (Twelve) months from the date of handing over of government land to successful bidder for development of solar project.

**“SEA”** means the State Energy Account issued by State Load Dispatch Centre,

**“Selected Bidder or Successful Bidder or Solar Power Developer (SPD) or Solar Power Generator (SPG)”** shall mean the Bidder selected pursuant to this RfS to set up the Project and supply electrical output as per the terms of PPA.

**“SLDC”** means the State Load Dispatch Center as notified by the State Government.

**“Solar PV Project”** means the solar Photo Voltaic Power project that uses sunlight for direct conversion into electricity through Photo Voltaic technology.

**“STU or “State Transmission Utility”** shall mean the State Transmission Utility notified by respective State Government under Sub-section (1) of Section 39 of the Act.

**“SNA” means** State Nodal Agency i.e Maharashtra Energy Development Agency (MEDA).

**“TOE”** shall mean Tender Opening Event.

**“Ultimate Parent”** shall mean a Company, which owns not less than fifty-one percent (51%) equity either directly or indirectly in the Parent and Affiliates.

**“Unit”** shall mean one set of Solar Photovoltaic Grid Interactive power plant and all the auxiliary equipment and facilities, required to constitute a solar Project.

**“Week”** shall mean calendar week.

**“Voltage of Delivery”** means the voltage at which the Electricity generated by the Project is required to be delivered at 11 / 22 kV level substation of MSEDCL.

**SECTION 3: BID INFORMATION AND INSTRUCTION TO BIDDERS**

## **Section 3: Bid Information and Instructions to Bidders**

### **3.1 Obtaining RfS Document, Cost of documents & Processing Fees**

- 3.1.1 The RfS document can be downloaded from the website of [www.mahadiscom.in](http://www.mahadiscom.in) or <https://mahadiscom.in/solar-mskvy/>. Interested bidders have to download the official copy of RfS & other documents after logging into e-tendering portal of mahadiscom by using the Login ID & Password provided by MSEDCL Portal during registration (Refer Annexure – D and E). <https://www.mahadiscom.in/solar-mskvy/index.html>. (Path: services->registration. After registration: Login -> Land & Developer -> registration for developer. -> tender portal).
- 3.1.2 The bidders shall be eligible to submit/ upload the bid document only after logging into the e-tendering portal of mahadiscom and downloading the official copy of RfS.
- 3.1.3 Prospective Bidders interested to participate in the bidding process are required to submit their proposals in response to this RfS document along with a non-refundable processing fee as mentioned in the Bid Information Sheet. The bids submitted without cost of the RfS document and/or Processing Fee and/or Bank Guarantee against EMD, shall not be considered for the bidding and such bids shall not be opened by MSEDCL.

### **3.2 Total Capacity Offered:**

#### **1. Total Capacity:**

Selection of Grid-connected Solar PV Projects for total capacity of 88 MW will be carried out through e-bidding followed by e-Reverse Auction process.

#### **2. Capacity of the Project:**

A Bidder may submit Bids for developing the Project(s) under solar PV technology (Solar PV ground mount Project) as per the criteria below:

- i. The Cumulative capacity to be installed is 88 MW

#### **3. Project Locations:**

The Successful bidders shall develop ground mounted solar PV power projects subject to the conditions specified above in Section 3.2. and as per list of government lands annexed as Annexure-G.

### **3.3 Project Scope:**



The successful bidder shall set up Solar PV Power Project(s) including the transmission/Distribution network up to the Delivery Point in line with **Section 3.7**, at its own cost (including but not limited to open access charges till the delivery point) and in accordance to the provisions of this RfS document. All approvals, permits and clearances required for setting up of the Project (including connectivity) and those required from State Government and local bodies shall be in the scope of the successful bidder. However, the selection of Projects would be technology agnostic within PV technology and crystalline silicon or thin film, etc. with or without Trackers can be installed fulfilling the criteria as specified under Annexure H. In order to ensure only quality systems are installed, the Bidders shall strictly comply with the technical parameters detailed in the Annexure -H. Bidder shall comply with MNRE Notification dated 10.03.2021 regarding Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirement for Compulsory Registration) Order, 2019 and its subsequent amendment upto date of commissioning of the Project.

1. The Bidder shall identify & do survey of lands displayed in Annexure-G required for the project at the time of submission of bid in Format 6.1.
2. .
3. The list of the land & its details is made available along with tender documents as Annexure-G. Bidders have to mention substation name along with its respective land application No. & its details in the bid. The detail information of lands will be made available on land portal after successful registration of bidder on the land portal. The terms & conditions for renting the lands from above list are as follows:
  - a. The lease rent for land to be paid is Rs 1/- per location per year for entire PPA period.
  - b. The Sub-lease rent agreement to be bipartite agreement i.e. between bidder & MSEDCL.
  - c. Any other Taxes/charges w.r.to lands if applicable are borne by successful bidder.

### **3.4 Eligibility for Project capacity allocation:**

Following conditions shall be applicable to the Bidders for submission of bids against this RfS:

1. A Bidder including its Parent, Affiliate or Ultimate Parent or any Group Company can only submit a single bid, subject to minimum bidding capacity as specified in Clause 3.2.2.
2. A Bidder including its Parent, Ultimate Parent, Affiliate, Group Company (ies) or any other Group Entity (ies) either bidding as Single Bidder or as a Consortium can submit only one (1) Bid. Submitting multiple bids from the same Bidder including its Affiliates / Parent / Ultimate Parent /Group Companies shall make all the bids submitted by the group invalid. Bidder in Conflict of Interest (as defined in the RfS)

with one another shall be liable for disqualification/ rejection under the sole discretion of MSEDCL. Further, the Bidders shall provide relevant disclosure as specified in Format 6.6 of the RfS.

3. The evaluation of bids shall be carried out as described in Section 4.
4. The methodology of allocation of projects is elaborated in Section 4.
5. In case the bidder wishes to set up a project at more than one location, then they would need to be physically identifiable with separate boundary wall, separate inter-connection points and metering arrangement.

### **3.5 Qualification Requirements:**

1. Bidder as defined in Section 2 is eligible to participate under this RfS.
2. The Bidding companies should be incorporated or registered in India under the Companies Act 1956 or Companies Act, 2013 or Co-operative Societies Act, 1912, as applicable.
3. Any consortium, if selected as successful bidder for the purpose of supply of power to MSEDCL, shall incorporate a Project company / Special Purpose Vehicle (SPV) with equity participation by the Members in line with consortium agreement (to be submitted along with the response to RfS) before signing of PPA., i.e. the Project Company incorporated shall have the same shareholding pattern at the time of signing of PPA as given at the time of submission of response to RfS.  
A bidder as a company which has been selected as successful Bidder based on this RfS can also execute the Project through a Special Purpose Vehicle (SPV) i.e. a Project company especially incorporated as a fully owned subsidiary Company (100% subsidiary) of the successful bidder for setting up of the Project which has to be registered under the Indian Companies Act, 2013, before signing of PPA. It is also clarified that the SPV shall be only for the purpose of the Project under this RfS and shall not engage in any other activities which are not directly related to the Project.
4. Foreign Companies are allowed to participate and foreign companies participating in the bidding process shall be registered as companies as per the rules of their country of origin. A foreign company can also participate on standalone basis or as a member of consortium at the RfS stage. In case of foreign company participating on standalone basis and its selection as successful bidder, it has to form an Indian Company registered under the Companies Act, 2013 as its fully owned subsidiary Company (i.e. 100% subsidiary) before signing of PPA. In case the foreign company participating as a member of consortium, the Clause 3.5.3 of this RfS shall be applicable.
5. Limited Liability Companies (LLC) shall be eligible. Further, if such Limited Liability Companies are selected as successful Bidders, they will have to register as a Company under the Indian Companies Act, 1956 or Companies Act, 2013, as applicable, before signing of PPA, keeping the original shareholding of LLC unchanged. In such cases, it will also be mandatory on the part of such Limited

Liability Companies to either demonstrate or infuse the capital in form of his own equity in line with the requirement stipulated in Clause 3.6 given below. In case LLC fails to incorporate as an Indian company before signing of PPA or unable to demonstrate/ infusion of capital in form of his own equity in to the Company registered in India or not able to sign PPA with MSEDCL, EMD of such Bidders shall be forfeited.

**Note: Limited Liability Companies (LLC) shall be eligible only for those LLCs which are formed by companies.**

6. Limited Liability Partnership (LLPs) are not eligible for participation.

### **3.6 Eligibility Criteria:**

#### **1) Net Worth:**

- i. The Net-Worth of the Bidder for the financial year ended on 31.03.2022 shall not be less than INR 0.55 Crores per MW (of the capacity quoted). In case of foreign companies the applicable financial year shall be as per the applicable laws of the country of Incorporation.
- ii. Bidders shall have to furnish a Certificate from a practicing and certified Chartered Accountant, certifying the Net worth per MW of quoted capacity as on 31st March, 2022. For avoidance of doubt, in case Bidder is a Company then “net worth” shall be as defined in Section 2 (57) of the Companies Act 2013 means the aggregate value of the paid-up share capital and all reserves created out of the profits and securities premium account, after deducting the aggregate value of the accumulated losses, deferred expenditure and miscellaneous expenditure not written off, as per the audited balance sheet, but does not include reserves created out of revaluation of assets, write- back of depreciation and amalgamation. In case Bidder is an Individual or a Propriety Concern or a Co-Operative Society or registered Partnership Firm then the Bidder shall be required to submit audited annual accounts as required by Indian Laws. The determination of Net Worth shall be based on the audited annual accounts by deducting the aggregate value of all the liabilities from the aggregate value of all the assets.
- iii. Pursuant to evaluation of Net Worth Criteria as part of technical bid, if it is found by MSEDCL that the Bidder is eligible for lesser quantum than the quantum for which bid has been submitted, then the Bidder shall be qualified for such lesser quantum, provided that such quantum is not less than minimum bid capacity i.e. as specified in Clause 3.2.2.

#### **2) Liquidity:**

In order to ascertain that the Bidder has sufficient means to manage the fund requirements for the Project, the Bidder shall be required to demonstrate at least one of the following parameters:

- i. A minimum annual turnover of Rs. 25 lakhs/MW of the quoted capacity during the previous financial year 2021-2022. It is hereby clarified that “Other Income” as indicated in the annual accounts of the Bidder shall not be considered for arriving at the annual turnover.
  - ii. Internal resource generation capability, in the form of Profit Before Depreciation Interest and Taxes (PBDIT) for a minimum amount of Rs. 10 Lakhs/MW of the quoted capacity, as on the last date of previous financial year, 2021-2022.
  - iii. In-principle sanction letter from the lending institutions/banks of the Bidder, committing a Line of Credit for a minimum amount of Rs. 12.5 Lakhs/MW of the quoted capacity, towards meeting the working capital requirement of the project quoted under this RfS. Such letter can also be obtained by the Affiliate(s) of the Bidder.
- 3) The Bidder may seek qualification on the basis of financial capability of its Affiliate(s) for the purpose of meeting the qualification requirements as per Clause 3.6.1 & 3.6.2 above. In case of the Bidder being a Bidding Consortium, any Member may seek qualification on the basis of financial capability of its Affiliate(s). In such cases, the Bidder shall be required to submit Board Resolutions from the respective Affiliate(s), in case Bidder being a Company, undertaking to contribute the required equity funding and performance bank guarantees in case the Bidder(s) fail to do so in accordance with the RfS. In case of non-availability of the Board Resolution as required above, a letter from the CEO/Managing Director of the respective Affiliate(s), undertaking the above, shall be required to be submitted and the requisite Board Resolution from the Affiliate(s) shall be required to be submitted prior to signing of PPA..

### **3.7 Connectivity with the Grid:**

1. The project should be designed for delivery of energy at 11 / 22 kV level of substation of MSEDCL. List of the MSEDCL Sub-stations is displayed in Annexure – G along with land details.
2. The responsibility of getting the grid connectivity with MSEDCL shall entirely be of the successful bidder. The successful bidder shall submit documentary evidence for securing connectivity with grid from MSEDCL within 6 months from the effective date.
3. The transmission of power up to the interconnection point and energy accounting infrastructure shall be the responsibility of the successful bidder at his own cost. The maintenance of Transmission / Distribution system up to the interconnection point shall be responsibility of the Bidder.
4. The arrangement of connectivity can be made by the successful bidder through a

dedicated line or sharing of a line. The dedicated line may be constructed by the successful bidder or through any other agency. The entire cost of transmission including cost of construction of line, maintenance, losses etc. from the project up to the delivery point will be borne by the successful bidder. The arrangement of connectivity can be made through sharing of a line, however sharing of line shall be at the discretion of the bidder provided there is a legally binding agreement between the bidder and the other parties sharing the same line for a period not less than 25 years and the bidder shall indemnify MSEDCL for any loss arising out of failure of such shared line.

5. The successful bidder shall not be entitled to deemed generation in case of any delay in grant of connectivity.
6. The successful bidder shall comply with MERC regulations on Forecasting, Scheduling and Deviation Settlement, as applicable and are responsible for all liabilities related to Connectivity and other regulatory provisions if applicable.

### **3.8 Clearances required from the Central/State Government and other local bodies**

The Bidders are required to obtain necessary clearances and permits as required for setting up the Solar Power Projects.

### **3.9 Earnest Money Deposit (EMD) and Performance Bank Guarantees (PBG)**

The Bidder shall provide the following Bank Guarantees to MSEDCL in a phased manner as follows:

- i. **Earnest Money Deposit (EMD) of INR 1 Lakh / MW per Project** in the form of Bank Guarantee along with RfS according to Format 6.3 A and **valid for six (06) months** from the last date of bid submission and shall be submitted by the Bidder along with their bid failing which the bid shall be summarily rejected. The Bank Guarantees towards EMD have to be in the name of the Bidding Company / Lead Member of Bidding Consortium.  
The Bidder shall furnish the Bank Guarantees towards EMD from any of the Banks listed in **Annexure-C** in favour of MSEDCL.
- ii. **Performance Bank Guarantee (PBG):**  
The Bidders selected by MSEDCL, based on this RfS shall submit the Performance Bank Guarantee (PBG) of Rs. 5 Lakh/MW, 30 days before signing of PPA, according to the Format 6.3 B, issued in favor of MSEDCL with a validity period 14 months from the effective date.  
The Bidder shall furnish the Performance Bank Guarantees (PBGs) from any of the Banks listed at **Annexure - C** to MSEDCL.
- iii. The format of the Bank Guarantees prescribed in the Formats 6.3 A (EMD) and 6.3 B (PBG) shall be strictly adhered to and any deviation from the above Formats shall result in rejection of the EMD/PBG and consequently, the bid. In case of deviations

in the formats of the Bank Guarantees, the corresponding PPA shall not be signed by MSEDCL.

- iv. The successful bidder is required to sign PPA with MSEDCL within one month from the date of issue of LoA. Subsequent extension in this timeline shall be finalized and agreed by MSEDCL. In case, MSEDCL offers to execute the PPA with the Selected Bidder and if the Selected Bidder does not submit the requisite documents as per Section 3.11 or does not meet eligibility criteria upon submission of documents or does not execute the PPA within the stipulated time period, then the Bank Guarantee submitted towards EMD shall be forfeited by MSEDCL as penalty and the selected Project(s) shall stand cancelled.
- v. The Bank Guarantees have to be executed on non-judicial stamp paper of Rs. 500.
- vi. All expenditure towards execution of Bank Guarantees such as stamp duty etc. shall be borne by the bidder.
- vii. In order to facilitate the Bidders to submit the Bank Guarantee as per the prescribed format and in line with the requirements, checklist at Annexure-B has been attached. Bidders are advised to take note of the above checklist while submitting the Bank Guarantees.
- viii. After the bidding process is over, MSEDCL shall release the Bank Guarantees towards EMD of the unsuccessful Bidders within 15 days after the completion of E-reverse auction. The PBG of the solar power generator / bidder shall be returned immediately after successful commissioning of their projects as per Terms of PPA, after taking into account any liquidated damages due to delays in commissioning as per Clause 3.14 of RfS and Article 3.3 of PPA.
- ix. On receipt and after successful verification of the total Performance Bank Guarantee in the acceptable form and signing of PPA, the BG submitted towards EMD shall be returned by MSEDCL to the successful Bidder.

### **3.10 Forfeiture of EMD:**

The BG towards EMD shall be forfeited by MSEDCL in following cases:

- i. If the bidder withdraws or varies the bid after due date and time of bid submission and during the validity of the bid;
- ii. In case, MSEDCL offers to execute the PPA with the Selected Bidder and if the selected bidder does not submit the requisite documents as per Section 3.11, within the time period specified by MSEDCL;
- iii. If after date of issue of LOA, it is found that the documents furnished by the bidder during RfS are misleading or misrepresented in any way and that relevant facts have been suppressed;
- iv. If the bidder fails to furnish required Performance Bank Guarantee in accordance with Section 3.9

### **3.11 Power Purchase Agreement:**

1. A copy of Power Purchase Agreement, to be executed between MSEDCL and the successful bidder or its 100% subsidiary Special Purpose Vehicle (SPV), shall be provided by MSEDCL along with this RfS. The single PPA shall be signed for 88 MW within 1 month from the date of issue of Letter of Award (LoA). PPA will be executed between MSEDCL and selected bidder. The PPA shall be valid for a period of 25 years from the Commercial Operation Date of the proposed / new solar power projects based on the terms, conditions and provisions of the RfS.
2. Before signing of PPA between MSEDCL and the selected Bidder, MSEDCL will verify the documents furnished by the Bidder at the time of submission of response to RfS including the shareholding of the Project Company along with a copy of complete documentary evidence supported with the original documents. Bidder will also be required to furnish the documentary evidence for meeting the RfS Qualification Requirements.
3. The successful bidder shall be free to operate their project after expiry of the 25 years from the COD of the project, if other conditions like land lease etc., permits. However, any extension of the PPA period beyond 25 years from the Commercial Operation Date of proposed / new solar power projects shall be through mutual agreements between the successful bidder and MSEDCL.

### **3.12 Capacity Utilisation Factor (CUF):**

#### **3.12.1 Criteria for generation:**

The Solar Power Generator will declare the CUF of their project at the time of signing of PPA and will be allowed to revise the same once within first year of COD. The declared CUF shall in no case be less than 19% over a year. They shall maintain generation so as to achieve CUF in the range of  $\pm 10$  % of their declared value during PPA duration. The lower limit will, however, be relaxed by MSEDCL to the extent of grid non-availability for evacuation which is beyond the control of the Solar Power Generator.

#### **3.12.2 Shortfall in minimum generation:**

During the term of PPA, if for any Contract year, it is found that the Solar Power Generator has not been able to generate minimum energy corresponding to the lower limit of CUF as declared by the Solar Power Generator; such shortfall in performance shall make Solar Power Generator liable to pay the compensation provided in the PPA as payable to MSEDCL. This will, however be relaxable by MSEDCL to the extent of grid non-availability for evacuation, which is beyond the control of the Solar Power Generator. The amount of such penalty will be in accordance with the terms of the PPA under Clause 5.5.2. This compensation shall be applied to the amount of shortfall in generation during the year. However, this compensation shall not be applicable in

events of Force Majeure identified under PPA with successful bidder affecting supply of solar power by seller/Solar Power Generator.

### **3.12.3 Excess Generation:**

In case the availability is more than the maximum CUF i.e over and above 10% of declared CUF by Solar Power Generator, the Solar Power Generator will be free to sell it to any other entity provided first right of refusal will vest with the Procurer. In case the Procurer purchases the excess generation, excess generation over and above maximum declared CUF, the same may be done at 75% of the PPA tariff. MSEDCL shall inform the Solar Power Generator for procurement of excess power within 15 days of receiving a written intimation from the Solar power Generator for such excess generation. If in case MSEDCL fails to reply to the Solar Power Generator within the above stipulated time period then the generator shall be free to sell it to any other entity.

### **3.12.4 Repowering:**

Solar Power Generator shall be allowed for the repowering once for a maximum cumulative period of six (6) months during the entire PPA term of 25 years. Solar Power Generator shall not be in default for non-supply of power during this period of repowering. However, the MSEDCL will be obliged to buy power only within the range of CUF, specified in the PPA. Any excess generation will be dealt as specified in clause 3.12.3 of RfS.

### **3.13 Financial Closure or Project Financing Arrangements:**

The Project Developer shall report tie-up of Financing Arrangements for the projects within 6 (Six) months from the effective date . Accordingly the successful bidder shall furnish the following documents at the time of reporting Financial Closure i.e. tie-up of Financing Arrangements:

- a) tie-up of Financing Arrangements: internal resources and/or tie up of funds through a bank / financial institution by way of a legally binding agreement/sanction letter for commitment of such finances The bidder shall submit the undertaking that legally binding agreement shall be submitted within two months.
- b) Submit power evacuation/ connectivity agreement of successful bidder with MSEDCL.

### **3.14 Commissioning and penalty for delay in commissioning:**

- 1) The Project shall be commissioned within a period of 12 (Twelve) months from the effective date.
- 2) Commissioning certificates shall be issued by SLDC / MSEDCL after successful commissioning of Project / Units.
- 3) The Project shall be commissioned by the Scheduled Commercial Operation Date. In case of failure to achieve this milestone, MSEDCL shall forfeit the Performance Bank Guarantee (PBG) in the following manner.
  - a) **Delay upto Two (2) months from SCOD** – MSEDCL will forfeit Performance Bank Guarantee on per day basis and proportionate to the



balance Capacity not commissioned.

- b) **In case the commissioning of the project is delayed beyond Two (2) months** from SCOD – MSEDCL will forfeit total PBG and the PPA capacity shall stand reduced / amended to the Project Capacity Commissioned at the end of 14<sup>th</sup> month from the effective date.

In case of delays of plant commissioning due to reasons beyond the control of the SPG, MSEDCL after having been satisfied with documentary evidences produced by the SPG for the purpose, can extend the time for commissioning date without any financial implications to the SPG.

### **3.15 Commercial Operation Date (COD):**

Commercial Operation Date with respect to the Project shall mean the date on which 88 MW Project is fully commissioned (certified by SLDC/MSEDCL) and available for commercial operation. The Successful Bidder shall have to provide a written notice to MSEDCL at least 30 days in advance for the same.

### **3.16 Minimum Paid up Share Capital to be held by Bidder:**

- i) The Bidder developing the project shall provide complete information in their bid in reference to RfS about the Owners or Promoters or Proprietor or Members of the Co-Operative Society and their shareholding in the Bidding Entity indicating the controlling shareholding before signing of PPA with MSEDCL.
- ii) The successful bidder, if being a single bidding entity, shall ensure that its shareholding in the entity executing the PPA shall not fall below 51% (fifty-one per cent) at any time prior to 1 (one) year from the COD, except with the prior approval of MSEDCL. However, in case the Project is being set up by a Public Limited Company, this condition will not be applicable.
- iii) In the event the successful bidder is a consortium, then the combined shareholding of the consortium members in the entity executing the PPA, shall not fall below 51% at any time prior to 1 (one) year from the COD, except with the prior approval of the MSEDCL.
- iv) However, in case the successful bidder shall itself be executing the PPA, then it shall ensure that its owners or promoters shall not cede control (Control shall mean ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such entity or right to appoint majority Directors) till 1 (one) year from the COD, except with the prior approval of MSEDCL. In this case it shall also be essential that the successful bidder shall provide the information about its promoters and their shareholding to MSEDCL before signing of the PPA with MSEDCL.
- v) Any change in the shareholding after the expiry of 1 (one) year from the COD can be undertaken under intimation to MSEDCL.
- vi) In case, the financial eligibility and qualification is attained through financials of

Parent Company or Affiliate, then the shareholding pattern of the Parent Company or Affiliate shall not change till the achievement of Financial Closure and the shareholding pattern of the bidding entity shall not change till one year from the date of COD.

vii) In the event the Solar Power Generator is in default to the lender(s), lenders shall be entitled to undertake “Substitution of Promoter” in concurrence with MSEDCL.

viii) In the event of Change in Shareholding/Substitution of Promoters triggered by the Financial Institutions leading to signing of fresh PPA with a New Entity, an amount of Rs. 10 Lakh per Project per Transaction as Facilitation Fee (non-refundable) shall be deposited by Solar Power Generator /bidder to MSEDCL. However, the new entity should be of the same financial strength as the Successful Bidder.

### **3.17 Structuring of the Bid selection process:**

Single stage, double envelope bidding process followed by e-reverse auction has been envisaged under this RfS. Bidders have to submit both Technical bid and Financial bid (Fixed Tariff) together in response to this RfS online. The preparation of bid proposal has to be in the manner described in **Section 3.18 & 3.21**.

### **3.18 Instructions to Bidders for structuring of bid proposals in Response to RfS**

The bidder including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit single response to RfS.

Detailed Instructions to be followed by the bidders for online submission of response to RfS as stated at **Annexure – D**.

Submission of bid proposals by Bidders in response to RfS shall be in the manner described below:

1. Covering Letter as per **Format 6.1**.
2. In case of a Bidding Consortium, a Power of Attorney in favour of the Lead Member issued by the other Members of the Consortium shall be provided in original as per format attached hereto as **Format 6.2**.

In the event any Member of the Bidding Consortium (other than Lead Member) is a foreign entity, it may submit Board Resolutions in place of Power of Attorney for the purpose of fulfilling the requirements under this Section. Provided that, such Board Resolutions shall be supported by an unqualified opinion issued by the legal counsel of such foreign entity stating that the Board Resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing Company and the authorizations granted therein are true and valid.

For meeting the above financial eligibility criteria, if the data is provided by the Bidder in a foreign currency, equivalent Indian Rupees of Net Worth and other financial parameters will be calculated by the Bidder using Reserve Bank of

India's reference rates prevailing on the date of closing of the accounts for the respective financial year.

In case of any currency for which RBI reference rate is not available, Bidders shall convert such currency into USD as per the exchange rates prevailing on the relevant date and used for such conversion, as certified by their banker. After such conversion, Bidder shall follow the procedure/ submit document as elaborated above.

3. Earnest Money Deposit (EMD) in the form as per **Format 6.3 A**.
4. Performance Guarantee (to be submitted before signing of PPA as specified in Section 3.9) in the form as per **Format 6.3 B**.
5. Board Resolutions, as per prescribed formats enclosed as Format 6.4 duly certified by the appropriate authority or in case Bidding Entity being a Company or Co-operative Society the Board Resolution shall have to be certified by Company Secretary or the Director of the relevant Bidder, as applicable to the Bidder and mentioned hereunder:
  - a. Board resolution from the Bidding Entity or the Lead Member of the Consortium, as the case may be, in favour of the person signing the response to RfS and in the event of selection of the Projects, to sign the PPA with MSEDCL. Board Resolution from each of the Consortium Members in favour of the person signing Consortium Agreement.
  - b. Board Resolution from the Bidding Entity committing one hundred percent (100%) of the equity requirement for the Project / Board Resolutions from each of the Consortium Members together in aggregate committing to one hundred percent (100%) of equity requirement for the Project (in case of Bidding Consortium); and
  - c. Board Resolutions from each of the Consortium Members and Lead member contributing such additional amount over and above the percentage limit (specified for the Lead Member and other member in the Consortium Agreement) to the extent becoming necessary towards the total equity share in the Project, obligatory on the part of the Consortium pursuant to the terms and conditions in the Consortium Agreement.
6. In case of a Consortium, the Consortium Agreement between the Members in the Consortium as per **Format 6.5** along with Board resolution from each Member of the Consortium for participating in Consortium.
7. Bidder shall ensure that the technology to be adopted shall be commercially established technology as per **Annexure-A** and is under operation for at least one year. Final details of the same shall be submitted within 1 months before CoD.
8. Tie-up of Financing Arrangements for the projects within 6 months from the effective date.
9. **Format 6.6:** Format for Disclosure.

**10. Attachments:**

- a) In case Bidding Entity is a Company, the Bidder shall submit the Memorandum of Association, Section of Association needs to be attached along with the bid. The bidder should also highlight the relevant provision which highlights the objects relating to generation and sale of Power/ Energy/ Renewable Energy/ Solar Power plant development.
- b) In case, there is no mention of the above provisions in the MoA, AoA or the Bye - Laws of the bidding company, the same has to be amended and submitted prior to signing of PPA, if the bidder is selected as Successful bidder.
- c) In case Bidder or a Bidding Consortium is a Company, the Bidder or all member companies of Bidding Consortium shall submit its Certificate of Incorporation.
- d) A certificate of shareholding of the bidding entity, its Affiliate, Parent and Ultimate Parent (if any), duly certified by a practicing Chartered Accountant / Company Secretary / or any other appropriate authority as per Indian Laws as on a date within one week prior to the last date of bid submission.
- e) Documents containing information about the Promoters or partners and their shareholding or percentage of sharing in the Entity (as on a date within one week prior to the last date of bid submission) to MSEDCL indicating the controlling shareholding at the stage of submission of response to RfS to MSEDCL as per Section 3.16. MSEDCL reserves the right to seek additional information relating to shareholding in bidding entity, their parents/ ultimate parents and other group entities to satisfy themselves that RfS conditions have been complied with and the bidder shall ensure submission of the same within the required time lines.

Certified copies of annual audited accounts for the last financial year, i.e. FY 2021-22 as applicable shall be required to be submitted. In case the Bidder is a newly formed entity, then the certificate issued by a Chartered Accountant with certified copy of Balance sheet, Profit & Loss account, Schedules and Cash Flow Statement supported with bank statement (if available) shall be required to be submitted.

- f) Certificate from Chartered Accountants/ Appropriate Authority, certifying the Net worth of the bidder per MW of quoted capacity as on 31<sup>st</sup> March, 2022.

**3.19 Important notes and instructions to Bidders:**

- a) Wherever information has been sought in specified formats, the Bidders shall fill in the details as per the prescribed formats and shall refrain from any deviations and referring to any other document for providing any information required in the prescribed format.
- b) The Bidders shall be shortlisted based on the declarations made by them in relevant provisions of RfS. The documents submitted online will be verified before signing

of PPA.

- c) If the Bidder/ Member in a Bidding Consortium conceals any material information or makes a wrong statement or misrepresents facts or makes a misleading statement in its response to RfS, in any manner whatsoever, MSEDCL reserves the right to reject such response to RfS and/or cancel the Letter of Award, if issued, and the Bank Guarantee provided up to that stage shall be encashed. Bidder shall be solely responsible for disqualification based on their declaration in the submission of response to RfS.
- d) Response submitted by the Bidder shall become the property of the MSEDCL and MSEDCL shall have no obligation to return the same to the Bidder. However, the EMDs submitted by unsuccessful Bidders shall be returned as specified in Section 3.9 (ix).
- e) All documents of the response to RfS (including RfS, PPA and all other documents uploaded on e-tendering portal of mahadiscom (<https://www.mahadiscom.in/solar-mskvy/index.html>) as part of this RfS) submitted online must be digitally signed by the person authorized by the Board as per Format 6.4.
- f) The response to RfS shall be submitted as mentioned in Section 3.21. No change or supplemental information to a response to RfS will be accepted after the scheduled date and time of submission of response to RfS. However, MSEDCL reserves the right to seek additional information from the Bidders, if found necessary, during the course of evaluation of the response to RfS.
- g) All the information should be submitted in English language only. In case of foreign bidders having documents in other than English language, then the documents shall be translated in English language by certified translator and submitted.
- h) Bidders shall mention the name of the contact person and complete address of the Bidder in the covering letter.
- i) Response to RfS that are incomplete, which do not substantially meet the requirements prescribed in this RfS, will be liable for rejection by MSEDCL.
- j) Response to RfS not submitted in the specified formats will be liable for rejection by MSEDCL.
- k) Bidders delaying in submission of additional information or clarifications sought will be liable for rejection.
- l) Non submission and/or submission of incomplete data/ information required under the provisions of RfS shall not be construed as waiver on the part of MSEDCL of the obligation of the Bidder to furnish the said data/information unless the waiver is in writing.
- m) Only MERC and/ or Bombay High Court shall have exclusive jurisdiction in all matters pertaining to this RfS.

- n) Bidder shall submit the bid considering the impact of the imposition of Basic Custom Duty (BCD) on Solar PV Cells & Modules/Panels as per MNRE Office Memorandum dated 09.03.2021. The imposition of BCD shall not be considered as change-in-law, in any case.

### **3.20 Non-responsive Bid**

The electronic response to RfS submitted by the bidder along with the documents submitted offline to MSEDCL shall be scrutinized to establish “Responsiveness of the bid”. Each bidder’s response to RfS shall be checked for compliance with the submission requirements set forth in this RfS.

Any of the following conditions shall cause the Bid to be “Non-responsive”:

- a) Non submission of Cost of RfS and/or Processing fee as mentioned in the Bid Information Sheet.
- b) Non-submission of EMD in acceptable form along with RfS document.
- c) Response to RfS (offline as well as online) not received by the due date and time of bid submission;
- d) Non submission of the original documents mentioned at **Section 3.21 A** by due date and time of bid submission;
- e) Any indication of tariff in any part of response to the RfS, other than in the financial bid.
- f) Data filled in the financial bid (Second envelope), not in line with the instructions mentioned.
- g) In case it is found that the Bidding Company including Ultimate Parent Company / Parent Company/ Affiliate / Group Companies have submitted more than one response to this RfS, then all these bids submitted shall be treated as non-responsive and rejected.
- h) Conditional bids shall be summarily rejected.

### **3.21 Method of Submission of Response to RfS by the bidder:**

#### **A. Documents to be submitted Offline (in Original):**

The bidder has to submit the documents in original as part of Response to RfS to the address mentioned in Bid Information Sheet before the due date and time of bid submission.

Bidding Envelope: Superscribed as “Bidding Envelope containing Covering Envelope” at the top of the Envelope and “Name & Address of the Bidder” on the left hand side bottom must contain the following:

Covering Envelope: **Superscribed as** “Covering Envelope Containing Cost of RfS Document, Processing Fee, Bank Guarantee towards EMD, and Covering Letter, Power of Attorney (if applicable), Consortium Agreement (if applicable), Board Resolution” **must contain the following:**

- i) Payment details towards Cost of RfS Document as mentioned in Bid Information Sheet.
- ii) Payment details towards Processing Fee as mentioned in the Bid Information

Sheet

- iii) Original Bank Guarantee towards EMD as mentioned in the Bid Information Sheet (as per Format 6.3A). One EMD may be submitted for the cumulative capacity quoted by the bidder.
- iv) Covering Letter as per Format-6.1,
- v) Power of Attorney as per Format 6.2 (if applicable),
- vi) Board Resolution as per Format 6.4 (if applicable),
- vii) Consortium Agreement as per Format 6.5 (if applicable)
- viii) Letter for Disclosure, as per format 6.6

The bidding envelope shall contain the following sticker: (illustration)

<i>Response to RfS for procurement of 88MW (AC) solar power from projects to be developed in ----- Maharashtra IN MSEDCL through competitive bidding process</i>	
<i>Cumulative Capacity of the project applied for</i>	<i>MW</i>
<i>RfS Reference No.</i>	
<i>Submitted by</i>	<i>(Enter Full name and address of the Bidder)</i>
<i>Authorized Signatory</i>	<i>(Signature of the Authorized Signatory) (Name of the Authorized Signatory) (Stamp of the Bidder)</i>
<i>Bid Submitted to</i>	<b>Chief Engineer (Renewable Energy) Maharashtra State Electricity Distribution Co. Ltd. Office of the Chief Engineer (Renewable Energy) “Prakashgad”, 5th Floor, Station Road, Bandra (E), Mumbai -400 051. Tel.: 26472131, 26474211</b>

**B. Documents to be submitted Online:**

Detail instructions to be followed by the bidders for online submission of response to RfS as stated as **Annexure-D**. The bidders shall strictly follow the instructions in respective technical bid and financial bid while filling the form.

If the Bidder has submitted offline documents and fails to submit the online bid, then the same shall be treated as incomplete bid and Cost of RfS, Processing fee submitted shall be encashed and the EMD(s) shall be returned.

All documents of the response to RfS submitted online must be digitally signed on <https://etender.mahadiscom.in> (e-tendering portal of mahadiscom) available on <https://mahadiscom.in/solar-mskvy/index.html> which should contain the following:

**1. “Technical Bid (First Envelope)”**

- i. The Bidder shall submit the technical bid for entire 88 MW.
- ii. The Bidder shall upload single technical bid containing the **scanned copy** of following documents duly signed and stamped on each page by the authorized person as mentioned below.
- iii. Formats - 6.1, 6.2 (if applicable), 6.3 A, 6.4, 6.5 (if applicable), 6.6
- iv. All supporting documents regarding meeting the eligibility criteria

**2. “Financial Bid (Second Envelope)”**

Bidders shall submit the Financial Bid in electronic mode only. The Bidder shall submit a single Financial Bid containing the scanned copy of following document(s):

- Covering letter as per Format - 6.7 of this RfS document;
- The Bidder shall, as part of its Financial Bid, submit separate Tariff for each of the Project for which it is bidding. The Financial Bid must clearly indicate the bid amount in Indian Rupees (INR) only up to two (2) decimal points.
- Tariff bid for all the Projects shall have to be filled online provided at the <https://etender.mahadiscom.in> (e-tendering portal of mahadiscom) available on <https://mahadiscom.in/solar-mskvy/index.html>. The instructions mentioned in the Financial Bid have to be strictly followed without any deviation; else the bid shall be considered as non-responsive.

**Important Note:**

- a) Any Financial Bid received in the physical form shall be considered as a non-responsive Bid and would be rejected.
- b) In the event a Bidder quotes the Tariff higher than the ceiling tariff as specified in this RfS and any subsequent amendments issues by MSEDCL, then such Bid shall be summarily rejected by MSEDCL.
- c) The Bidders shall not deviate from the naming and the numbering formats mentioned above, in any manner.
- d) Wherever mentioned, the Bidder must clearly indicate the Category under which the respective Project is being proposed. In case of any discrepancy, the Bid will be liable for rejection.
- e) In each of the Envelopes, all the documents enclosed shall be indexed and flagged appropriately, with the index list indicating the name of the document against each flag.
- f) All the Envelopes shall be properly sealed with the signature of the Authorized Signatory running across the sealing of the envelopes.

**3.22 Validity of the Response to RfS:**



The Bidder shall submit the response to RfS which shall remain valid up to One Hundred Eighty (180) days from the last date of submission of response to RfS (“Bid Validity”). MSEDCL reserves the right to reject any response to RfS which does not meet the aforementioned validity requirement.

**3.23 Bid Preparation cost:**

The Bidder shall be responsible for all the costs associated with the preparation of the response to RfS and participation in discussions and attending pre-bid meeting(s), etc. MSEDCL shall not be responsible in any way for such costs, regardless of the conduct or outcome of the bid process.

**3.24 Clarifications/Pre Bid meeting/ Enquires/ Amendments:**

- i. Clarifications/Doubts, if any, on RfS document may be emailed on skvytendermsedcl@gmail.com.
- ii. MSEDCL will make effort to respond to the same in the Pre Bid Meeting to be held as mentioned in the Bid Information Sheet. A compiled list of such questionnaire and MSEDCL’s response will be uploaded in the website [www.mahadiscom.in](http://www.mahadiscom.in). If necessary, amendments, clarifications, elaborations shall be issued by MSEDCL which will be notified on MSEDCL website. No separate reply/intimation will be given for the above, elsewhere.
- iii. A Pre Bid Meeting shall be held as mentioned in the Bid Information sheet.

**3.25 Right of MSEDCL to reject a Bid:**

MSEDCL reserves the right to reject any or all of the responses to RfS or cancel the RfS or annul the bidding process for any project at any stage without assigning any reasons whatsoever and without thereby any liability.

## **SECTION 4: BID EVALUATION AND SELECTION OF PROJECTS**

## **SECTION 4: BID EVALUATION AND SELECTION OF PROJECTS**

### **Section 4: Bid Evaluation methodology and Selection of Projects**

#### **4.1 Bid Evaluation:**

- 1) Bid evaluation will be carried out considering the information furnished by Bidders as per provisions specified in **Section 3** of this RfS.

- 2) To ensure competitiveness, the minimum number of qualified Bidders should be two. If the number of qualified bidders is less than two, MSEDCL may continue with the bidding process at its discretion.
- 3) The detailed evaluation procedure and selection of bidders are described in subsequent sections in this Section.

#### **4.2 Techno-commercial Evaluation of bidders:**

##### **A. First Envelope (Technical Bid) Evaluation (Step-1):**

- i. The first envelope (Technical Bid submitted online) of only those bidders will be opened by MSEDCL whose required documents as mentioned at **Section 3.21 A** are received at MSEDCL office on or before the due date and time of bid submission.
- ii. Documents (as mentioned in the previous section) received after the bid submission deadline specified in the Bid Information Sheet shall be rejected and returned unopened, if super-scribed properly with address, to the bidder.
- iii. Subject to **Section 3.20**, MSEDCL will examine all the documents submitted by the Bidders and ascertain meeting of eligibility conditions prescribed in the RfS. During the examination of the bids, MSEDCL may seek clarifications / additional documents to the documents submitted etc. from the Bidders if required to satisfy themselves for meeting the eligibility conditions by the Bidders. Bidders shall be required to respond to any clarifications/additional documents sought by MSEDCL within **3 days** from the date of such intimation from MSEDCL. All correspondence in this regard shall be made through email or [www.mahadiscom.in](http://www.mahadiscom.in). only. It shall be the responsibility of the Bidder to ensure that the email id of the authorized signatory of the Bidder is functional. The Bidder may provide an additional email id of the authorized signatory in the covering letter. No reminders in this case shall be sent. It shall be the sole responsibility of the Bidders to remove all the discrepancies and furnish additional documents as requested. MSEDCL shall not be responsible for rejection of any bid on account of the above.
- iv. The response to RfS submitted by the Bidder shall be scrutinized to establish Techno - Commercial eligibility as per RfS. MSEDCL will declare the list of eligible bidders as per the terms and conditions mentioned in this RfS.
- v. Bidder shall be disqualified if the bid capacity is less than tender capacity i.e. 88 MW

##### **B. Second Envelope (Financial Bid) Evaluation (Step-2):**

- i. In this step evaluations shall be done based on the “Tariff” quoted by the eligible bidders in the Financial Bid. After this step, if the quoted capacity by the bidders is more than the tender capacity then shortlisted bidders shall be invited for the E-reverse Auction for which bidder has submitted the bid.
- ii. The bidders including its Parent, Affiliate or Ultimate Parent or any Group Company will have to submit bid (single application) quoting a tariff per kWh for the

project it intends to bid for. Tariff can be quoted up to two places of decimal only. If it is quoted with more than two digits after decimal, it shall be ignored after first two decimal places. (For e.g. if the quoted tariff is Rs. 3.337, then it shall be considered as Rs. 3.33).

- iii. In this step, evaluation will be carried out based on tariff quoted by the Bidders.
- iv. Total bid capacity of the Solar Power Projects is higher than the bid capacity, MSEDCL shall conduct e-reverse auction.

Note: In case of each category, on completion of Techno-commercial bid evaluation, if it is found that only one bidder is eligible, opening of the financial bid of the bidder will be at the discretion of MSEDCL. Thereafter MSEDCL will take appropriate action by taking necessary approval from MERC.

- v. If the first-round tariff quoted is same for two or more bidders, then all the bidders with same tariff shall be considered of equal rank/ standing in the order.
- vi. All qualified bidders shall be eligible for e-reverse auction round.

Ranking of bidders after Financial Bid Evaluation: In case of financial bids received from all bidders are in the form of tariff, ranking of bidders shall be done accordingly. For example:

<b>BIDDER</b>	<b>SUBMITTED FINANCIAL BID</b>	<b>RANKING</b>
B8	RS. 2.30 (TARIFF IN RS./ KWH)	L1
B5	RS. 2.70 (TARIFF IN RS./ KWH)	L2
B1	RS. 2.80 (TARIFF IN RS./ KWH)	L3
B4	RS. 2.80 (TARIFF IN RS./ KWH)	L3
B2	RS. 3.00 (TARIFF IN RS./ KWH)	L4
B3	RS. 3.30 (TARIFF IN RS./ KWH)	L5
B7	RS. 3.50 (TARIFF IN RS./ KWH)	L6
B6	RS. 3.60 (TARIFF IN RS./ KWH)	L7
B10	RS. 3.90 (TARIFF IN RS./ KWH)	L8
B9	RS. 4.00 (TARIFF IN RS./ KWH)	L9
B11	RS. 4.00 (TARIFF IN RS./ KWH)	L9

### **C. Reverse Auction (Step-3):**

1. The e-reverse auction shall be conducted on <https://etender.mahadiscom.in> (etendering portal of mahadiscom).. MSEDCL shall inform the schedule for the e-reverse auction to the eligible bidders. E-reverse Auction shall be carried out as specified in “Bid Information Sheet” of this RfS/EoI.
2. Shortlisted bidders for E-reverse Auction will be able to login into <https://etender.mahadiscom.in> (e-tendering portal of mahadiscom) of e-reverse auction, 15 minutes before the start time of e-reverse auction.
  - a) During the 15 minutes prior to start of e-reverse auction process, the respective tariff along with the bid capacity of the bidder shall be displayed on its window.

- b) The minimum decrement value for tariff shall be ₹ 0.01 per kWh. The bidder can mention its revised tariff which has to be at least 01 (one) paisa less than its current tariff.
- c) Bidders can only quote any value lower than their previous quoted tariff taking into consideration of the minimum decrement value mentioned in 4.2(C) (2b). However, at any stage, increase in tariff will not be permissible. Bidders can improve their ranking by quoting the tariff lower than their last quoted tariff.
- d) In the bidder's bidding window, the following information can be viewed by the bidder: Its tariff as their initial start price and there after last quoted tariff along with bid capacity for which the bidder is qualified;
- e) The initial auction period will be of 60 minutes (one hour) with a provision of auto extension by Eight minutes from the scheduled/extended closing time if any fresh bid is received in last Eight minutes of auction period or extended auction period. If no valid bid is received during last Eight minutes of auction period or extended auction period, then the e-reverse auction process will get closed.

#### **4.3 Selection of Successful Bidders:**

- 1.
2. The lowest quoting bidder will be allotted its qualified project capacity of 88 MW.
3. In case of tie, among two or more bidders (i.e. their last quoted tariff being the same) they will be considered in the chronological order of their last bid with preference to that bidder who has quoted his last bid earlier than others.
4. In the above case, if the time of quote also becomes exactly same among the bidders at a tie, then the ranking among these bidders shall be done as follow:  
Step – 1: Lowest rank will be given to the bidder who has quoted the lowest in Financial Bid and so on. If there is also a tie among any of these bidders, then the following step (Step 2) will be followed.  
Step – 2: Ranking will be done based on draw of lots.
5. Allocation would be done based on the bid capacity i.e 88 MW.
6. After completion of e-reverse auction, only one successful bidder shall be allocated 88 MW..
7. At the end of selection process, Letter of Award (LOA) will be issued to Successful Bidder. In case of Consortium being selected as Successful Bidder, the LOA shall be issued to the Lead Member of the Consortium.
8. In all cases, MSEDCL's decision regarding selection of bidder through Reverse Auction or otherwise based on tariff or annulment of tender process shall be final and binding on all participating bidders.

Also, MSEDCL reserve the right to short close tender at its discretion if prices are abruptly high.

## **SECTION 5: OTHER PROVISIONS**

## **Section 5: Other Provisions**

### **5.1 General Design of the Facility:**

The Bidder shall ensure to operate and maintain the Facility in accordance with the relevant technical standards in terms of the Electricity Act 2003 and Rules, Regulations, Orders and Policy decisions there under.

The Bidder shall ensure that the Facility at all times:

- a. Have SCADA installation/ any other continuous communication facility for transferring the data of Solar Energy generated from his switchyard / MSEDCL Substation to the State Grid's Sub-Station / Control room;
- b. Have installed Special Energy Meter (SEM) with telecommunication facility with availability based tariff (ABT) feature as per relevant CEA specifications / Regulations along with Automatic Meter reading arrangements.
- c. Moreover, it shall be mandatory to provide real time visibility of electricity generation to MSLDC at Airoli, Navi Mumbai, Maharashtra or MSEDCL through RTU-DC, V-SAT or any other standard protocol decided by MSEDCL.

### **5.2 SCADA Communication Point**

The bidders shall ensure that the data communication for 2 to 5 MW project capacity shall be at MSEDCL control room and for the project capacity above 5 MW the same shall be at MSLDC control room.

### **5.3 Role of / MSEDCL:**

It is envisaged that the MSEDCL will provide transmission/distribution system to facilitate the evacuation of power from the Projects which may include the following:  
Upon application for Connectivity as per MERC Regulations, MSEDCL shall coordinate with the concerned agencies for grant of connectivity.

**SECTION 6: FORMATS FOR BID SUBMISSION**



## **Section 6: Formats for Bid Submission**

The following formats are required to be submitted as part of the RfS. These formats are designed to demonstrate the Bidder's compliance with the Qualification Requirements set forth in **Sections 3.5, 3.16, 3.18** and other submission requirements specified in the RfS.

- a) Format of Covering Letter (Format 6.1)
- b) Format for Power of Attorney (Format 6.2)
- c) Format for Earnest Money Deposit (EMD) (Format 6.3 A);  
Format for Performance Bank Guarantee (Format 6.3 B)
- d) Format for Board Resolutions (Format 6.4)
- e) Format for the Consortium Agreement (Format 6.5)
- f) Format for Disclosure (Format 6.6)
- g) Format for submission of financial bid (Formats 6.7)
- h) Technical Requirements for Grid Connected Solar Power Projects (Annexure - A)
- i) Check List for Bank Guarantees (Annexure-B)
- j) List of Banks (Annexure-C)
- k) Special Instructions to Bidders for e-Tendering and E-reverse Auction (Annexure-D)
- l) Terms & Conditions of E-reverse Auction Procedure (Annexure-F)

The Bidder may use additional sheets to submit the information for their detailed response.

## FORMAT-6.1

### Covering Letter

(The covering letter should be on the Letter Head of the Bidding Entity/ Lead Member of the Bidding Consortium)

Date:                      Reference No:

From: (Insert name and address of Bidding Entity/ Lead Member of the Bidding Consortium)

Tel.#:

Fax#:

E-mail address:

GST number:

To

**Chief Engineer (RE),  
Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL),  
Renewable Energy Section, 5th Floor, 'Prakashgad',  
Bandra (East), Mumbai - 400 051  
Tel No.022-26474211.**

**Web Site – [www.mahadiscom.in](http://www.mahadiscom.in)**

Sub:      Response to **RfS No.** MSEDCL/CE/RE/2022/Solar/Decentralized/----- dated 10.04.2023 for purchase of 88 MW (AC) solar power from projects to be developed in Maharashtra through competitive bidding process (followed by e-reverse auction).

Dear Sir,

We, the undersigned ..... [insert name of the 'Bidder'] having read, examined and understood in detail the RfS including Qualification Requirements in particular, terms and conditions of the standard PPA for supply of power for a period of 25 years from the Commercial Operation Date of proposed / new solar power projects and hereby submit our response to RfS. We confirm that in response to the aforesaid RfS, neither we nor any of our Ultimate Parent / Parent / Affiliate/ Group Entities has submitted response to RfS other than this response to RfS, directly or indirectly, in response to the aforesaid RfS (as mentioned in Format 6.6 under Disclosure). We are submitting application for the development of following Solar Power Project(s):-

**Table :** (Mention the details of land in below table if land required for solar project is selected by developer from MSEDCL Land Portal)

	<b>Mention Land Application No. mentioned in MSEDCL Land Portal</b>	<b>Location of Project (Village, Taluka, District)</b>	<b>Sub-station Details</b>	<b>Proposed Capacity (MW)</b>
<i>01</i>				
<i>02</i>				
...				
<b>Total</b>				

(Note: 1. The bidder must ensure the project capacity mentioned should be as per Section 3.2 (2).

Note 2. Delete/Insert the rows as applicable, and number the Projects and envelopes accordingly).

1. We give our unconditional acceptance to the RfS dated ----- and PPA.  
In token of our acceptance to the RfS, and PPA along with the amendments and clarifications issued by MSEDCL, the same have been digitally signed by us and enclosed with the response to RfS. We shall ensure that the PPA is executed as per the provisions of the RfS, and provisions of PPA shall be binding on us. Further, we confirm that the Project shall be commissioned within 12 months of the effective date.
2. Earnest Money Deposit (EMD): - (Please read Section 3.9 carefully before filling)  
We have enclosed EMD of Rs... (Insert Amount) in the form of bank guarantee no..... [Insert bank guarantee number] dated ..... [Insert date of bank guarantee] as per Format 6.3A from ..... [Insert name of bank providing bank guarantee] and valid up to.....in terms of Section 3.9 of this RfS. The total capacity of the Solar Power Project offered by us is ..... MW
3. We hereby declare that in the event our Project get selected and we are not able to submit Bank Guarantee of the requisite value(s) towards PBG for the selected Projects within due time as mentioned in 3.9 , respectively on issue of LOA by MSEDCL for the selected Projects and/or we are not able to sign PPA with MSEDCL within 1 month from date of issue of LOA or as intimated by MSEDCL, MSEDCL shall have the right to forfeit the EMD submitted by us and return the balance amount (if any) for the value of EMD pertaining to unsuccessful capacity.
4. We have submitted our response to RfS strictly as per Section – 6 (Formats) of this RfS, without any deviations, conditions and without mentioning any assumptions or notes in the said Formats.

5. We hereby declare that during the selection process, in the event our Project happens to be the last Project and MSEDCL offers a capacity which is less than our quoted capacity due to overall bid capacity limit, we shall accept such offered capacity.
6. Acceptance
7. We hereby unconditionally and irrevocably agree and accept that the decision made by MSEDCL in respect of any matter regarding or arising out of the RfS shall be binding on us. We hereby expressly waive and withdraw any deviations and all claims in respect of this process.
8. Familiarity with Relevant Indian Laws & Regulations:
9. We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this response to RfS, execute the PPA in the event of our selection as Successful Bidder.
10. In case of our selection as the Successful bidder and the project being executed by a Special Purpose Vehicle (SPV) incorporated by us which shall be our 100% subsidiary, we shall infuse necessary equity to the requirements of RfS. Further we will submit a Board Resolution prior to signing of PPA with MSEDCL, committing total equity infusion in the SPV as per the provisions of RfS.
11. We hereby undertake that in the event of our project is selected, we shall be solely responsible for getting the connectivity within the period of 06 months from the effective date. In the event of delay in commissioning, the provisions of Section 3.14 of the RfS/ relevant Sections of PPA shall be applied on such projects. Further, the project shall not be considered as commissioned unless the connectivity with MSEDCL grid is established, SNA/MEDA registration and SLDC / MSEDCL issues certificate of commissioning. We are submitting our response to the RfS with formats duly signed as desired by you in the RfS online for your consideration.
12. It is confirmed that our response to the RfS is consistent with all the requirements of submission as stated in the RfS, including all clarifications and amendments and subsequent communications from MSEDCL.
13. The information submitted in our response to the RfS is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our response to the RfS.
14. We confirm that all the terms and conditions of our Bid are valid up to (*Insert date in dd/mm/yyyy*) for acceptance (i.e. a period of one hundred eighty (180) days from the last date of submission of response to RfS).
15. Contact Person

Details of the representative to be contacted by MSEDCL are furnished as under

Name :.....

Designation :

..... Entity

: .....

Address :

..... Phone

Nos. : .....

Mobile Nos. :

..... Fax

Nos. :

.....

E-mail address:.....

16. We have neither made any statement nor provided any information in this Bid, which to the best of our knowledge is materially inaccurate or misleading. Further, all the confirmations, declarations and representations made in our Bid are true and accurate. In case this is found to be incorrect after our selection as Successful Bidder, we agree that the same would be treated as a Solar Power Generator's event of default under PPA and consequent provisions of PPA shall apply.

Dated the ... day of ..., 2023

Thanking you,  
Yours faithfully,

(Name, Designation and Signature of Person Authorized by the board as per Section 3.18  
(5) (a))

**FORMAT-6.2**

**(Applicable only in case of Consortiums)**

**FORMAT FOR POWER OF ATTORNEY**

(To be provided by each of the other members of the Consortium in favor of the Lead Member)

**POWER OF ATTORNEY**

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

KNOW ALL MEN BY THESE PRESENTS THAT .....having its registered office at ....., .....and ..... having its registered office at ....., (Insert names and registered offices of all Members of the Consortium) the Members of Consortium have formed a Bidding Consortium named ..... (insert name of the Consortium if finalized) (hereinafter called the ‘Consortium’) vide Consortium Agreement dated..... and having agreed to appoint .....as the Lead Member of the said Consortium do hereby constitute, nominate and appoint .....an entity incorporated under the laws of .....and having its Registered /Head Office at .....as our duly constituted lawful Attorney (hereinafter called as Lead Member) to exercise all or any of the powers for and on behalf of the Consortium in regard to submission of the response to **RfS No. MSEDCL/CE/RE/2022/Solar/Decentralised/----** dated 10.04.2023 .

We also authorize the said Lead Member to undertake the following acts:

- i) To submit on behalf of Consortium Members response to RfS.
- ii) To do any other act or submit any information and document related to the above response to RfS Bid.

It is expressly understood that in the event of the Consortium being selected as Successful Bidder, this Power of Attorney shall remain valid, binding and irrevocable until the Bidding Consortium achieves execution of PPA.

We as the Member of the Consortium agree and undertake to ratify and confirm all whatsoever the said Attorney/Lead Member has done on behalf of the Consortium Members pursuant to this Power of Attorney and the same shall bind us and deemed to have been done by us.

IN WITNESS WHEREOF M/s ..... as the Member of the Consortium have executed these presents on this..... day of .....under the Common Seal of our company.

For and on behalf of Consortium Member M/s.....

-----  
(Signature of person authorized by the board)  
(Name, Designation, Place, Date)

Accepted

-----  
(Signature, Name, Designation and Address of the person authorized by the board of the Lead Member)

Attested

-----  
(Signature of the executant)

-----  
(Signature & stamp of Notary of the place of execution)

Place:----- Date:-----

**Note:** - Lead Member in the Consortium shall have the controlling shareholding in the Company as defined in Section 2 of the RfS.

**FORMAT- 6.3 A**  
**Format for Earnest Money Deposit**

Ref. \_\_ Bank Guarantee No. \_\_\_\_\_ Date: \_\_\_\_\_

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/Projects of the cumulative capacity of ..... MW [Insert cumulative Project capacity proposed] for Procurement of up to ----- MW of Power from grid-Connected Solar Power Projects for long term basis, in response to the RfS No. \_\_\_\_\_-- issued MSEDCL and MSEDCL 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 MSEDCL at [Insert Name of the Place from the address of MSEDCL] forthwith on demand in writing from MSEDCL or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees --- --[Insert amount not less than that derived on the basis of INR 4 Lakhs per MW of cumulative capacity proposed, 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 Section 3.9 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 INR \_\_\_\_\_ (INR only).

Our Guarantee shall remain in force until [insert date of validity in accordance with Section 3.9 of this RfS]. MSEDCL shall be entitled to invoke this Guarantee till .....[insert date of validity in accordance with Section 3.9 of this RfS].

The Guarantor Bank hereby agrees and acknowledges that the MSEDCL 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 MSEDCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to MSEDCL.

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 MSEDCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against MSEDCL in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Mumbai 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 MSEDCL 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 MSEDCL or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to MSEDCL and may be assigned, in whole or in part, (whether absolutely or by way of security) by MSEDCL to any entity to whom MSEDCL is entitled to assign its rights and obligations under the PPA.

*Notwithstanding anything contained herein:*

- (i) *Our liability under this Bank Guarantee shall not exceed Rs. \_\_\_\_\_ (Rupees \_\_\_ only)*
- (ii) *This Bank Guarantee shall be valid up to \_\_\_\_\_ and*
- (iii) *We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before..*  
*... .. (mention period of the guarantee as found under clause (ii) above plus claim period of at least 6 months)*

IN WITNESS WHEREOF THE BANK, through its authorised officer has set its hand and stamp on this day of \_\_\_\_\_ in the city of \_\_\_\_\_ i.

**This Bank Guarantee shall be effective only when the BG message is transmitted by the issuing Bank through SFMS to Bank of India, Mumbai large corporate branch M.G. Road Fort, Mumbai - 400001**

Signature :  
Name:  
Designation with Bank Stamp:  
Official Address:

Witness 1  
Signature :  
Name:

Witness 2  
Signature:  
Name :

## FORMAT- 6.3 B

### Format for Performance Bank Guarantee for Solar Power Project

Ref. \_\_ Bank Guarantee No. \_\_\_\_\_ Date: \_\_\_\_\_

In consideration of the ----- [Insert name of the Bidder] (hereinafter referred to as selected Solar Power Developer') submitting the response to RfS inter alia for selection of the Project of the capacity of ..... MW, at .....[Insert name of the place] for purchase of power from \_\_\_\_\_ MW \_\_\_\_\_ (mentioned the Source) Power Projects through competitive bidding process (followed by reverse e-auction), in response to the RfS No. \_\_\_\_\_ dated..... issued by Maharashtra State Electricity Distribution Company Limited (hereinafter referred to as MSEDCL) and MSEDCL considering such response to the RfS of .....[insert the name of the selected Solar Power Developer] (which expression shall unless repugnant to the context or meaning thereof include its executors, administrators, successors and assignees) and selecting the Solar Power Project of the Solar Power Developer and issuing Letter of Intent No. ----- to (Insert Name of selected Solar Power Developer) as per terms of RfS and the same having been accepted by the selected bidders resulting in a Power Purchase Agreement (PPA) to be entered into, for purchase of Power [from selected Solar Power Developer or a Project Company, M/s -----.

As per the terms of the RfS, the [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to MSEDCL at [Insert Name of the Place from the address of the MSEDCL] forthwith on demand in writing from MSEDCL or any Officer authorised by it in this behalf, any amount up to and not exceeding Rupees----- [Total Value] only, on behalf of M/s \_\_\_[Insert name of the selected Solar Power Developer / Project Company].

This guarantee shall be valid and binding on this Bank up to and including..... 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 INR\_\_ only.

Our Guarantee shall remain in force until..... MSEDCL shall be entitled to invoke this Guarantee till .....(**mention validity period as per clause 3.9 (ii) of the RfS**)

The Guarantor Bank hereby agrees and acknowledges that MSEDCL 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 MSEDCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to MSEDCL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by -----[Insert name of the selected Solar Power Developer/Project Company; as applicable] and/or any other person. The

Guarantor Bank shall not require MSEDCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against MSEDCL in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Maharashtra 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 MSEDCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Solar Power Developer / Project Company, to make any claim against or any demand on the selected Solar Power Developer/Project Company or to give any notice to the selected Solar Power Developer / Project Company or to enforce any security held by MSEDCL or to exercise, levy or enforce any distress, diligence or other process against the selected Solar Power Developer / Project Company .

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to MSEDCL and may be assigned, in whole or in part, (whether absolutely or by way of security) by MSEDCL to any entity to whom MSEDCL is entitled to assign its rights and obligations under the PPA.

*Notwithstanding anything contained herein:*

- (i) *Our liability under this Bank Guarantee shall not exceed Rs.\_\_\_\_\_ (Rupees\_\_\_\_ only)*
- (ii) *This Bank Guarantee shall be valid up to \_\_\_\_\_and*
- (iii) *We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before.. .. . (mention period of the guarantee as found under clause (ii) above plus claim period of at least 6 months)*

IN WITNESS WHEREOF THE BANK, through its authorised officer has set its hand and stamp on this day of \_\_\_\_\_ in the city of \_\_\_\_\_i.

This Bank Guarantee shall be effective only when the BG message is transmitted by the issuing Bank through SFMS to **Bank of India, Mumbai large corporate branch M.G. Road Fort, Mumbai - 400001**

Signature :

Witness 1  
Signature :  
Name:  
Witness 2  
Signature:  
Name :.

Name:  
Designation with Bank Stamp:  
Official Address:

## FORMAT-6.4

### Format for Board Resolutions

The Board, after discussion, at the duly convened Meeting on ..... (Insert date), with the consent of all the Directors present and in compliance of the provisions of the Companies Act, 1956 or Companies Act 2013 or Co-operative Society Act 1912, as applicable, passed the following Resolution:

1. **RESOLVED THAT** Mr/Ms....., be and is hereby **authorized** to do on our behalf, all such acts, deeds and things necessary in connection with or incidental to our response to **RfS No. MSEDCL/CE/RE/2022/Solar/Decentralised/---** dated 10.04.2023 for purchase of ----- MW (ac) solar power from projects to be developed in **Maharashtra** of MSEDCL through competitive bidding process (followed by e-reverse auction), including signing and submission of all documents and providing information / response to RfS to Maharashtra State Electricity Distribution Company Limited(MSEDCL), representing us in all matters before MSEDCL, and generally dealing with MSEDCL in all matters in connection with our bid for the said Project. **(To be provided by the Bidding Entity or the Lead Member of the Consortium)**
2. **FURTHER RESOLVED THAT** pursuant to the provisions of the Companies Act, 1956 or Companies Act, 2013 or Cooperative Societies Act 1912, as applicable and compliance thereof and as permitted under the Memorandum and Articles of Association of the Company or the registered Bye – Laws of Cooperative Societies, as applicable, approval of the Board be and is hereby accorded to invest total equity in the Project. **(To be provided by the Bidding Entity)**

**[Note: In the event the Bidder is a Bidding Consortium, in place of the above resolution at Sl. No. 2, the following resolutions are to be provided]**

**FURTHER RESOLVED THAT** pursuant to the provisions of the Companies Act, 1956 or Companies Act, 2013 or Cooperative Societies Act 1912, as applicable and compliance thereof and as permitted under the Memorandum and Articles of Association of the Company or the registered Bye – Laws of the Cooperative Society, as applicable, approval of the Board be and is hereby accorded to invest (----%) equity [Insert the % equity commitment as specified in Consortium Agreement] in the Project. **(To be provided by each Member of the Bidding Consortium including Lead Member such that total equity is 100%)**

**FURTHER RESOLVED THAT** approval of the Board be and is hereby accorded to participate in consortium with -----[Insert the name of other Members in the Consortium] and Mr/Ms....., be and is hereby authorized to execute the Consortium Agreement. **(To be provided by the each Member of the Bidding Consortium including Lead Member)**

**FURTHER RESOLVED THAT** approval of the Board be and is hereby accorded to contribute such additional amount over and above the percentage limit (specified for the Lead Member in the Consortium Agreement) to the extent becoming necessary towards the total equity share in the Project, obligatory on the part of the Consortium pursuant to the

terms and conditions contained in the Consortium Agreement dated ..... executed by the Consortium as per the provisions of the RfS. **[To be passed by the Lead Member of the Bidding Consortium]**

**Certified true copy**

-----  
-----

**(Signature, Name and stamp of Company Secretary or equivalent authority for Cooperative Societies)**

Notes:

- 1) This certified true copy should be submitted on the letterhead of the Company or Cooperative Society, signed by the Company Secretary/ Director/equivalent authority for Cooperative Society.
- 2) The contents of the format may be suitably re-worded indicating the identity of the entity passing the resolution.
- 3) This format may be modified only to the limited extent required to comply with the local regulations and laws applicable to a foreign entity submitting this resolution. For example, reference to Companies Act, 1956 or Companies Act, 2013 as applicable may be suitably modified to refer to the law applicable to the entity submitting the resolution. However, in such case, the foreign entity shall submit an unqualified opinion issued by the legal counsel of such foreign entity, stating that the Board resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing Company and the authorizations granted therein are true and valid.

## FORMAT- 6.5

### Format for Consortium Agreement

(to be submitted separately for each Project)

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

THIS Consortium Agreement (“Agreement”) executed on this day of Two thousand between [insert name of Lead Member] a Company incorporated under the laws of or a Cooperative Society registered under the Cooperative Societies Act 1912 and having its Registered Office at (hereinafter called the “**Member - 1**”, which expression shall include its successors, executors and permitted assigns) and a Company incorporated under the laws of or a Cooperative Society registered under the Cooperative Societies Act 1912 and having its Registered Office at (hereinafter called the “**Member-2**”, which expression shall include its successors, executors and permitted assigns), a Company incorporated under the laws of or a Cooperative Society registered under the Cooperative Societies Act 1912 and having its Registered Office at (hereinafter called the “**Member-n**”, which expression shall include its successors, executors and permitted assigns), [The Bidding Consortium should list the details of all the Consortium Members] for the purpose of submitting response to RfS execution of Power Purchase Agreement (in case of award), against RfS No. MSEDCL/CE/RE/2022/Solar/Decentralised/---- dated 10.04.2023 issued by MSEDCL a Company incorporated under the Companies Act, 1956 (1 of 1956) having its Registered office at Prakashgad, Plot G 9, Prof. Anant Kanekar Marg, Bandra (East), Mumbai 400 051.

WHEREAS, each Member individually shall be referred to as the “Member” and all of the Members shall be collectively referred to as the “Members” in this Agreement.

WHEREAS MSEDCL desires to purchase power from 88 MW (AC) solar power projects to be developed in Maharashtra of MSEDCL through competitive bidding process (followed by e-reverse auction),

WHEREAS, MSEDCL had invited response to RfS vide its Request for Selection (RfS) dated 10.04.2023

WHEREAS the RfS stipulates that in case response to RfS is being submitted by a Bidding Consortium, the Members of the Consortium will have to submit a legally enforceable Consortium Agreement in a format specified by MSEDCL wherein the Consortium Members have to commit equity investment of a specific percentage for the Project.

NOW THEREFORE, THIS AGREEMENT WITNESSTH AS UNDER:

In consideration of the above premises and agreements all the Members in this Bidding Consortium do hereby mutually agree as follows:

- 1) We, the Members of the Consortium and Members to the Agreement do hereby unequivocally agree that Member-1 ( ), shall act as the Lead Member as defined in the RfS for self and agent for and on behalf of Member-2, -----, Member- n and to submit the response to the RfS.
- 2) The Lead Member is hereby authorized by the Members of the Consortium and Members to the Agreement to bind the Consortium and receive instructions for and on their behalf.
- 3) Notwithstanding anything contrary contained in this Agreement, the Lead Member shall always be liable for the equity investment obligations of all the Consortium Members i.e. for both its own liability as well as the liability of other Members.
- 4) 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 equity 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.
- 5) Subject to the terms of this Agreement, the share of each Member of the Consortium in the issued equity share capital of the Project Company is/shall be in the following proportion:

<b>Name</b>	<b>Percentage</b>
<b>Member 1</b>	---
<b>Member 2</b>	---
<b>Member n</b>	---
<b>Total</b>	<b>100%</b>

We acknowledge that after the execution of PPA, the controlling shareholding (having not less than 51% of the voting rights and paid up share capital) in the Project Company developing the Project shall be maintained for a period of (1) one year after commencement of supply of power.

- 6) The Lead Member, on behalf of the Consortium, shall inter alia undertake full responsibility for liaising with Lenders or through internal accruals and mobilizing debt resources for the Project, and ensuring that the Solar Power Generator achieves Financial Closure in terms of the PPA.
- 7) In case of any breach of any equity investment commitment by any of the consortium Members, the Lead Member shall be liable for the consequences thereof.
- 8) Except as specified in the Agreement, it is agreed that sharing of responsibilities as aforesaid and equity investment obligations thereto shall not in any way be a limitation of responsibility of the Lead Member under these presents.



- 9) It is further specifically agreed that the financial liability for equity contribution of the Lead Member shall not be limited in any way so as to restrict or limit its liabilities. The Lead Member shall be liable irrespective of its scope of work or financial commitments.
- 10) This Agreement shall be construed and interpreted in accordance with the Laws of India and courts at [ ---- ] alone shall have the exclusive jurisdiction in all matters relating thereto and arising there under..
- 11) It is hereby further agreed that in case of being selected as the Successful Bidder, the Members do hereby agree that they shall furnish the Performance Guarantee in favour of MSEDCL in terms of the RfS.
- 12) It is further expressly agreed that the Agreement shall be irrevocable and shall form an integral part of the Power Purchase Agreement (PPA) and shall remain valid until the expiration or early termination of the PPA in terms thereof, unless expressly agreed to the contrary by MSEDCL.
- 13) 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.
- 14) 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 the PPA except with prior written consent of MSEDCL.
- 15) This Agreement
  - a) 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 MSEDCL.
- 16) All the terms used in capitals in this Agreement but not defined herein shall have the meaning as per the RfS and PPA.

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

For M/s----- [Member 1]

-----

(Signature, Name & Designation of the person authorized vide Board Resolution  
Dated) Witnesses:

1) Signature----- Name: Address:

2) Signature ----- Name: Address:

For M/s-----[Member 2]

-----

(Signature, Name & Designation of the person authorized vide Board Resolution

Dated) Witnesses:

1) Signature ----- Name: Address:

2) Signature -----

----- Name:

Address:

For M/s-----[Member n]

-----

(Signature, Name & Designation of the person authorized vide Board Resolution Dated [●])

Witnesses:

1) Signature -----

----- Name:

Address:

(2) Signature -----

----- Name:

Address:

---

Signature and stamp of Notary of the place of execution

**Note:** - Technology Partner in a Consortium shall be an entity with equity participation less than 10%.

## **FORMAT- 6.6**

### **Format for Disclosure**

[On the letter head of Bidding Entity / Each Member in a Bidding Consortium]

#### **Disclosure**

We hereby declare and confirm that only we are participating in the RfS Selection process for the RfS No. MSEDCL/CE/RE/2022/Solar/Decentralised/----- dated 10.04.2023 and that our Parent, Affiliate or Ultimate Parent or any Group Entity with which we have direct or indirect relationship are not separately participating in this selection process.

We further declare that the above statement is true & correct. We are aware that if at any stage it is found to be incorrect, our response to RfS will be rejected and if LOA has been issued or PPA has been signed, the same will be cancelled and the bank guarantees will be forfeited and recoveries will be effected for the payments done.

(Signature & Name of the person Authorized By the board)

Date:

**FORMAT- 6.7**  
**FINANCIAL PROPOSAL Covering Letter**  
(On Bidder's letter head)

[Date and Reference]

To,

**Chief Engineer (RE)**  
**Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL),**  
**Renewable Energy Section, 5th Floor, 'Prakashgad',**  
**Bandra (East), Mumbai - 400 051**

**Sub: Response to RfS No. MSEDCL/CE/RE/2022/Solar/Decentralised/--- dated 10.04.2023 for purchase of 88 MW (AC) solar power from projects to be developed in Maharashtra of MSEDCL through competitive bidding process (followed by e-reverse auction).**

(Applicant's name) enclose herewith the Financial Proposal for

Selection of my / our firm for a cumulative capacity of ..... MW as Bidder for above.

I/ We agree that this offer shall remain valid for a period of 180 (One Hundred and Eighty) days from the due date of submission of the response to RfS such further period as may be mutually agreed upon..

1. There can be only one tariff. If the bidder quotes two tariffs, then the bid shall be considered as non-responsive.
2. If the bidder submits the financial bid at <https://etender.mahadiscom.in> (e-tendering portal of mahadiscom) not in line with the instructions mentioned therein, then the bid shall be considered as non-responsive.
3. Tariff requirement shall be quoted as a fixed amount in Indian Rupees only. Conditional proposal shall be considered as non-responsive and summarily rejected.
4. In the event of any discrepancy between the values entered in figures and in words, the values entered in words shall be considered.
5. The tariff should be mentioned up to two places of decimal only.
6. The Financial bid is not to be mentioned anywhere other than the Electronic Form and only the financial bid mentioned in the Electronic form will be considered for further evaluation

Authorized Signatory

Name: Designation

Name of the Firm/Consortium Address

**Format 6.8 Regarding Timelines of the Milestones**

<b>D represents Effective Date of PPA</b>		
<b>S. No.</b>	<b>Query item</b>	<b>Response</b>
<b>a.</b>	Tentative date/month of procurement of RE generating equipment's such as Solar Modules/Panels, etc	- Solar Modules/Panels– <b>D + ---- months</b> -
<b>b.</b>	Country of Import, if not domestically procured	- Solar Modules/Panels ----- -
<b>c1.</b>	Land Procurement	<b>By D + ----- months</b>
<b>C2.</b>	Grid Connectivity	-----
<b>C3.</b>	Material Procurement	<b>D + ----- months</b>
<b>C4.</b>	Start and Completion of construction activities	Start of construction activities – <b>D + ----- month onwards</b>
		Completion of construction – <b>D + ----- months</b>
<b>C5.</b>	Testing and Commissioning	<b>D + ----- months</b>
<b>C6.</b>	Scheduled Commercial Operation Date (SCOD)	<b>D + ----- months</b>

## **Annexure – A: Technical Parameter of PV Module and various other components for use in Grid Connected Solar Power Plants**

All components of the PV plant shall be in accordance with technical specifications given in relevant IS/IEC Standards. The design and commissioning also shall be as per latest IEC/IS standards. The following are some of the technical measures required to ensure quality of the major components used in grid connected solar power Projects.

### **1. PV Module Qualification**

The PV modules used in the grid connected solar power Projects must qualify to the latest edition of any of the following IEC PV module qualification test or equivalent BIS standards.

Crystalline Silicon Solar Cell Modules	IEC 61215
Thin Film Modules	IEC 61646
Concentrator PV modules	IEC 62108

In addition, PV modules must qualify to IEC 61730 for safety qualification testing @1000 V DC or higher. For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701.

### **2. Power Conditioners/ Inverters**

The Power Conditioners/Inverters of the SPV power plants must conform to the latest edition of IEC/ equivalent BIS Standards as specified below:

<b>Efficiency Measurements</b>	IEC 61683
<b>Environmental Testing</b>	IEC 60068-2/ IEC 62093
<b>Electromagnetic Compatibility (EMC)</b>	IEC 61000-6-2, IEC 61000-6-4 & other relevant parts of IEC 61000
<b>Electrical Safety</b>	IEC 62103/ 62109-1&2
<b>Protection against Islanding of Grid</b>	IEEE1547/IEC 62116/ UL1741 or equivalent EN/BIS Standards
<b>LVRT Compliance</b>	As per the latest CERC Guidelines/ Order/ Regulations
<b>Grid Connectivity</b>	Relevant CERC Regulations (including LVRT compliance) and Grid Code as amended and revised from time to time.

<b>Rated capacity</b>	Nominal/Rated output power of the inverter (if different power ratings are mentioned at different temperatures, then power rating at 50 <sup>0</sup> C shall be considered) in kW will be considered as inverter rated
-----------------------	--

### 3. Cables and connectors:

All cables and connectors for used for installation of solar field must be of solar grade which can withstand harsh environment conditions for 25 years from the COD of the project and voltages as per latest IEC standards. (**Note:** IEC Standard for DC cables for PV systems is under development. It is recommended that in the interim, the Cables of 600 - 1800 Volts DC for outdoor installations should comply with the BS EN50618:2014/2pfg 1169/08.2007 or equivalent IS for service life expectancy of 25 years).

### 4. Other Sub-systems/Components

Other subsystems/components used in the SPV power plants (Cables, Connectors, Junction Boxes, Surge Protection Devices, etc.) must also conform to the relevant international/national Standards for Electrical Safety besides that for Quality required for ensuring Expected Service Life and Weather Resistance

### 5. Authorized Test Centres

The PV modules / Power Conditioners deployed in the power plants must have valid test certificates for their qualification as per above specified IEC/ BIS Standards by one of the NABL Accredited Test Centres in India. In case of module types/ equipment for which such Test facilities may not exist in India at present, test certificates from reputed ILAC Member body accredited Labs abroad will be acceptable.

### 6. Warranty

- a. PV modules used in grid connected solar power plants must be warranted for peak output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years from the COD of the project.
- b. The modules shall be warranted for at least 10 years for failures due to material defects and workmanship.
- c. The mechanical structures, electrical works and overall workmanship of the grid solar power plants must be warranted for a minimum of 5 years.
- d. The Inverters/PCUs installed in the solar power plant must have a warranty for 5 years.

## **7. Identification and Traceability**

Each PV module used in any solar power Project 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):

- i) Name of the manufacturer of PV Module
- ii) Name of the Manufacturer of Solar cells
- iii) Month and year of the manufacture (separately for solar cells and module)
- iv) Country of origin (separately for solar cells and module)
- v) I-V curve for the module at Standard Test Condition ( $1000 \text{ W/m}^2$ , AM 1.5,  $25^{\circ}\text{C}$ )
- vi) Wattage,  $I_m$ ,  $V_m$  and FF for the module
- vii) Unique Serial No. and Model No. of the module
- viii) Date and year of obtaining IEC PV module qualification certificate
- ix) Name of the test lab issuing IEC certificate
- x) Other relevant information on traceability of solar cells and module as per ISO 9000

Site owners would be required to maintain accessibility to the list of Module IDs along with the above parametric data for each module.

## **8. Safe Disposal of Solar PV Modules:**

The Bidder will ensure that all Solar PV modules from their plant after their 'end of life' (when they become defective/ non-operational/ non-repairable) are disposed in accordance with the "e-waste (Management and Handling) Rules, 2011" notified by the Government and as revised and amended from time to time.



**Installation Report**

*(To be provided by Solar Power Generator and to be submitted at least 10 days prior to commissioning date)*

Sr. No.	Capacity of the Project (MW)	
	Capacity already commissioned (MW)	
	Capacity proposed to be commissioned (MW)	
I.	Technology used (Mono/Multi Crystalline / thin film / Others; please specify along with capacity of each type)	
II.	Rating of the each module (Wp)	
III.	Angle from horizontal at which array is installed	
IV.	Number of modules installed of each type	
V.	Source(s) of the cells installed of each type	
VI.	Source(s) of the Modules installed of each type	
VII.	Number of PCUs / Inverters installed	
VIII.	Source of the PCUs / Inverters (Name of supplier with address)	
IX.	Rating of PCUs / Inverters	
X.	Date of installation of full capacity (as per capacity proposed to be commissioned)	-----
	PV arrays	
	PCUs / Inverters	
	Transformers	
XI	Documents / Lease Agreement to establish possession / right to use 100% (hundred per cent) of the required land in the name of solar power generator for a period not less than the complete term of PPA	

### Sample Connectivity Report

(To be provided by concerned STU / MSEDCLs)

This is in compliance to the office order of the -----,----- STU / MSEDCL, <Place> issued vide office order

<No.><dated>, the committee constituted vide said order has completed the work for commissioning of <kV> Bay & Metering Equipment to interconnect the <MW> Solar Power Generation Plant (having

<technology>) with Grid installed at <Village>, <Tehsil>, <District> in the <State> on <date>. The details of Solar Power Plant are as under:-

S. No	Name of Solar Power Generator & Location	Capacity Mentioned in PPA	Connectivity	Details of Solar Power Plant (Transformer, Inverter, Modules, Switchgear)
1	<M/s> <Village> <Tehsil> <District.	<> MW	Metering Detail at Delivery Point (<Village>) S.No. of <kV> CT i) <R-Phase> ii) <Y-Phase> iii) <B-Phase> S.No. of <kV> PT i) <R-Phase> ii) <Y-Phase> iii) <B-Phase> S.No. of Main<ABT> Meter> S.No. of Check <ABT Meter> Metering Equipment installed at	Transformer <Make/Type:> <Sr. No.> Inverters <Make/Type:> <Sr. No.> Modules <Make: > <W>, < W > <Total: Nos.> Switchgear Panels <Make/Type:> <Sr. No.> Protection Provided: Under/Over voltage, Over current & Earth fault.

The Commissioning date of various equipment is as under:

<kV> line from --- to -----, completed on date -----.

Line Bay at < kV > GSS, ----- charged for ---- on -----.

<kV> line charged from -----to----- on date-----.

Main & check metering commissioned on ..... (Initial record of main/Check meters at the time of Commissioning is to be taken and enclosed)

Complete system commissioned on date-----

The Joint Inspection Report of metering arrangement & copy of permission of Electrical Inspector is enclosed herewith.

## Appendix-A-4

### Sample Synchronization Certificate

It is certified that ----- MW (Capacity) Solar Photovoltaic Power Project of M/s. -----, Village - ----- Tehsil/Taluka -----, District ----- was Grid connected on ..... (Date) at----- Hrs.

It is further certified that the Project was synchronized and supply of power into the grid from the Project connected on ..... (Date) at ----- Hrs.

The above certificate is issued on the basis of MRI record.

NB:

- (i) The above certificate shall be issued by concerned MSEDCLs
- (ii) Copy of duly signed MRI is to be enclosed.

## **Appendix-A-5**

### **Sample Part Commissioning / Full Commissioning Certificate of Solar PV Power Project**

This is to certify that <M/s> having its registered office at ----- has successfully commissioned Capacity < MW > out of total <MW> installed Capacity on (Date) of their Solar PV Power Generation Project at Village -----, Tehsil/Taluka ----- & Dist. -----

The Commissioning Certificate has been issued on the basis of the following documents enclosed:

- (i) Installation Report including Snap shots of the Project from various angles
- (ii) Electrical Inspector Report
- (iii) Connectivity Report
- (iv) Synchronization Certificate including MRI record

NB: To be issued by as mentioned in clause 3.17.

**Annexure – B: Check list for Bank Guarantees**

<b>Sl. no.</b>	<b>Details of Checks</b>	<b>Yes/No</b>
1.	Is the BG on non-judicial Stamp paper of Rs. 500	
2.	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.	
3.	In case of BGs from Banks abroad, has the BG been executed on Letter Head of the Bank endorsed by the Indian branch of the same bank or SBI, India?	
4.	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
5.	Is each page of BG duly signed / initialed 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 proforma?	
6.	Do the Bank Guarantees compare verbatim with the Proforma prescribed in the Bid Documents?	
7.	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	
8.	Whether overwriting/cutting, if any, on the BG have been properly authenticated under signature & seal of executant?	
9.	Whether the BG has been issued by a Bank in line with the provisions of Bidding documents?	
10.	In case BG has been issued by a Bank other than those specified in Bidding Document, is the BG confirmed by a Bank in India acceptable as per Bidding documents?	

## Annexure – C: List of Banks

(Refer to para 2(b) of notification dated April 13, 2020)

### List of Scheduled Commercial Banks

<b>PUBLIC SECTOR BANKS</b>		<b>PRIVATE BANKS</b>	
1	State Bank of India	1	Axis Bank Ltd.
2	Bank of Baroda (Including Vijaya Bank and Dena Bank)	2	Catholic Syrian Bank Ltd.
3	Bank of India	3	City Union Bank Ltd.
4	Bank of Maharashtra	4	Development Credit Bank Ltd.
5	Canara Bank (Including Syndicate Bank)	5	Dhanlaxmi Bank Ltd.
6	Central Bank of India	6	Federal Bank Ltd.
7	Indian Bank (Including Allahabad Bank)	7	HDFC Bank Ltd.
8	Indian Overseas Bank	8	ICICI Bank Ltd.
9	Punjab National Bank (including Oriental Bank of Commerce and United Bank of India)	9	IndusInd Bank Ltd.
10	Punjab & Sind Bank	10	Jammu & Kashmir Bank Ltd.
11	Union Bank of India (including Andhra Bank and Corporation Bank)	11	Karnataka Bank Ltd.
12	UCO Bank	12	Karur Vysya Bank Ltd.
		13	Kotak Mahindra Bank Ltd.
		14	Lakshmi Vilas Bank Ltd.
		15	Nainital Bank Ltd.
		16	Ratnakar Bank Ltd.
		17	South Indian Bank Ltd.
		18	Tamilnad Mercantile Bank Ltd.
		19	Yes Bank Ltd.
		20	Bandhan Bank
		21	IDFC Bank Ltd.
		22	IDBI Bank Ltd

## FOREIGN BANKS

1	The Royal Bank of Scotland N.V	23	Mizuho Corporate Bank Ltd.
2	Abu Dhabi Commercial Bank Ltd.	24	Oman International Bank
3	Antwerp Diamond Bank N.V	25	SocieteGenerale
4	Arab Bangladesh Bank Ltd.(AB Bank)	26	Sonali Bank
5	Bank International Indonesia	27	Standard Chartered Bank
6	Bank of America	28	State Bank of Mauritius
7	Bank of Bahrain & Kuwait B.S.C	29	JSC - VTB Bank
8	Bank of Ceylon	30	UBS AG
9	Bank of Nova Scotia	31	American Express Banking Corporation
10	Bank of Tokyo - Mitsubishi Ltd.	32	First Rand Bank Ltd.
11	Barclays Bank	33	Commonwealth Bank of Australia
12	BNP Paribas	34	United Overseas Bank Ltd.
13	China Trust Bank	35	Credit Suisse A.G
14	Shinhan Bank	36	Sberbank
15	Citibank N.A	37	Australia and New Zealand Banking Group Ltd.
16	Credit Agricole Corporate and Investment Bank	38	Rabobank International
17	Deutsche Bank	39	National Australia Bank
18	DBS Bank Ltd.	40	Woori Bank
19	Hongkong and Shanghai Banking Corp. Ltd.	41	Industrial & Commercial Bank of China
20	J.P.Morgan Chase Bank N.A	42	Sumitomo Mitsui Banking Corporation
21	Krung Thai Bank	43	Westpac Banking Corporation
22	Mashreqbank	44	Doha Bank



### **Annexure – D: Special instructions to Bidders for e-Tendering**

The Complete user guide for vendor registration and bidding process is available in “Download” section as “Vendor's manual for Power Purchase E-Tendering” on <https://etender.Mahadiscom.in> (e-tendering portal of mahadiscom)

## **Annexure – F: Terms & Conditions of e-Reverse Auction**

After opening of financial bids and short-listing of bidders based on the First round tariff and total capacity of project of qualified Project(s), MSEDCL shall resort to “REVERSE AUCTION PROCEDURE”. Reverse Auction shall be conducted as per methodology specified in Section- 4 and other provisions of Reverse Auction in RfS Documents and their subsequent Addenda/Amendments/Clarifications. Bidders in their own interest, are advised to go through the documents in entirety. The Terms & Conditions and Business Rules mentioned hereunder are in brief and may not give complete explanations. Further these are supplementary in nature.

1. Bidders shall ensure online submission of their ‘Bid Price’ within the auction period.
2. Bidders shall ensure to take all necessary training and assistance before commencement of reverse auction.
3. Business rules for Reverse Auction like event date, time, bid decrement, extension etc. shall be as per the business rules, enumerated in the RfS document or intimated later on, for compliance.
4. Reverse auction will be conducted on scheduled date & time, as mentioned in the RfS document.
5. Bidders should acquaint themselves of the ‘Business Rules of Reverse Auction’, which is enclosed separately in the RfS document.
6. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant MSEDCL guidelines, shall be initiated by MSEDCL.
7. The Bidder shall not divulge either his Bids or any other exclusive details of MSEDCL to any other party.
8. Period of validity of Prices received through Reverse Auction shall be same as that of the period of validity of bids offered.
9. Bidders should also note that:
  - a. Bidders may note that, although extension time is ‘8’ minutes, there is a time lag between the actual placing the bid on the local computer of the bidder and the refreshing of the data on to the server for the visibility to the Owner. Considering the processing time for data exchange and the possible network congestion, bidders must avoid the last minute hosting of the Financial Bid during reverse auction.
  - b. Participating bidder will agree to non-disclosure of trade information regarding the purchase, identity of MSEDCL, bid process, bid technology, bid documentation and bid details.
  - c. It is brought to the attention of the bidders that the bid event will lead to the final price of bidders only.
  - d. Technical and other non-commercial queries (not impacting price) can only be routed to the MSEDCL contact personnel indicated in the RfS document.
  - e. Order finalization and post order activities such issue of LOA, signing of PPA etc. would be transacted directly between successful bidder(s) and MSEDCL.
  - f. LOA shall be placed outside the e-Tender Portal & further processing of the LOA shall also be outside the system.
  - g. In case of any problem faced by the bidder during Reverse Auction and for all Bidding process related queries, bidders are advised to contact the persons indicated in Annexure – D of the RfS document.
  - h. Bidders are advised to visit the auction page and login into the system well in advance to identify / rectify the problems to avoid last minute hitches.

- i. MSEDCL will not be responsible for any PC configuration/ Java related issues, software/ hardware related issues, telephone line glitches and breakdown / slow speed in internet connection of PC at Bidder's end.
- j. Bidders may note that it may not be possible to extend any help, during Reverse Auction, over phone or in person in relation to rectification of PC / Internet / Java related issues and Bidder may lose the chance of participation in the auction.

10. For access to the Reverse Auction site, e-tendering portal of mahadiscom to be used

11. No queries shall be entertained while Reverse Auction is in progress.

**BUSINESS RULES OF REVERSE AUCTION:**

Reverse Auction shall be conducted as per methodology specified in Section – 4 and other provisions of Reverse Auction in RfS documents and their subsequent Amendments/ Clarifications/ Addenda. Bidders, in their own interest, are advised to go through the documents in entirety.

The following would be parameters for e-Reverse Auction:

Sr.No.	Parameter	Value
1.	Date and Time of Reverse-Auction Bidding Event	Please refer Bid Information Sheet
2.	Duration of Reverse-Auction Bidding Event	1 Hour
3.	Automatic extension of the 'Reverse-Auction closing Time', if last bid received is within a 'Predefined Time-Duration' before the 'Reverse-Auction Closing Time'	Yes
3.1	Pre-defined Time-Duration	08 minutes
3.2	Automatic extension Time-Duration	08 minutes
3.3	Maximum number of Auto-Extension	Unlimited Extension
4.	Entity-Start-Price	First Round tariff Quoted by the bidders in Financial Bid (Second Envelope)

Online Reverse Auction shall be conducted by MSEDCL on pre-specified date and time, while the bidders shall be quoting from their own offices/ place of their choice. Internet connectivity shall have to be ensured by bidders themselves.

During the Reverse Auction, any requests for extension of time will not be considered by MSEDCL. Bidders are therefore requested to make all the necessary arrangements/ alternatives whatever required so that they are able to participate in the Reverse Auction successfully. Failure of power or loss of connectivity at the premises of bidders during the Reverse Auction cannot be the cause for not participating in the Reverse Auction. MSEDCL shall not be responsible for such eventualities.

Bidders are advised to get fully trained and clear all their doubts such as refreshing of Screen, capacity/no. of projects being auctioned, auction rules etc.

MSEDCL reserves the right to cancel/reschedule/extend the Reverse Auction process/ tender at any time, before ordering, without assigning any reason.

MSEDCL shall not have any liability to bidders for any interruption or delay in access to the auction website irrespective of the cause. In such cases, the decision of MSEDCL shall be binding on the bidders.

Other terms and conditions shall be as per bidder's techno-commercial offers and as per the RfS document and other correspondences, if any, till date.

**Annexure – G: List of Land & Sub-stations**

(Attached Separately)

## **Annexure – H:**

### **Main Keywords**

- 1) Made in India
- 2) Distributed Cable Drive Actuator
- 3) Self-Powered Controller and Wind Station.
- 4) Wireless communication for controller and wind station
- 5) Uniform Torque Tube section in the row.

### **A. Documents and Details Required**

1. The single-axis tracking tender, bidder confirmation letters and data shall be provided by the bidders as described below. Studies and reports to be covered in the confirmation letters from the manufacturer:

Stow Strategy Control System: The bidders are responsible for the definition of a stow strategy which clearly demonstrates the safe operation of the tracker during maximum wind speed events as defined in local code or standard for wind loads. The following points should be included:

- Tracker inclination and orientation at stow position.
  - Maximum wind speed as per IS 875-III:2015 basic wind speed map of India.
  - If study from authentic reputed source shows that the wind speed at the proposed site location is different than given in local code or standard for wind loading, such wind speed acceptable per client/owner's request such study and its approval to be provided by client/owner in written format as deviation from local code /standard for wind loading.
  - Preference will be given for submission of Coefficients for computing loads are derived from a Boundary layer Wind tunnel study from a Wind tunnel facility of International repute.
  - Static coefficients along with dynamic Amplification factors to be used to design the structure.
  - Aeroelastic instability analysis for the proposed tracker structure to show that the stow angle will not result in aeroelastic instability. This has to be demonstrated by the supplier.
  - Time period required to move the tracker from maximum tilted working position into stow position considering aero elastic instability study output for the tracker structure. This has to be demonstrated by the supplier.
2. Wind tunnel tests from a recognized wind expert institute to be shown / submitted (CPP Wind Engineering, RWDI or an alternative experienced institute subject to approval by the client). Boundary Layer Wind Tunnel tests should be used to be in supplement calculations using appropriate models of the structure. Successful tracker dynamic analysis and tests based on the actual tracker configuration, stiffnesses and geometry with investigations of vortex shedding and all possible aeroelastic instabilities.
  3. Independent Engineers Bankability review report from reputable agencies like Black and Veatch, DNV or alternative experienced agency to be shown / submitted.

4. Structure design review document from any IIT civil/structural certifying department.

**General Tracker Specification:**

1. Single Axis Tracker: Independent Row Tracker.
2. Tracking Angle: minimum-60/+60.
3. DC Self –powered drive system with battery backup.
4. Suitable material for corrosion category compliance as per Corrosion map of India, EN ISO 14713, EN ISO 1461, EN ISO 12944-5 or ASTM 123.
5. Module Configuration: IP configuration.
6. Actuation: Electro-mechanical.
7. Design wind speed as per site condition, basic wind speed as per wind map of India from IS 875-III: 2015.
8. Stow configuration: optimal Angle, as per aero elastic instability analysis.
9. Operational temp: -10 to 55 degree Celsius.
10. Distributed drive with multi location torsion lock for each tracker table to enhance table structural stability. Tracker supplier to submit calculations to substantiate this.
11. Cleaning mode in control system- Compliant with robotic module cleaning.
12. Uniform minimal gaps between modules in a single table.
13. Individual row-level bi-directional control with communication redundancy through mesh networked controllers.

**B. Other technical requirement:**

**Tracker Bushing:**

1. It should be type tested for operation cycles which solar plant will go through in its life of 25 years.
2. Preference will be given to maintenance free and/or lubrication free bushings.
3. Bearing must be resistant to dust, water and any other external elements, test report to be submitted.

**Control and Monitoring:**

1. The tracker controller must have at least one tilt sensor per tracker table for measurement of tracker tilt angle.
2. Each logical tracker block should have at least one wind station for measuring and monitoring the speed of the wind. The wind speed data should be transmitted to the block wirelessly.
3. Tracker controller should have the Micro-controllers for controlling all the outputs of the sensors. Details of Algorithm used to be submitted to client.
4. Battery back up should be provided for controller. Minimum 2 days of backup and self powered, power consumption less than 0.075% of generated power on per MWp basis (calculation to be submitted).