## Maharashtra State Electricity Distribution Co. Ltd.

#### **REQUEST FOR SELECTION (RfS)**

## FOR PROCUREMENT OF POWER ON LONG TERM BASIS THROUGH COMPETITIVE BIDDING PROCESS (FOLLOWED BY REVERSE E- AUCTION) FROM 500 MW INTER/INTRA STATE GRID CONNECTED WIND-SOLAR HYBRID PROJECTS WITH GREEN SHOE OPTION OF ADDITIONAL CAPACITY UPTO 500 MW

### RfS No. MSEDCL/RE/2024/500MW/Wind-Solar Hybrid/T-Phase III Dated 11.03.2024

### ISSUED BY Maharashtra State Electricity Distribution Co. Ltd.

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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 on or before the date of pre-bid meeting (to be conducted online through MS Teams) as specified in bid information sheet, 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 Co. Ltd. (MSEDCL) reserves the right to modify, amend or supplement this RfS document including the draft PPA.
- 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: 11.03.2024

## **Bid Information Sheet**

Document Description	RfS document for procurement of power on long term basis through competitive bidding process (followed by reverse e- auction) from 500 MW inter/intra state grid connected Wind- Solar Hybrid projects with green shoe option of additional capacity upto 500 MW
RfS No.& Date	MSEDCL/RE/2024/500MW/Wind-Solar Hybrid/T- Phase III dated 11.03.2024
Downloading of tender documents	Date:- 11.03.2024
Pre-bid Conference /Clarification Meeting date and location	Online pre-bid meeting Date:- 20.03.2024 (Link for the meeting will be displayed on Bharat e-bidding portal and on mahadiscom website)
<ul> <li>Last date &amp; Time for</li> <li>a) Online Submission of Response to RfS and</li> <li>b) All documents as per Section 3.24A physically at MSEDCL office, Mumbai</li> </ul>	Date : 04.04.2024 Time : 11:00 Hrs
Technical Bid Opening	Will be informed later.
Financial Bid Opening	Will be informed to eligible bidders.
Reverse e-auction	Will be informed to eligible bidders.
Cost of RfS Document (non- refundable)	Rs 25000/- (plus applicable GST) (to be paid through online payment. Account details are as below: Account Name- Maharashtra State Electricity Distribution Co. Ltd. Bank- Bank of Maharashtra. Branch-Bandra East, Mumbai Account No 20045303764 IFSC SCDe-MAHB0000164 MICR SCDe- 400014043 (Kindly provide UTR No. details to MSEDCL at the time of bid submission)
Processing Fee (non- refundable)	Rs. 15 Lakhs plus applicable GST as on last date of bid submission for each response/bid, (to be paid through online payment to the above mentioned account details (Kindly provide UTR No. details to MSEDCL at the time of bid submission), along with the response to RfS.

EMD	Earnest Money @ 11 lakh /MW to be submitted in the form of Bank Guarantee along with the Response to RfS.	
Name, Designation, Address and	Chief Engineer (Rene	ewable Energy)
other details (For Submission of Response to RfS)	"Prakashgad", 5 <sup>th</sup> flo Mumbai -400 051. Tel No. 022-2647421 E-mail - <u>ncetenderm</u>	
Details of persons to be contacted in case of any assistance	1) Mr. Nikhil Meshra Superintending Er	
required	Mobile No. 70452 2) Mr. Amit Bute Executive Engine Mobile No. 99200	er (RE)
	Name of Bank Branch Name	Bank of India Mumbai Large Corporate Branch
Bank Details of MSEDCL for Bank Guarantee	Account No. Name of Account Holder by Designation	016020110000033 Maharashtra State Electricity Distribution Company Limited
	IFSC SCDe TYPE OF ACCOUNT	BKID0000160 CURRENT ACCOUNTS
	Address	Mumbai Large Corporate, 70/80, MG Road, Fort, Fort, Maharashtra

**Important Note:** Prospective Bidders are requested to remain updated for any notices/amendments/clarifications etc. to the RfS document through the website https://www.bharat-electronictender.com or <u>www.mahadiscom.in</u>, No separate notifications will be issued for such notices/amendments/clarifications etc. in the print media or individually.

For conducting the e-bidding, MSEDCL will use https://www.bharat-electronictender.com (E-tender Portal). Bidders are required to register themselves online with M/s ISN Electronic Tender Services website https://www.bharat-electronictender.com (if not registered already) e-tender portal and subsequently download the RfS and other Bid Documents from the E-tender Portal. A Bidder, who is already registered on the E-tender Portal need not register again on the E-tender Portal.

# **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) and Maharashtra State Electricity Transmission Co. Ltd. (Mahatransco) on 6th June 2005.
- 1.1.2. In order to fulfil the Renewable Purchase Obligation (RPO) and to meet the future power requirements, MSEDCL intends to procure Wind-Solar Hybrid Power up to capacity of 500 MW with green shoe option of additional capacity upto 500 MW through Competitive Bidding Process (conducted through electronically facilitated online web based portal (https://www.bharat- electronictender.com) followed by e-reverse auction).

#### **1.2. DETAILS OF POWER PROCUREMENT:**

- 1.2.1. The bidders selected by MSEDCL based on this RfS, shall set up Wind-Solar Hybrid Power Projects in accordance with the provisions of this RfS document and draft Power Purchase Agreement (PPA) can be downloaded from https://www.bharat- electronictender.com.
- 1.2.2. MSEDCL shall enter into Power Purchase Agreement (PPA) with the Bidders selected based on this RfS for purchase of Wind-Solar Hybrid power for a period of 25 years from Scheduled Commencement of Supply Date for new projects and from signing of PPA for existing projects of the Wind-Solar Hybrid 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, Concessional Excise Duties, Tax Holidays, Benefits from trading of Carbon Credits, etc. as available for such projects. 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. Wind-Solar Hybrid Power Developer (HPG) shall be responsible for arrangement of startup power / auxiliary consumption.

Intra State project:-

In case of import of energy during a month after SCD, the Wind-Solar Hybrid Power Developer (HPG) shall be required to make payment to MSEDCL at prevailing HT Industrial Tariff or tariff as applicable determined by MERC from time to time.

Inter-State Project:

In case of import of energy from inter-state project, the relevant provision of the respective utility shall be applicable.

#### **1.3. ELIGIBLE PROJECTS**

1.3.1.The Projects to be selected shall provide for deployment of Wind-Solar Hybrid Power Technology. However, the selection of projects shall be technology agnostic only commercially established and operational technologies can be used, to minimise the technology risk and to achieve commissioning of the Projects. The technology to be adopted shall be commercially established technology as per the type certified wind turbine models listed in Revised List of Models and Manufactures (RLMM) (Refer NIWE website) issued by MNRE and For Solar modules, in accordance with MNRE's Approved Models and Manufacturers of Solar PV Modules (Requirements for Compulsory Registration) Order, 2019 as amended from time to time, whichever is applicable. Final details of the same shall be

submitted 30 days before Scheduled Commencement of Supply Date (SCSD) of project.

- 1.3.2. The Inter/Intra-state Wind-Solar Hybrid projects under construction, projects which are not yet commissioned and projects already commissioned but do not have any long-term PPA with any agency will be considered, in case these projects are not already accepted under any other Central or State Schemes and do not have any obligations towards existing buyers.
  - 1.3.3. In order to timely completion of project, the bidder shall submit activity wise Tentative schedule for meeting timelines/milestones as per RfS at the time of Bid Submission such as Grid Connectivity, Material Procurement, tentative date/month of procurement of Solar Modules/Panels and Wind Turbine Generators, Country of Import, if not domestically procured Solar Modules/Panels, details of Taxes and duties considered for Wind-Solar Hybrid Project, Start and Completion of construction activities etc. However, if any revision in given schedule, Bidder shall submit it at the time of Financial Closure. . (Format 6.8)

# **SECTION 2: DEFINITIONS**

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

Act or Electricity	shall mean the Electricity Act, 2003 and include any
Act, 2003	modifications, amendments and substitution from time to time.
Affiliate	<ul> <li>shall mean a Company that, directly or indirectly,</li> <li>i) controls, or</li> <li>ii) is controlled by, or</li> <li>iii) is under common control with, Such Company. The expression 'control' shall means the ownership, directly or indirectly, of more than 50% (fifty percent) of the voting shares of such Company or right to appoint majority Directors.</li> </ul>
Bidder/ Bidding	Shall mean Bidding Company or a Limited Liability Company (LLC)
Entity	or a Bidding Consortium submitting the Bid. Any reference to the Bidder includes Bidding Company 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; foreign companies participating in the bidding process shall be registered as companies as per the rules of their country of origin
Bidding Consortium	Refers to a group of Companies that has collectively submitted the
or Consortium	response in accordance with the provisions of these guidelines.
Capacity Utilization factor/ CUF	shall have the same meaning as provided in CERC (Terms and conditions for tariff determination from Renewable Energy Sources) Regulations, 2020 as amended from time to time.
	For illustration, CUF shall be calculated based on the annual energy injected / delivered as the case may be In any Contract year, if 'X' MWh of energy has been Scheduled/delivered out at Delivery Point for 'Y' MW Contracted capacity,
	CUF= (X MWh /(Y MW*8760)) X100%;
	<ul> <li>(i) For the first contract year starting from the SCD and ending on 31st March of respective year, the CUF shall be calculated as under: If 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity, CUF= (X MWh/(Y MW*Z)) * 100%,</li> </ul>

	<ul> <li>where "Z" = No. of days from CSD to 31st March of respective year * 24.</li> <li>(ii) In any Contract Year except for first and last contract year, the CUF shall be calculated as under: If 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity, CUF= (X MWh/(Y MW*8760)) *100%.</li> </ul>
	<ul> <li>(iii) For the last contract year, the CUF shall be calculated as under: If 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity, CUF= (X MWh/(Y MW*Z)) *100%, where "Z" = No. of days from 1st April of respective year up to</li> </ul>
	end date of PPA * 24.
CERC	shall mean Central Electricity Regulatory Commission
Chartered Accountant	for bidders or its Parent, Affiliate or Ultimate Parent or any Group Company incorporated in India,
	<b>"Chartered Accountant"</b> 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, " <b>Chartered</b> <b>Accountant</b> " 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 corporate incorporated in India under the Companies Act, 1956 or the Companies Act, 2013, as applicable
Commissioning	with respect to the Project/ Wind-Solar Hybrid Power Project as certified by RLDC/SLDC/MSEDCL shall mean when all equipment as per rated capacity has been installed and energy has flown into the grid.
Commencement Of Supply Date	shall have the same meaning as defined in 3.18 this RfS.
(CSD)	
Contracted Capacity	shall mean the capacity (in MW AC) contracted with MSEDCL for supply by the successful bidder at the delivery point from the Wind- Solar Hybrid Power Project.
Contract Year	shall mean the period beginning from the Effective Date of the PPA and ending on the immediately succeeding March 31 and thereafter each

	period of 12 months beginning on April 1 and ending on March 31 provided that:
	a) in the financial year in which the Scheduled Commissioning Date would occur, the Contract Year shall end on the date immediately before the Scheduled Commissioning Date and a new Contract Year shall commence once again from the Scheduled Commissioning Date and end on the immediately succeeding March 31, and thereafter each period of twelve (12) months commencing on April 1 and ending on March 31, and
	b) provided further that the last Contract Year of this Agreement shall end on the last day of the Term of the PPA.
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 to the Board of Directors.
Controlling shareholding	shall mean more than 50% of the voting rights or paid up share capital in the Company/Consortium
Day	shall mean calendar day.
Delivered Energy	shall mean the kilowatt hours of energy actually fed and measured by the energy meters or schedule at the Delivery Point as the may be and as certified by RLDC/SLDC/DISCOM as applicable.
Delivery Point	shall mean the point(s) of connection(s) at which energy is delivered into the Grid System
	a) For intra - state projects, at the voltage level of 110 kV or above of STU/MSETCL sub-station.
	b) For inter - state projects, energy settlement and delivery point shall be at Maharashtra STU/MSETCL periphery.
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 execution of Power Purchase Agreement (PPA) by both the parties.
Financial Closure or Project Financing Arrangements	shall have the same meaning as defined in 3.11 of RfS
Financing Parties	means Parties financing the Project, pursuant to Financing Documents.
General Network Access (GNA)	shall mean General Network Access as defined under the Central Electricity Regulatory Commission (Connectivity and General Network Access to the Inter-State Transmission System) Regulations, 2022 and amendments thereof.
Group Company	<ul> <li>of a Company means</li> <li>a) A company which, directly or indirectly, holds 10% (ten percent) or more of the share capital of the company, or</li> <li>b) a company in which the company, directly or indirectly, holds 10% (ten percent) or more of the share capital of such company, or</li> <li>c) 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</li> <li>d) a company which, directly or indirectly, has the power to direct of the management and policies of such company the ownership of securities or agreement or any other arrangement or otherwise, or</li> <li>e) 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</li> <li>e) a company which is under common control with the company, and control means ownership by one company of at least 10% (Ten percent) 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.</li> <li>Provided that a financial institution, scheduled bank, foreign institutional investor, nonbanking financial company, and its shareholding and the power to direct or cause to be directed the management and</li> </ul>

	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;
Interconnection Point	shall mean the point(s) of connection(s) at which the project is connected to the grid:
	<ul> <li>b) For new intra - state projects, at the voltage level of 110 kV or above of STU/MSETCL sub-station, including the dedicated transmission line connecting the Wind and/or Solar power project.</li> </ul>
	c) For inter - state projects, energy settlement and delivery point shall be at Maharashtra STU/MSETCL periphery.
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 Commencement Of Supply Date (SCD) of the Project without prior approval of MSEDCL.
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 the Contract.
Limited Liability Partnership or ILP	shall mean a Company governed by Limited Liability Partnership Act 2008 or as amended.
Limited Liability Company or LLC	shall mean Limited Liability Company; shall be as defined in clause 3.5.5.
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	the metering point will be at
	a) For new intra - state projects, metering shall be at the voltage level of 110 kV or above of STU/MSETCL sub-station including the dedicated transmission line connecting the Hybrid power project.
	b) For inter - state projects, energy settlement and delivery point shall be at Maharashtra STU/MSETCL periphery.

	All expenses including wheeling charges and losses in relation to the transmission and distribution network including metering arrangement upto delivery point shall be borne by HPG.
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 more than 50% 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 or its 100% subsidiary Special Purpose Vehicle (SPV) (it should be between SPV and MSEDCL only)and MSEDCL according to the terms and conditions of the draft PPA enclosed with this RfS.
Project/ Wind-Solar Hybrid Power Project/ Power Project	shall mean the Wind-Solar Hybrid Power Project, comprising Solar PV and Wind Power generation facilities having a single point or separate points of injection in to the grid at the Delivery Point/Interconnection Point/Metering Point at STU sub-station or in case of sharing of transmission lines, by separate injection at STU sub-station and having control systems and metering. The Project shall include all units/ modules and auxiliaries and associated facilities, bay(s) for transmission system in the switchyard, dedicated transmission line up to the Delivery Point and all the other assets, buildings/structures, equipment, plant and machinery, facilities and related assets required for the efficient and economic operation of the power generation facility, whether completed or at any stage of development and construction or intended to be developed and constructed for the purpose of supply of power to MSEDCL. The wind- solar hybrid power project is the project, where the rated power capacity of one resource is at least 33% (As specified by MNRE/MoP time to time) of the total contracted power capacity.
HybridPowerGenerator(HPG)/Generator	shall mean a generator and supplier of electricity generated through a Wind Solar Hybrid power generating station and the Bidding Company or a Bidding Consortium participating in the bid and having been selected

SNA	means State Nodal Agency.
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, 2003.
Solar PV Project	means the Solar Photo Voltaic Power Project that uses sunlight for direct conversion into electricity through Photo Voltaic technology.
SLDC	means the State Load Dispatch Centre as notified by the State Government.
Selected Bidder or Successful Bidder	shall mean the Bidder selected by MSEDCL pursuant to this RfS to set up the Project and supply electrical output as per the terms of PPA.
SEA	means the State Energy Account issued by State Load Dispatch Centre, and amendment thereto.
Scheduled Commencement of Supply Date (SCSD)	means in relation to the contracted capacity or the part of the contracted capacity shall mean the date(s) corresponding to the date of commencement of supply. The date shall be declared by the Successful Bidder in the PPA for 100% contracted capacity which shall be within 24 (Twenty Four) months from the date of execution of the PPA.
SCADA	means the Supervisory Control and Data Acquisition System (SCADA) installed for recording and transferring the online data.
RLDC	shall mean relevant Regional Load Dispatch Center established under sub section(1) of Section 27 of Electricity Act 2003, and amendments from time to time.
REA	shall mean Regional Energy Account.
Project Capacity	means the maximum AC capacity (in MW) at the delivery Point that can be scheduled on which the PPA shall be signed.
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.
	and allocated a project capacity by MSEDCL (through a competitive bidding process), including the SPV formed by the selected bidder/ consortium for the purpose of setting up of project and signing of PPA with MSEDCL.

TOE	shall mean Tender Opening Event.
Ultimate Parent	shall mean a Company, which owns more than fifty percent (50%) Equity either directly or indirectly in the Parent and Affiliates.
Week	shall mean calendar week.
Wind Power Project	means the wind power project that uses wind energy for conversion into electricity through wind turbine generator

# 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 (<u>htttps://www.bharat-electronictender.com</u>). A link of the same is also available at <u>www.mahadiscom.in</u>. Interested bidders have to download official copy of RfS & other documents after logging into website of <u>htttps://www.bharat-electronictender.com</u> by using Login ID & Password provided by Bharat portal during registration (Refer Annexure C).
- **3.1.2** The bidders shall be eligible to submit / upload the bid document only after logging into (https://www.bharat-electronictender.com ) and downloading 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 and cost of RfS documents as mentioned in the Bid Information Sheet. The bids submitted without cost of RfS document and/or Processing Fee and/or Bank Guarantee against EMD, shall not be considered for bidding and such bids shall not be opened by MSEDCL.

#### 3.2 Total Capacity Offered:

#### **3.2.1** Total Capacity

The selection of inter/intra state Grid-connected Wind-Solar Hybrid Power Projects for total capacity of 500 MW with green shoe option of additional capacity upto 500 MW will be carried out through e-bidding followed by e-Reverse Auction process.

#### 3.2.2 Total capacity offered:

I. The Wind-Solar Hybrid Power Projects are required to be designed for inter-connection with transmission network of STU/CTU as the case may be. Following points are to be noted in this regard:

- a) The minimum bid capacity shall be 50 MW and above subject to the condition that the rated power capacity of one resource (wind or solar) shall be at least 33% (As specified by MNRE/MoP time to time) of the total contracted capacity.
- b) The minimum Project size of a single Hybrid Power Project for inter-state projects shall be 50 MW and above at one site and for intra-state projects shall be 10 MW and above at one site.
- c) Under this RfS, a Wind-Solar Hybrid Power Project shall mean a Project comprising two 'Resources' one Solar and one Wind Power Project. The rated installed Project capacity of either of the two resources (wind or solar) shall be at least 33% of the total contracted capacity. (For e.g, if the total contracted capacity comprises of 200 MW then the minimum rated project capacity of any of the resource (wind or solar) shall be at least 66 MW).

**Note:** In the interest of utilizing the optimization potential offered by Wind-Solar Hybridization of the two resources, the HPG is free to declare the Project capacity of the Wind-Solar Hybrid Power Project at the STU/CTU Substation, which shall be considered as the Contracted capacity of the Wind-Solar Hybrid Power Project. The same Project capacity shall be entered in the Covering Letter and shall be considered as the Contracted Capacity under the PPA.

For avoidance of any doubt, it is hereby reiterated that the Project capacity of the Wind-Solar Hybrid Project does not necessarily have to be the arithmetic sum of the installed capacity of the two resources. However, the requirements as indicated above, regarding the minimum installed rated capacity of each of the components shall be strictly adhered to, failing which, the Project shall not be eligible for commissioning under the RfS.

- d) The solar and wind projects of the hybrid project may be located at same or different locations.
- II. The HPGs shall demonstrate the rated capacities of each component separately at the

input side of the STU/CTU Substation as per the standard commissioning procedures. The HPG shall also maintain records of generation of electrical energy from wind and solar resource of the Wind-Solar Hybrid Project separately. The same shall be made available by the HPG to MSEDCL as and when required by MSEDCL.

#### 3.3 Project Scope:

The successful bidder shall set up Wind-Solar Hybrid Power Project including the transmission/Distribution network up to the Delivery Point in line with Section 3.12, 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 Government and local bodies shall be in the scope of the successful bidder.

However, the selection of Projects would be technology agnostic. In order to ensure quality of wind turbines installed, only type certified wind turbines models listed in Revised List of Models and Manufactures (RLMM) as published by MNRE from time to time and as on the date of commission of the project, shall be allowed for deployment of Country. In order to ensure only quality systems are installed, the Bidders shall strictly comply with the technical parameters detailed in the Annexure –A and as specified by MNRE from time to time whichever is applicable

For solar modules and balance of systems, technology would be within PV technology and crystalline silicon or thin film, etc. with or without Trackers (The trackers may fulfil the criteria as per the Annexure-F or any better technology/specifications) can be installed and the technology to be adopted shall be commercially established technology or in accordance with MNRE"s Approved Models and Manufacturers of Solar PV Modules (Requirements for Compulsory Registration) Order, 2019 Implementation-Reg." and its subsequent amendments and clarifications issued until prior to atleast 30 days before SCSD, shall be applicable for this RfS. The modules used in the Projects under this RfS should have been included in the List-I under the above Order, valid as on the date of invoicing of such modules. Further, the bidder

shall submit Declaration Format associated with Implementation of ALMM Order as per the Annexure- E attached to this RfS

The Bidder shall identify 100% land required for the project and submit tentative locations at the time of submission of bid in Format 6.1. The HPGs are free to change the Project location upto the date as on 12 months after Effective Date of the PPA.

#### 3.4 Eligibility for Project capacity allocation

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

- A bidder including its Parent, Affiliate or Ultimate Parent or any Group Company can only submit a single bid, subject to maximum bid capacity of 500 MW or minimum bidding capacity as per Section 3.2.
- b) Multiple bids from same company including its Parent/Ultimate Parent/Affiliates/Group Companies shall make all the bids submitted by the group invalid.
- c) The evaluation of bids shall be carried out as described in Section 4. The methodology of allocation of projects is elaborated in Section 4.
- d) In case the bidder wishes to set up the Project at more than one location, there needs to be physically identifiable with separate boundary wall, separate inter-connection points, control systems and metering arrangements.
- e) MSEDCL shall exercise the Green-Shoe Option to allocate additional capacity up to 500 MW to the successful bidder if discovered tariff is found economical to MSEDCL. In order to avail the Green-Shoe Option, the successful bidder need to match the lowest discovered tariff (L1 tariff) of this tender corresponding to the Green-Shoe quantity. The Successful bidder shall avail the capacity to the extent of their respective quoted capacity or higher quantum (in case of the L1,L2,L3.... Successful Bidder does not accept the additional quantum offered under the 'Green shoe Option') to the extent of green shoe capacity. It would be voluntary for Successful Bidder(s) to opt for green-shoe option. For the avoidance of doubt, capacity allocation under 'Green Shoe' shall only be for the successful bidders i.e., bidders winning e-RA.

The successful bidder shall submit his acceptance for availing the "Green-Shoe Option" maximum within 07 (Seven) days from the date of intimation by MSEDCL. Successful Bidder(s) intending to avail the Green shoe Capacity shall have to meet the eligibility criteria for the capacity intended to be entered into PPA under 'Green shoe Option'. Successful Bidder(s) shall have to comply with the same by making submissions required in accordance with Clause 3.5 and 3.6 of the RfS along with Bank Guarantee related to Earnest Money Deposit (EMD) as per the Clause 3.9 of the RfS to the capacity won under "Green-Shoe Option" (in addition to the capacity won previously) within a period of 10 days from the date of acceptance of Green Shoe Option by the successful bidder.

The Successful Bidders shall sign separate PPAs for base (awarded) capacity and green shoe capacity.

The terms & conditions as well as obligations & rights of Successful Bidder(s) as well as MSEDCL shall be identical for additional capacity allocated under the 'Green shoe Option' as for the base capacity of 500 MW under this RfS.

However, the discretion to allot or not to allot the additional capacity upto 500 MW capacity under Green Shoe option shall be vested solely with MSEDCL.

#### 3.5 Qualification Requirements

- **3.5.1** Bidder as defined in Section 2 is eligible to participate under this RfS.
- **3.5.2** The Bidding Entity should be incorporated in India under the Companies Act 1956 or Companies Act, 2013 as applicable.
- **3.5.3** 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 with MSEDCL, 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 in consortium agreement. The combined shareholding of the consortium members in the SPV / Project company executing the PPA, shall not fall below 51% at any time prior to 1 (one) years from the SCD, except with the prior approval of MSEDCL.

A bidder which has been selected as successful Bidder based on this RfS shall 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 that are not directly related to the Project. Further, the successful bidder shall ensure that its shareholding in the SPV (special purpose vehicle) / project company executing the PPA shall not fall below 51% (fifty-one per cent) at any time prior to 1 (one) year from the SCD, except with the prior approval of MSEDCL

- **3.5.4** 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 on 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) shall be applicable. Foreign company participating in RFS shall also comply with the applicable rules on foreign direct investments as specified by Government of India time to time.
- **3.5.5** Limited Liability Companies (LLC) shall be eligible to participate. 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 shall also be mandatory on the part of such Limited Lability 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.
- **3.5.6** Limited Liability Partnership (LLPs) are not eligible for participation.

**3.5.7** For avoidance of doubt, it is clarified that the fully owned subsidiary Company as mentioned in Clauses 3.5.3 and 3.5.4 above should be an immediate 100 % subsidiary of the Bidder, without any intermediaries involved.

#### 3.6 Eligibility Criteria

#### 3.6.1 Net Worth:

- a) The Net-Worth of the Bidder for the financial year ended on 31.03.2023 shall not be less than INR 1.10 Crores per MW (of the capacity quoted in bid) or as on the date at least 7 days prior to the due date of bid submission In case of foreign companies the applicable financial year shall be as per the applicable laws of the country of Incorporation.
- b) Bidders shall have to furnish a Certificate from Chartered Accountants/Appropriate Authority, certifying the Net worth per MW of quoted capacity as on 31st March, 2023 or as on the date at least 7 days prior to the due date of bid submission
- c) For avoidance of doubt 'net worth' as per 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.
- d) 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 per Section 3.2.2.

#### 3.6.2 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:

- a) A minimum annual turnover of Rs. 82.2 lakhs/MW (Rupees Seventy Five Lakhs per MW) of the quoted capacity during the previous financial year i.e., FY 2022-23 or as on the date at least 7 days prior to the due date of bid submission. It is hereby clarified that at " Other Income) as indicated in the annual accounts of the Bidder shall not be considered for arriving at the annual turnover.
- b) Internal resource generation capability, in the form of Profit Before Depreciation Interest and Taxes (PBDIT) for a minimum amount of Rs. 16.44 Lakhs/MW of the quoted capacity, as on the last date of previous financial year, 2022-23.
- c) In-principle sanction letter from the lending institutions/banks of the Bidder, committing a Line of Credit for a minimum amount of Rs. 20.55 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.
- **3.6.3** 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 3.6.(1) and 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), 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.
- **3.6.4** The net worth to be considered for the above purpose will be the cumulative net-worth of the bidding company or consortium, together with the networth of those Affiliates of the bidder(s)

that undertake to contribute the required equity funding and performance bank guarantees in case the bidder(s) fail to do so in accordance with the RfS document

#### 3.7 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 Wind-Solar Hybrid Power Projects and delivery of power at delivery point.

#### 3.8 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:

- **3.8.1 Earnest Money Deposit (EMD)** of **Rs. 11 lakh / MW** in the form of Bank Guarantee along with RfS according to Format 6.3 (A) and valid for 12 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 at Annexure-B in favour of MSEDCL.
- 3.8.2 Performance Bank Guarantee (PBG): The bidders selected by MSEDCL, based on this RfS shall submit the Performance Bank Guarantee (PBG) of Rs. 28 Lakh/MW according to the Format 6.3 (B), issued in favor of MSEDCL Seven (7) days prior to signing of PPA, with a validity period of 9 months and with claim period of 12 months from SCSD.
  The Bidder shall furnish the Performance Bank Guarantees (PBGs) from any of the Banks listed at Annexure-B to MSEDCL.
- **3.8.3** 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.
- **3.8.4** The successful bidders are required to sign PPA with the MSEDCL within 1 month after the date of issue of LoA or date of MERC approval whichever is later. 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 3.6 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 and the selected Project(s) shall stand cancelled.

- **3.9.5** All expenditure towards execution of Bank Guarantees such as stamp duty etc. shall be borne by the bidder.
- **3.9.6** 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-A has been attached. Bidders are advised to take note of the above checklist while submitting the Bank Guarantees.
- **3.9.7** After the bidding process is over, MSEDCL shall release the Bank Guarantees towards EMD of the unsuccessful Bidders within 30 days after the completion of e- reverse auction. The PBG of the Wind-Solar Hybrid power generator / bidder shall be returned within 30 days of 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.
- **3.9.8** On receipt and after successful verification of the total Performance Bank Guarantee in the acceptable form and execution of the 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 3.6;
- 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 3.8.

#### 3.11 Financial Closure or Project Financing Arrangements

- **3.11.1** The HPG shall report 100 % tie-up of Financing Arrangements for the projects within Twelve (12) months the date of signing of PPA. Accordingly, the successful bidder shall furnish the following documents within Twelve (12) months from the date of signing of PPA. In this regard, the HPG shall submit a certificate/necessary documents from all financing agencies regarding the tie-up of 100% of the funds indicated for the Project, including arrangements of funds in the form of Equity. Accordingly, the successful bidder shall furnish the following documents at the time of reporting Financial Closure i.e. Tie-up letter of 100% Financing Arrangements: internal resources and/or tie up funds through a bank/ financial institution by way of a legally binding agreement. In case of legally binding agreement not available at that time, sanction letter for commitment of such finances shall also be considered. The successful bidder shall submit the undertaking that legally binding agreement shall be submitted within two months from the date of financial closure.
  - For internal resources, Copy of Board Resolution, Audited/Certified Balance sheet, Profit & Loss Account Statement, Bank Statement and Cash Flow Statement in support of availability of Internal resources of the Project Company and of the Company other than Project Company (in case the required funding will be raised from Company other than Project Company)
  - ii) Copy of Final Detailed Project Report (DPR).
  - iii) Connectivity Agreement with STU; and
  - iv) Copy of Agreement/ MOU entered into / Purchase Order with acceptance, for the supply of Plants and Equipment;
  - v) **Ownership of the HPG:** Latest Shareholding Pattern of the Project Company certified by Chartered Accountant.
  - vi) Activity wise final schedule for meeting timelines/milestones as per RfS, Material Procurement, final date/month of delivery of Solar Modules/Panels and WTGs at site, details of Taxes and duties considered for Wind-Solar Hybrid Project, Country of Import, if not domestically procured – Solar Modules/Panels, Start and Completion of construction activities etc.

- vii) Self-Undertaking for identification of 100% land for Wind-Solar Hybrid Project as per the format attached as Annexure-.D
- **3.11.2** Accordingly the Successful Bidder shall furnish the following documents within 12 months from the date of signing of PPA:
  - Submission of the details of all planned/proposed solar panels, inverters and wind turbine generators, along with necessary purchase order/agreements for the project at least 14 days prior to the scheduled financial closure date.
  - ii) Identification of 100% of the land for the project.
- **3.11.3** Successful Bidders will have to submit the required documents as listed above to MSEDCL at least 14 days prior to the scheduled Financial Closure date. In case of delay in submission of documents mentioned above, MSEDCL shall not be liable for delay in verification of documents and subsequent delay in Financial Closure.
- **3.11.4** An extension for the attainment of the financial closure can however be considered by MSEDCL, on the sole request of the Wind-Solar Hybrid Power Generator, on payment of penalty of Rs.10000/- per day per MW (excluding 18% GST, if applicable). This extension will not have any impact on the Scheduled Commencement Supply Date (SCSD). However such amount of penalty paid so shall be returned to the HPG without any interest within a period of 30 days of achievement of successful commissioning provided such commissioning is within the SCSD. However, in case of any delay in commissioning of the project beyond the SCSD, the amount as deposited above by the HPG shall not be refunded by MSEDCL.
- **3.11.5** Sworn affidavit from the authorized signatory of the HPG listing the details of the land and certifying that total land required for the Project is under clear possession of the HPG. Change of land for the projects, including the State where the Project is located, is allowed prior to fulfilment of Financial Closure, under prior intimation to MSEDCL.

#### 3.12 Connectivity with the Grid

- i) The project should be designed for delivery of energy at STU/CTU periphery as per applicable Delivery Point.
- ii) The responsibility of getting the grid connectivity with STU/CTU shall entirely be of the successful bidder and the same shall be in the name of successful bidder/SPV/its

Developer.

Provided that if successful bidder with whom PPA has been executed have the grid connectivity in the name of developer, then successful bidder shall submit Memorandum of Understanding (MoU) between successful bidder and developer for utilization of grid connectivity of the developer by the successful bidder under this tender. The MoU shall be valid till the tenure of PPA i. e. 25 years from SCSD. However, successful bidder shall fulfil all the responsibilities under this PPA.

The HPDs will be required to apply for connectivity at the identified substation, as mentioned in the Covering Letter (Format 6.1), within 30 days after execution of PPA, and shall furnish copies of the application, complete in all respect, to MSEDCL within 15 days of date of filing of application. HPG shall also have to provide the copy of in-principle grant of connectivity, final grant of connectivity, connectivity agreement within 15 days of issuance of letter by STU/CTU / signing of connectivity agreement, as the case may be, to MSEDCL.

- iii) The transmission of power up to the Interconnection Point/Delivery point and energy accounting infrastructure shall be the responsibility of the successful bidder at his own cost. The maintenance of Transmission system up to the Interconnection Point/Delivery point shall be responsibility of the Bidder.
- iv) The arrangement of connectivity can be made by the successful bidder through a dedicated line which the successful bidder may construct himself or through any other agency. The entire cost of dedicated line including cost of construction of line, maintenance, losses etc. from the project up to the delivery point shall be borne by the successful bidder.
- v) The successful bidder shall not be entitled for deemed generation in case of any delay in grant of connectivity and /or Open Access till the Delivery Point.
- vi) The successful bidder shall comply with CERC/MERC regulations on Forecasting, Scheduling and Deviation Settlement, as applicable and are responsible for all liabilities related to Connectivity. In case of absence of regulations specific to Hybrid Projects, the above regulations shall be adhered to, separately for Wind and Solar Project components.
- vii) The HPG shall be responsible for all transmission charges and losses and any other charges as applicable under the respective regulations till the Delivery Point.
- viii) The HPG has to follow the timelines mentioned in the GNA regulation with respect to

connectivity. In case the connectivity gets revoked due to non-compliance of HPG, in such case the capacity may not be off-taken and HPG will keep MSEDCL indemnified from any losses; further, the HPG shall be liable for any penalty for non-performance as specified in the RfS/PPA.

 ix) Further, it may be clarified that in case MSEDCL needs to pay transmission charges and losses upto delivery point, the same shall be recovered from HPG. Transmission charges shall be calculated on project capacity (MW) for which connectivity is granted.

#### 3.13 Land Arrangement:

Bidder shall identify the 100% (hundred per cent) land at the time of bid submission. The Successful bidder shall submit documents / Lease Agreement to establish possession and right to use 100 % (hundred per cent) of the required land in the name of the successful bidder/SPV for a period not less than the complete term of PPA, one month before SCSD. Wherever leasing of private land is involved, the lease should allow transfer of land to the lenders or MSEDCL, in case of default of the Bidder.

At the time of Bid submission, the Bidder shall submit following details for identification of land

- (a) Sworn affidavit from the authorized person of the successful bidder listing the details of the land and certifying total land required for the project.
- (b) Copy of key plan drawing showing survey number, plot number, point of installation of Wind-Solar Hybrid project with capacity.

#### 3.14 **Power Purchase Agreement**

**3.14.1** Power Purchase Agreement shall be executed between MSEDCL and successful bidder or its 100% subsidiary Special Purpose Vehicle (SPV), shall be provided by MSEDCL along with this RfS. The PPA shall be signed with the tariff rate for the contracted power as quoted by the bidder in the "Price Bid" or that after e-Reverse Auction, whichever is lower. The PPA shall be signed within 1 month from date of issue of LoA or the adoption of Tariff by MERC whichever is later. Single PPA will be executed between MSEDCL and successful bidder or its 100 % SPV for the awarded capacity. The PPA shall be valid for a period of 25 years from Scheduled Commencement of Supply Date (SCSD) in case of proposed/new wind solar hybrid power projects or for a period of 25 years from the date of execution of PPA for existing wind solar hybrid power projects based on the terms,

conditions and provisions of the RfS, irrespective of dates of early part commissioning or early full commissioning.

Note: Single PPA will be executed between MSEDCL and the HPG as per the breakup of the cumulative Project capacity awarded to the Bidder. The HPG shall provide the project breakup for the cumulative capacity quoted, in the Covering Letter (Format 6.1), which can be changed by the HPG prior to signing of PPA. The final project configuration, adding up to the cumulative capacity awarded to the bidder may be intimated to MSEDCL at the time of signing of PPA, which shall remain unchanged subsequent to signing of PPA. However, the HPG will be allowed to change the location of the Project(s) till 12 months from execution of PPA without any change in the project configuration. Delays in connectivity and/or LTA for the Project(s) on account of such changes in Project locations, which differ from the details provided in the Covering letter, shall be at the risk of the Successful Bidder.

- **3.14.2** Before signing of PPA between MSEDCL and the selected Bidders, MSEDCL will verify the documents furnished by the Bidders 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. Bidders will also be required to furnish the documentary evidence for meeting the RfS Qualification requirements.
- **3.14.3** The successful bidders shall be free to operate their projects after expiry of 25 years from the SCSD of the project if other conditions like land lease etc., permits. However, any extension of the PPA period beyond 25 years shall be through mutual agreements between the successful bidder and MSEDCL.

#### **3.15 Capacity Utilization Factor (CUF):**

"Declared CUF" shall mean the % capacity utilization factor of the project mentioned in Clause No. 5.6.1 of the PPA and which shall be allowed to revise the same once within first three years of SCD. Such revision of the CUF shall be done within completion three years from SCD and no such revision shall be allowed thereafter and it shall remain unchanged for the balance term of the PPA.

#### **3.15.1** Criteria for generation:

The HPG will declare the annual CUF of their project at the time of bid submission

and will be allowed to revise the same once within first three years after SCSD of the full project capacity. The declared annual CUF shall in no case be less than 30% over a Contract Year. The CUF so revised, shall be applicable, after intimation by HPG to MSEDCL, which shall be within first three years of SCD and applicable till remaining period of PPA. Calculation of CUF will be on yearly basis from 1<sup>st</sup> April of the year to 31<sup>st</sup> March of next year. Energy supplied between SCD and commencement of first financial year after SCD will not be taken into consideration for the purpose of calculation of CUF. Subsequently, the annual CUF will be calculated every year from 1<sup>st</sup> April of the year to 31<sup>st</sup> March of next year.

The HPG shall maintain generation so as to achieve annual CUF not less than 90% of the declared value (i. e. minimum CUF) and not more than 120% of the declared CUF value (i. e. Maximum CUF), during the PPA duration of 25 years. The lower limit will, however, be relaxable by MSEDCL to the extent of grid non-availability for evacuation which is beyond the control of the HPG.

For the first year of operation of the Project, the annual CUF shall be calculated for the complete year after commencement of power supply from the Project. Subsequently, the annual CUF will be calculated every year from 1st April of the year to 31st March next year. Similarly, for the last year of operation of the Project, the annual CUF shall be calculated for the complete year before the expiry of the PPA.

#### **3.15.2** Shortfall in minimum generation:

During PPA, if for any Contract Year, it is found that the HPG has not been able to generate minimum energy corresponding to minimum annual CUF declared by the HPG, such shortfall in performance shall make Power Producer liable to pay the compensation to MSEDCL. This will, however be relaxed by MSEDCL to the extent of grid non-availability for evacuation, which is beyond the control of the Wind-Solar Hybrid power generator. The amount of such penalty will be equal to 1.5 times (**one and a half times**) the Applicable Tariff for the shortfall in energy terms. The penalty as per above shall be applied on the amount of shortfall in generation from the Project during any Contract Year. However, this penalty shall not be applicable in events of Force Majeure identified under PPA affecting supply of wind-solar hybrid power by seller/HPG.

The reference to the compensation payable to MSEDCL for not meeting RPOs is only a

measure of damage. It shall not be construed that the compensation is payable by the HPG only if the MSEDCL is required to pay compensation for such not meeting of RPOs or that the MSEDCL or the HPG shall be required to prove or establish such payment of compensation for not meeting the RPOs.

The HPG shall agree that the methodology specified herein above for calculation of liquidated damages payable by the HPG for shortfall in generation is a genuine and accurate pre-estimation of the actual loss that will be suffered by MSEDCL. The HPG shall further acknowledge that a breach of any of the obligations contained herein result in injuries and that the amount of the liquidated damages or the method of calculating the liquidated damages specified in this document is a genuine and reasonable pre-estimate of the damages that may be suffered by the MSEDCL in each case specified under this Agreement.

#### 3.15.3 Excess Generation:

In case the availability is more than the maximum annual CUF specified, the HPG will be free to sell it to any other entity provided first right of refusal will vest with MSEDCL. In case the MSEDCL purchases the excess generation, excess generation over and above maximum annual CUF, the same may be done at the PPA tariff. MSEDCL shall inform the HPG for procurement of excess power within 15 days of receiving a written intimation from the HPG for such excess generation. If in case MSEDCL fails to reply to the HPG within the above stipulated time period then the HPG shall be free to sell it to any other entity. In case at any point of time, the peak of capacity reached is higher than the allotted capacity and causes disturbance in the system at the point where power is injected, the HPG will have to forego the excess generation and reduce the output to the allotted capacity to ensure compliance with grid requirement.

#### **3.16 Repowering:**

The Wind-Solar Hybrid Power Generator(s) shall be allowed to repower the project from time to time during the PPA term of 25 years. The generator shall not be in default for non-supply of power during this period of repowering. The generator has to maintain generation as per committed/ declared CUF range (-90% / + 120 %) and MSEDCL will be obliged to buy power only within the Capacity Utilization Factor (CUF) range laid down in Power Purchase Agreement (PPA) and compensation against change in law for

the repowered capacity shall not be allowed. Any excess generation shall be dealt as specified in clause 3.15.3 of RfS.

#### 3.17 Commissioning and Penalty for Delay in commissioning

- 3.17.1 The Projects shall be commissioned within a period of 24 (Twenty Four) months from the date of execution of the PPA, in line with the Procedure elaborated in PPA document. Commissioning certificates shall be issued by RLDC/SLDC/ MSEDCL as the case may be after successful commissioning of the Project.
- **3.17.2** The Successful Bidder shall be required to obtain Developer and / or Transfer Permission, Copy of key plan drawing showing survey number, plot number, point of installation of wind solar hybrid project with capacity.
- Further, evidence of clear possession of Project Site selected by Successful Bidder shall be 3.17.3 submitted 30 (Thirty) days before SCSD or extended SCSD for which the Successful Bidder shall provide documents/ Lease Agreement to establish possession/ right to use 100% (hundred per cent) of the required land in the name of the Successful Bidder or its Affiliate. In case the land is in the name of Affiliate, the land should be transferred in the name of Successful Bidder prior to Scheduled Commencement of Supply Date (SCSD). Wherever leasing of private land is involved, the lease should allow transfer of land to lenders or MSEDCL, in case of default of the Successful Bidder. For lease of Government land, if the lease is not available upfront for the entire term of the PPA, then the Successful Bidder shall be required to give an undertaking stating that they shall be solely responsible for securing the extension of required land for the balance period of term of PPA. For lease of private land, the lease period shall cover the entire term of PPA. Sworn affidavit from the authorized person of the Successful Bidder listing the details of the land and certifying total land required for the Project under clear possession of the Successful Bidder shall be submitted by the Successful Bidder 30 (thirty) days before SCSD. Commissioning of the Project will not be allowed until the demonstration of land possession by the successful bidder. Such delay in commissioning, if any, shall lead to liquidated damages as per clause 3.17.7. Synchronization certificates shall be issued by RLDC/MSLDC and after successful commissioning of Project, commissioning certificate shall be issued by MSEDCL.
- **3.17.4 Part Commissioning:** Part commissioning of the Project shall be accepted by MSEDCL subjected to the condition that the minimum capacity for acceptance of commencement of

supply of power shall be 50% of Project Capacity or 50 MW, whichever is lower, without prejudice to the imposition of penalty, in terms of the PPA on the part which is not commissioned. However, in case of inter-state project, minimum capacity for acceptance of commencement of supply of power shall be at least 50 MW. The projects can further commence supply of power in parts of at least 50 MW capacity; with last part as the balance capacity

However, the SCSD will not get altered due to part commissioning. In case of part – commissioning of the Project, land corresponding to the part capacity being commissioned, shall be required to be demonstrated by the HPD prior to declaration of commissioning of the said part capacity. Irrespective of dates of part commissioning, the PPA will remain in force for a period of 25 years from the SCSD.

The part commissioning should not be construed by just installing one source of generation, the HPD shall install both Solar and Wind capacities in proposed ration on pro-rata basis.

#### **3.17.5 Early Commissioning:**

- (a) The HPG shall be permitted for full commissioning as well as part commissioning of the Project even prior to the SCSD subject to availability of transmission connectivity and Long-Term/Medium Term/ Short Term Access. In cases of early part commissioning, the HPG will be free to sell it to any other entity provided first right of refusal will vest with MSEDCL. MSEDCL shall provide refusal within 30 (thirty) days from the receipt of the request, beyond which it would be considered as deemed refusal. Procurement of such early commissioned power, if accepted by the MSEDCL, shall be done at the PPA tariff.
- (b) In case of multiple Project components, and if one or more such whole component (wind, solar PV source) is/are ready for injection of power into the grid, but the remaining component(s) is/are unable to commence supply of power, the HPG will be allowed to commence power supply from such component which is ready, outside the ambit of PPA, with first right of refusal for such power being vested with MSEDCL. In case MSEDCL decides to buy such discrete component's power outside the PPA, such power shall be purchased at the rate and time period as decided by MSEDCL.

The above scenario (b) does not qualify under the provisions of Part/Early Commencement of power supply under the RfS and PPA. This is a special scenario wherein in case one or more project

component(s) is/are ready, the power supply from such component is not wasted. The above scenario will be applicable until the HPD is ready to commence power supply as per the provisions of Clauses 3.17.4 and 3.17.6 (a) of the RfS.

#### **3.17.6 Delay in Commissioning:**

The Project shall be commissioned by the Scheduled Commencement of Supply Date (SCSD), which will be the date as on 24(twenty four) months from the date of execution of the PPA. In case of failure to achieve this milestone, MSEDCL shall forfeit the Performance Bank Guarantee (PBG) in the following manner:

i) For Delay in Commencement of Supply of Power upto six (6) months from SCSD

MSEDCL will forfeit total Performance Bank Guarantee on per day basis and proportionate to the Capacity that has not commenced supply of power.

For example, in case of a Project of 240 MW capacity, if commencement of power supply from 100 MW capacity is delayed by 18 days beyond the SCSD, then the penalty shall be calculated as: PBG amount X (100/240) X (18/180). For the purpose of calculations of penalty, 'month' shall be considered consisting of 30 days.

# ii) In case the Commencement of Supply of Power delayed beyond Six (6) months from the SCSD,

In case the commissioning of the project is delayed beyond Six (6) months from SSCD, the HPG's Event of Default as per Article 10.3 of PPA shall be considered to have occurred and the contracted capacity shall stand reduced to the project capacity commissioned upto SCSD + 6 months. The PPA for balance capacity not commissioned shall be terminated.

- a) Further The HPG shall be debarred from participating in bids issued by any procurer or any intermediary procurer (as defined in the Guidelines) for the following period: For one year in case of first default.
- b) For not less than 2 years and not more than 3 years for second and any sub sequent defaults.

Starting date of the above debarment period shall be the date of debarment as

notified by MSEDCL.

### **3.18** Commencement Of Supply Date (CSD):

Commencement Of Supply Date with respect to the Project shall mean the date certified in the commissioning certificate is issued upon successful commissioning of the full capacity of the Project or the last part capacity of the Project (certified by RLDC/SLDC/MSEDCL) as the case may be and available for commercial operation. The Successful Bidders shall have to provide a written notice to MSEDCL at least 30 days in advance for the same.

Provided that in case of the reduced Contracted Capacity due to delay in commissioning as per 3.17.6 of the RfS, the SCD shall be the date of commissioning of the last part in line with part commissioning terms of 3.17.4 of the RfS.

### 3.19 Minimum Paid up Share Capital to be held by Project Promoter

- i) The Company developing the project shall provide complete information in their bid in reference to RfS about the Owner or Promoters and their shareholding in the company indicating the controlling shareholding before signing of PPA with MSEDCL.
- ii) The successful bidder, if being a single company, shall ensure that its shareholding in the SPV/project company executing the PPA shall not fall below 51% (fifty-one per cent) at any time prior to 1 (one) year from the SCD, 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 SPV/project company executing the PPA, shall not fall below 51% at any time prior to 1 (one) year from the SCD, except with the prior approval of the MSEDCL.
- iv) However, in case the successful bidder shall be itself executing the PPA, then it shall ensure that its Owner 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 Company or right to appoint majority Directors) till 1 (one) year from the SCD, 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 owner or promoters or and their shareholding to MSEDCL before signing of the PPA with MSEDCL.
- v) <u>In case of Project being executed through SPVs</u>: The Selected Bidder executing the project,

if being a single company, shall ensure that its shareholding in the SPV/ Project Company executing the PPA, shall not fall below 51% at any time prior to 01 (one) year after the SCD, except with the prior approval of MSEDCL. In the event the selected Bidder is a consortium, then the combined shareholding of the consortium members in the SPV/ Project Company executing the PPA, shall not fall below 51% at any time prior to 01 (one) year after SCD, except with the prior approval of MSEDCL. However, in case the Project is being set up by a listed Company, this condition will not be applicable.

- vi) Any change in the shareholding after the expiry of 1 (one) year from the SCD can be undertaken under intimation to MSEDCL.
- vii) In case, the financial eligibility and qualification is attained through financials of Parent Company, then the shareholding pattern of the Parent Company 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 SCD. However, in case Parent company is a listed company, then shareholding pattern of promoters of Parent Company shall not be changed.
- viii) In the event the HPG is in default to the lender(s), lenders shall be entitled to undertake "Substitution of Promoter" in concurrence with MSEDCL.
- ix) 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 HPG/bidder to MSEDCL. However, the new entity should be of the same financial strength as the Successful Bidder.

### **3.20** Structuring of the Bid selection process

Single stage, double envelope bidding followed by 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 3.21 & 3.22.

**3.21** Instructions to Bidders for structuring of bid proposals in Response to RfS Bidders 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 C**.

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

- i) Covering Letter as per **Format 6.1.**
- ii) 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 here to 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.

- iii) Earnest Money Deposit (EMD) in the form as per Format 6.3 A.
- iv) Performance Bank Guarantee (to be submitted before signing of PPA as specified in Section 3.9) in the form as per Format 6.3 B

- v) Board Resolutions, as per prescribed formats enclosed as Format 6.4 duly certified by the Company Secretary or the Director of the relevant Bidder, as applicable to the Bidder and mentioned hereunder:
  - a) Board resolution from the Bidding Company 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 the MSEDCL. Board Resolution from each of the Consortium Members in favour of the person signing Consortium Agreement.
  - b) Board Resolution from the Bidding Company 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 Company, obligatory on the part of the Consortium pursuant to the terms and conditions in the Consortium Agreement.
- vi) 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.
- vii) Bidder shall ensure that the technology to be adopted shall be commercially established technology as per the type certified wind turbine models listed in Revised List of Models and Manufactures (RLMM) (Refer NIWE website) issued by MNRE and For solar modules, Bidder shall ensure that the technology to be adopted shall be commercially established technology or in accordance with MNRE"s Approved Models and Manufacturers of Solar PV Modules (Requirements for Compulsory Registration) Order, 2019 as amended from time to

time, whichever is applicable. Final details of the same shall be submitted prior to at least 30 days before SCSD.

- viii) Tie-up of Financing Arrangements for the projects within 12 months from the date of execution of PPA.
- ix) Format 6.6: Format for Disclosure.
- x) Format 6.7: Format submission of Financial Bid
- xi) Format 6.8: Format for regarding timelines and milestones
- xii) Attachments
  - a) 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/ Wind-Solar Hybrid Power plant development.
  - b) In case, there is no mention of the above provisions in the MoA/ AoA 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) Certificate of Incorporation of Bidding Company / all member companies of Bidding Consortium.
  - d) A certificate of shareholding of the bidding company, its Parent and Ultimate Parent (if any), duly certified by a practicing Chartered Accountant/ Company Secretary/ Appropriate Authority as on a date within one week prior to the last date of bid submission.
  - e) Documents containing information about the Promoters and their shareholding in the Company (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. MSEDCL reserves the right to seek additional information relating to shareholding in promoter companies, their parents/ ultimate parents and other group companies to satisfy themselves that RfS conditions have been complied with and the bidder will ensure submission of the same within the required time lines.

- f) Certified copies of annual audited accounts for the last financial year, i.e. 2022-23 as applicable shall be required to be submitted; OR in case the Bidder is a newly formed company, supported by documentary evidence of its recent formation at RoC, then the certificate issued by a Chartered Accountant with certified copy of Balance sheet, Profit & Loss account, Schedules and cash flow statement as on latest available date supported with bank statement (if available) shall be required to be submitted. In case Final Audited Annual Accounts for the last financial year are not available, then MSEDCL shall accept the Provisional Accounts which are duly certified by a practicing Chartered Accountant of India. Provided that an undertaking is submitted by the bidder confirming that Final Audited Annual Accounts for the last financial year are not available as on date of bid submission. Foreign Bidders shall be required to submit their audited annual accounts of previous two years as per relevant laws / acts of their country of origin and the same shall be duly certified by a practicing Chartered Accountant of India.
- g) Certificate from Chartered Accountants, certifying the Net worth of the bidder per MW of quoted capacity as per Section 2 of the Companies Act 2013 as on date of financial year ending i.e. 31.03.2023 or 31.12.2023 as the case may be, or in case the Bidder is a newly formed company, supported by documentary evidence of its recent formation at ROC or in case the net worth of the Bidder is not meeting the criteria as per Clause 3.6, then the certificate issued by a Chartered Accountant computing net worth based on certified copy of Balance Sheet, Profit & Loss account, Schedules and cash flow statement as on latest available date supported with bank statement shall be required to be submitted.
- h) In case a bidder submits the Net-worth credentials of its Parent / Affiliate, an undertaking from such Parent / Affiliate shall be submitted, stating that in case the bidder(s) fails to contribute required equity funding and performance bank guarantee, the same shall be done by such Parent / Affiliate in line with Clause 3.6 of the RFS.
- Activity wise Tentative schedule for meeting timelines/milestones (Format 6.8\_ as per RfS at the time of bid submission such as Grid Connectivity,

Material Procurement, tentative date/month taxes of procurement of Wind turbines/Solar Modules/Panels, Country of Import, if not domestically procured – Wind Turbines/Solar Modules/Panels, details of Taxes and duties considered for Wind-Solar Hybrid Project, Start and Completion of construction activities etc. However, if any revision in given schedule, Bidder shall submit it at the time of Financial Closure.

#### **3.22** Important notes and instructions to Bidders

- i) 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.
- ii) 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.
- iii) 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 forfeited. Bidder shall be solely responsible for disqualification based on their declaration in the submission of response to RfS.
- iv) If the event specified at (iii) above is discovered after the Effective Date of PPA, consequences specified in PPA shall apply.
- v) 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).
- vi) All documents of the response to RfS (including RfS, PPA and all other documents uploaded on <u>htttps://www.bharat-electronictender.com</u> part of this RfS) submitted online must be **digitally signed** by the person authorized by the Board as per Format 6.4.

- vii) 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.
- viii) 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.
- ix) Bidders shall mention the name of the contact person and complete address of the Bidder in the covering letter.
- Response to RfS that are incomplete, which do not substantially meet the requirements prescribed in this RfS, will be liable for rejection by MSEDCL.
- xi) Response to RfS not submitted in the specified formats will be liable for rejection by MSEDCL.
- xii) Bidders delaying in submission of additional information or clarifications sought will be liable for rejection.
- xiii) 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.
- xiv) Only MERC and/ or Bombay High Court shall have exclusive jurisdiction in all matters pertaining to this RfS.

#### 3.23 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":

i) Non submission of Cost of RfS and/or Processing fee or the details pa

yment done online as mentioned in the Bid Information Sheet.

- ii) Non-submission of EMD in acceptable form along with RfS document.
- iii) Response to RfS (offline as well as online) not received by the due date and time of bid submission;
- iv) Non submission of correct, valid and operative Pass-Phrase to decrypt either the Technical Bid Part or Financial Bid Part offline before due date and time of submission of bid;
- v) Non submission of the original documents mentioned at Section 3.6, 3.16 by due date and time of bid submission;
- vi) Any indication of tariff in any part of response to the RfS, other than in the financial bid.
- vii) Data filled in the Electronic form of financial bid (Second envelope), not in line with the instructions mentioned in the same electronic form Bidder or any of its Affiliates is a wilful defaulter to any lender;
- viii) Major litigation pending or threatened against the bidder or any of its Affiliates which are of a nature that could cast a doubt on the ability or the suitability of the bidder to undertake the Project;
- ix) 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 nonresponsive and rejected.
- x) Conditional bids shall be summarily rejected.

# **3.24** 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: Superscripted 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:

(a) Covering Envelope: Superscripted 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 for RfS Document as mentioned in Bid Information Sheet.
- ii) Payment Details for 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
- vii) Consortium Agreement as per Format 6.5 (if applicable)
- viii) Letter for Disclosure, as per format 6.6:
- ix) Submission of Financial Bid as per format 6.7
- x) Format regarding timelines of the milestones as per format 6.8
- xi) Bidders' Declaration Format associated with Implementation of ALMM Order (Annexure-E)
- (b) Pass-Phrase Envelope-1: Containing Pass Phrase for Technical Bid duly stamped and signed by the authorized signatory in sealed envelope.
- (c) **Pass-Phrase Envelope-2**: Containing Pass Phrase for Financial Bid duly stamped and signed by the authorized signatory in sealed envelope.

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

Response to RfS for procurement of 500 MW of Power from Grid- Connected Wind-Solar Hybrid Power Project with Green shoe option additional capacity upto 500 MW		
Cumulative Capacity of the project applied for	MW	
RfS Reference No.		
Submitted by	(Enter Full name and address of the Bidder)	

Authorized Signatory	(Signature of the Authorized Signatory) (Name of the Authorized Signatory) (Stamp of the Bidder)
Bid Submitted to	Chief Engineer (Renewable Energy) Maharashtra State Electricity Distribution Co. Ltd. Office of the Chief Engineer (Renewable Energy), "Prakashgad", 5 <sup>th</sup> floor, Station Road, Bandra (E), Mumbai -400 051.

## **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-C. The bidders shall strictly follow the instructions mentioned in the electronic form 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 forfeited and the EMD(s) shall be returned.

All documents of the response to RfS submitted online must be digitally signed on https://www.bharat-electronictender.com , which should contain the following:

# 1. Technical Bid (First Envelope)

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.

- a) Formats- 6.1, 6.2 (if applicable), 6.3 A, 6.4, 6.5 (if applicable), 6.6
- b) All supporting documents regarding meeting the eligibility Criteria
- c) The bidder will have to fill the Electronic Form provided at the p https://www.bharat-electronictender.com portal as part of Technical Bid.

# 2. Financial Bid (Second Envelope

Bidders shall submit the single Financial Bid containing the scanned copy of following document(s):

- a) Covering letter as per Format-6.1 of this RfS document;
- b) Only single tariff bid for all the Projects shall have to be filled online in the Electronic

Form provided at https://www.bharat-electronictender.com. The instructions mentioned in the Financial Bid Electronic Form have to be strictly followed without any deviation; else the bid shall be considered as non-responsive.

# **Important Note:**

- a) The Bidders shall not deviate from the naming and the numbering formats mentioned above, in any manner.
- b) 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.
- c) 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.
- All the Envelopes shall be properly sealed with the signature of the Authorized Signatory running across the sealing of the envelopes.

### **3.25** 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 afore mentioned validity requirement. MSEDCL reserves its right to extend the bid validity with the successful bidder/s with mutual consent, if required.

### **3.26 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.

### 3.27 Clarifications/Pre Bid meeting/ Enquires/ Amendments

- i) Clarifications / Doubts, if any, on RfS document may be emailed and/or through https://www.bharat-electronictender.com / ncetendermsedcl@gmail,com.
- ii) MSEDCL will make effort to respond to the same in 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 on the website https://www.bharat- electronictender.com. If necessary, amendments,

clarifications, elaborations shall be issued by MSEDCL which will be uploaded on website https://www.bharat- electronictender.com /www.mahadiscom.in . 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

## **3.28** 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.

## **3.29** Pre and Post LoA Compliance :

As per Format 6.8 of this RfS, timely completion of all milestones i.e. signing of PPA, meeting Financial Closure requirements, conditions subsequent, commissioning, etc. will be the sole responsibility of the Successful Bidders and MSEDCL shall not be liable for issuing any intimations / reminders to them for timely compliance of milestones and/or submission of compliance documents.

Any checklist shared with the Bidders / Successful Bidders by MSEDCL for compliance of milestones shall be for the purpose of facilitation only. Any additional documents required as per the conditions of RfS and PPA must be timely submitted by the Bidders / Successful Bidders.

# SECTION 4: BID EVALUATION AND SELECTION OF PROJECTS

# Section 4: Bid evaluation methodology and selection of Projects

# 4.1 Bid Evaluation

- i) Bid evaluation will be carried out considering the information furnished by Bidders as per provisions specified in **Section 3** of this RfS.
- ii) To ensure competitiveness, the minimum number of qualified Bidders should be two. If the number of qualified bidders is less than two, even after three attempts of bidding, and MSEDCL still wants to continue with the bidding process, the same may be done with the consent of Maharashtra Electricity Regulatory Commission.
- iii) The detailed evaluation procedure and selection of bidders are described in subsequent sections in this Section.

### 4.2 Techno-commercial Evaluation of bidders

- i) First Envelope (Technical Bid) Evaluation (Step-1):
  - a) 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 are received at MSEDCL office on or before the due date and time of bid submission.
  - b) 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.
  - c) 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 https://www.bharatelectronictender.com. 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.

d) The response to RfS submitted by the Bidder shall be scrutinized to establish Techno-Commercial eligibility as per RfS.

#### ii) Second Envelope (Financial Bid) Evaluation (Step-2):

In this step evaluations shall be done based on the Tariff quoted by the bidders in the Electronic Form of Financial Bid. After this step, the shortlisted bidders shall be invited for the Reverse Auction.

- a) 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. 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).
- b) In this step, evaluation will be carried out based on tariff quoted by the Bidders.
- c) On completion of Techno-commercial bid evaluation, if it is found that the total aggregate capacity of the Wind-Solar Hybrid Power Projects short-listed is more than 500 MW, then the procedure as elaborated in Section 4.3 shall be followed.

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 in consultation with MERC. If more than 5 bidders submitted their bids, then the bidder or bidders with the highest quoted Tariff shall be disqualified from this Tender process.

- d) 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.
- e) All bidders with same tariff shall be eligible for reverse auction round

 f) 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:

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

In above illustration both L9 bidders (B9 and B11) shall be disqualified. Example: If L5 and L6 or above have same highest quoted Tariff, then MSEDCL shall disqualify L6 and above, taking consideration of the bid submission date and time.

### 4.3 Reverse Auction (Step-3)

- The reverse auction shall be conducted on https://www.bharat-electronictender.com Reverse Auction shall be carried out as specified in "Bid Information Sheet" of this RfS.
- ii) The bucket of the capacity to be considered in the price auction process will be based on the installed capacity which needs to be submitted by the bidder while filing the Online Bid.
- iii) Shortlisted bidders for Reverse Auction will be able to login into the https://www.bharat-electronictender.com website of reverse auction, 15 minutes before the start time of reverse auction.
  - a) During the 15 minutes prior to start of reverse auction process, the respective tariff along with the total project capacity of the bidder shall be displayed on its window.
  - b) The minimum decrement value for tariff shall be Rs. 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 the previous section. 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 project capacity for which the bidder is qualified;

e) The initial auction period will be of 30 minutes with a provision of auto extension by Eight minutes from the scheduled/extended closing time if any fresh bid is received in last eight (8) 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 reverse auction process will get closed.

#### 4.4 Selection of Successful Bidders

- i) The bidders shall be selected in the ascending order with lowest quoted tariff (being L1) till the capacity is exhausted.
- ii) The lowest quoting bidder will be allotted its qualified project capacity and then, next higher bidder will be allotted its qualified project capacity and so on, till the total capacity (i.e. 500 MW) is exhausted.
- iii) In case of the last selected bidder, if the balance project capacity is less than the total project capacity mentioned by the bidder, then the balance capacity shall be awarded to the bidder till the total capacity (i.e. 500 MW) is exhausted. However, if the allocated capacity is less than the 50% of the offered capacity by the bidder then right to refusal shall be lie with the bidder. In case the last selected bidder opts for right of refusal as stated above, the bidder shall intimate MSEDCL about its refusal within two working days after e- Reverse Auction event in writing. The balance capacity will be offered to next eligible bidders at MSEDCL discretion.
- iv) 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.

- v) In the above case (as mentioned in previous section), if the time of quote also become 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 (Electronic Form) 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.
- vi) At the end of selection process, a letter of Award (LOA) will be issued to all the successful bidders. In case Consortium being selected as successful bidder, the LOA shall be issued to the Lead Member of the Consortium.
- vii) The capacity allocation shall be on the basis of Bucket filling i.e. capacity quoted by least quoted tariff bidder (called the L1 bidder) at the rates quoted (L1 rates) shall be allocated first, then the capacity quoted by the next lowest bidder (called the L2 bidder) at the rates quoted (called the L2 rates) may be allocated and so on However, the allocation will only be made to the bidders whose bid falls within a pre-defined "Range" from the L1 tariff. Thus, after arranging the bidders in the ascending order of tariff, the Project capacities will be awarded only to those bidders whose final price bids are within a range of "L1+3%", in terms of Rs/kWh.

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 shall reserve the right to short close the capacity lower than 500 MW at its discretion if prices are abruptly high. Additionally, the discretion to allot or not to allot the additional capacity upto 500 MW capacity under Green Shoe option shall be vested solely with MSEDCL.

# **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 (Applicable for Intra-State Projects only):

- i) Have SCADA installation/ any other continuous communication facility for transferring the data of Wind-Solar Hybrid generation from the Facility's switchyard to the State Grid's Sub-Station;
- ii) Have installed Special Energy Meter (SEM) with telecommunication facility with availability based tariff (ABT) feature as per relevant CEA specifications / regulations as may be applicable.
- iii) Moreover, it shall be mandatory to provide real time visibility of electricity generation to MSLDC at Airoli, Navi Mumbai, Maharashtra through RTU-DC, V-SAT.

# **5.2Performance Monitoring**

All Hybrid Power Projects shall install necessary equipment to continuously measure wind and solar resource data and other weather parameters and electrical parameters. They are required to submit this data through online portal to MSEDCL/DISCOM, National Institute of Wind Energy (NIWE), National Institute of Solar Energy (NISE) and/ or other designated agency for monitoring the performance for the entire life of the project.

# 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 Section 3.6, 3.16, 3.18 of Section 3 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)
   Format for Earnest Money Deposit (EMD) (Format 6.3 A) ;Format for Performance Bank Guarantee (Format 6.3 B)
- c) Format for Board Resolutions (Format 6.4)
- d) Format for the Consortium Agreement (Format 6.5)
- e) Format for Disclosure (Format 6.6)
- f) Format for submission of financial bid (Formats 6.7)
- g) Format regarding Timelines of the milestones (Format 6.8)
- h) Check List for Bank Guarantees (Annexure-A)
- i) List of Banks (Annexure-B)
- j) Special Instructions to Bidders for e-Tendering and Reverse Auction (Annexure-C)
- k) Self-Undertaking for identification of 100% land for wind solar hybrid project (Annexure-D).
- 1) Bidders' Declaration Format associated with Implementation of ALMM Order (Annexure-E)
- m) Tracker Specifications (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 Company/ Lead Member of the Bidding Consortium)

Date: \_\_\_\_\_ Reference No: \_\_\_\_\_

From:\_(Insert name and address of Bidding Company/ Lead Member of the Bidding Consortium)

Tel.#: Fax#:

E-mail address#

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

> PURCHASE OF POWER FROM 500 MW GRID CONNECTED WIND-SOLAR HYBRID POWER PROJECTS THROUGH COMPETITIVE BIDDING PROCESS (FOLLOWED BY REVERSE E- 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 draft PPA for supply of power for 25 years from the date of SCD (for the proposed projects) and date of execution of PPA (for already commissioned projects) of the Project to MSEDCL and hereby submit our response to RfS. We confirm that in response to the aforesaid RfS, neither we nor any of our Ultimate Parent Company/ Parent Company/ Affiliate/ Group Company 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 Wind solar Wind-Solar Hybrid Power Project:-

	Source (Wind/Solar)	Project capacity in MW	Location of Project (Village, Taluka, District.)
1			
2			
3			

(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 18 months from the date of execution of PPA.

- 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 Section 3.8, respectively on issue of LOA by MSEDCL for the selected Projects and/or we are not able to sign PPA with MSEDCL within 01 month from date of issue of LOA or date of MERC approval whichever is later., 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

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.

7. Familiarity with Relevant Indian Laws & Regulations:

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this response to RfS, execute the PPA in the event of our selection as Successful Bidder.

- 8. 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.
- 9. 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 3 months from the date of signing of PPA. In the event of delay in commissioning, the provisions of Section 3.14 of the RfS/relevant articles of PPA shall be applied on such projects. Further, the project shall not be considered as commissioned unless the connectivity with STU /DISCOM grid is established, SNA/MEDA registration certificate and /SLDC/DISCOM 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.

- 10. 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.
- 11. 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.
- 12. 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).
- 13. Contact Person

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

•			 		
Designatio	n				
Company A	Addre	ess			
Mobile No	os. :		 	 	
Fax Nos.	:		 	 	

E-mail add

14. 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 HPG s event of default under PPA and consequent provisions of PPA shall apply.

Dated the \_day of \_, 24

Thanking you, Yours faithfully,

(Name, Designation and Signature of Person Authorized by the board)

#### 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 M/s.....having ALL MEN BY THESE PRESENTS THAT its registered office at .,.. and M/s . .. having its registered office at , (Insert names and registered offices of all Members of the Consortium) Consortium have formed a Bidding the Members of Consortium named ..... (insert name of the Consortium if finalized) (hereinafter called the Consortium') vide Consortium Agreement dated and having agreed to appoint . M/s..... as the Lead Member of the said Consortium do hereby constitute, nominate and appoint M/s..... .a company incorporated under the laws 0 f .....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 / Competitive / 500 MW / Wind-Solar Hybrid dated......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/

----- (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.

# **Instructions/guidelines for Issuance Bank Guarantee**

- 1. Bank guarantee to be submitted shall be as per the format attached.
- 2. Bank guarantee shall be executed on the non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. The Stamp Paper should be in the name of the Executing Bank and of appropriate value.
- 3. Bank guarantee shall be submitted along with the banker's covering letter.
- 4. Bank guarantee issued should ensure the compliance with the SFMS (Structured Financial Messaging System) requirement, as mandated by RBI.
- 5. Bank guarantee issued without SFMS compliance will not be accepted.
- 6. MSEDCL Bank details for Earnest Money Deposit and Performance Bank Guarantee are as follows

Name	Maharashtra State Electricity Distribution Co. Ltd.		
Address	Prakashgad", 5th Floor, Anant kanekar Marg, Bandra (E), Mumbai -400 051		
Bank Name	Bank of India		
Branch Name and address	Mumbai Large Corporate Branch Bank of India Building, 4 <sup>th</sup> Floor, 70-80 M.G. Road, Fort Mumbai-400 001		
Account No	016020110000033		
IFSC CODE	BKID0000160		
MICR CODE	400013127		

- 7. While issuing the bank guarantee, Bank should adhere to the RBI guidelines in respect of same. Each page of Bank guarantee should bear the BG number and signatures of officials.
- 8. The Bank Guarantee shall be executed by any of the Bank from the List of Banks mentioned in this Rfs.
- 9. The Complete address of issuing Bank & branch to be mentioned in the Bank guarantee also the details like email address and contact nos to be provided with bank guarantee.
- 10. Bidder must adhere to the above instruction/guidelines while submitting the Bank guarantee. Bank guarantee will not be accepted if its found to be in any deviation of above instruction/guidelines.

### 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 Hybrid Power Generators for Setting up of 500 MW inter/intra state grid connected Wind-Solar Hybrid projects with green shoe option of additional capacity upto 500 MW through competitive bidding process of the cumulative capacity of......

MW [Insert cumulative Contractedt capacity proposed] for supply of Power there fromon basis, in response to the RfS No. MSEDCL/RE /2024/ 500 MW/ Wind-Solar Hybrid/Tlong term Phase III dated -----issued by Maharashtra State Electricity Distribution Company Limited (hereinafter referred to as MSEDCL) and MSEDCL considering such response to the [Insert the name of the Bidder] as per the terms of the RfS, the RfS of [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to MSEDCL at [Insert Name of Place from the address of MSEDCL] forthwith on demand in writing from MSEDCL or any name of Officer authorized by it in this behalf, any amount up to and not exceeding Rupees -----[Insert the amount not less than that derived on the basis of Rs. 10 Lakhs per MW of cumulative capacity Bidder] 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

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

> 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 Wind-Solar Hybrid Power Project

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

In consideration of the ----- [Insert name of the Bidder] (hereinafter referred to as selected HPG') submitting the response to RfS inter alia for selection of the Project of the capacity of MW, at WIND-SOLAR HYBRID POWER PROJECTS THROUGH COMPETITIVE BIDDING PROCESS (FOLLOWED BY REVERSE E-AUCTION), in response to the RfS dated -----issued by Maharashtra State Electricity Distribution Co. Ltd.(hereinafter referred to as MSEDCL) and MSEDCL considering such response to the RfS of ........[insert the name of the selected HPG] (which expression shall unless repugnant to the context or meaning thereof include its executers, administrators, successors and assignees) and selecting the Wind-Solar Hybrid Power Project of the HPG and issuing Letter of Intent No ------- to (Insert Name of selected Power Producer) 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 HPG 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 HPG / 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 Rs..... only.

Our Guarantee shall remain in force until MSEDCL shall be entitled to invoke this Guarantee till.....

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 HPG / 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 HPG / Project Company, to make any claim against or any demand on the selected HPG / Project Company or to give any notice to the selected HPG / 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 HPG / 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

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

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

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

#### 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, as applicable, passed the following Resolution:

- RESOLVED THAT Mr/M 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 vide RfS No. MSEDCL/Competitive/ ------ MW/ Wind-Solar Hybrid <u>dated</u> ------ for PURCHASE OF POWER FROM ------ MW GRID CONNECTED WIND-SOLAR HYBRID POWER PROJECTS THROUGH COMPETITIVE BIDDING PROCESS (FOLLOWED BY REVERSE E- AUCTION) with additional upto 500 MW under Green Shoe option including signing and submission of all documents and providing information / response to RfS to Maharashtra State Electricity Distribution Co. Ltd.(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 Company or the Lead Member of the Consortium)
- FURTHER RESOLVED THAT pursuant to the provisions of the Companies Act, 1956 or Companies Act, 2013, as applicable and compliance thereof and as permitted under the Memorandum and Articles of Association of the Company, approval of the Board be and is hereby accorded to invest total equity in the Project. (To be provided by the Bidding Company)

[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, as applicable and compliance thereof and as permitted under the Memorandum and Articles of Association of the Company, 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 M/s ------[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**)

And

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 Company, 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) Notes:

- 1. This certified true copy should be submitted on the letterhead of the Company, signed by the Company Secretary/ Director.
- 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 M/s [insert name of Lead Member] a Company incorporated under the laws of and having its Office (hereinafter called the Member-1", which expression shall Registered at include and M/s a its successors. permitted assigns) Company incorporated executors and under of and having its Registered Office the laws

hereinafter called at the Member-2", which expression shall include its successors, executors and permitted assigns), M/s Company incorporated under the laws of а and having Registered Office at (hereinafter called the Member-n", which expression shall its 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.

WHEREAS MSEDCL desires to purchase power FROM ------ MW GRID CONNECTED WIND-SOLAR HYBRID POWER PROJECTS THROUGH COMPETITIVE BIDDING PROCESS (FOLLOWED BY REVERSE E-AUCTION) with additional upto 500 MW under Green Shoe option of additional capacity upto 500 MW.

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

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 (M/s \_), 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.
- 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:

Name	Percentage
Member 1	
Member 2	
Member n	
Total	100%

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 HPG 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 Date d [•])

Witnesses:

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

2) Signature ------Name: Address: For M/s-----[Member n]

-----

(Signature, Name & Designation of the person authorized vide Board Resolution Date d [•])

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 a Company with equity participation less than 10%.

#### FORMAT- 6.6

#### Format for Disclosure

[On the letter head of Bidding Company/ 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 / Competitive / 500MW / Wind-Solar Hybrid dated ------ and that our Parent, Affiliate or Ultimate Parent or any Group Company 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 (Renewable Energy)**

"Prakashgad", 5th Floor, Station Road, Bandra (E), Mumbai

**Sub:** Response to RfS FOR PURCHASE OF POWER FROM 500 MW GRID CONNECTED WIND-SOLAR HYBRID POWER PROJECTS THROUGH COMPETITIVE BIDDING PROCESS (FOLLOWED BY REVERSE E-AUCTION) with additional upto 500 MW under Green Shoe option

Dear Sir,

I/ We, -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. Note:

- 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 in the Electronic Form at https://www.bharatelectronictender.com 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.
- 4. Conditional proposal shall be considered as non-responsive and summarily rejected.
- 5. In the event of any discrepancy between the values entered in figures and in words, the values entered in words shall be considered.
- 6. The tariff should be mentioned up to two places of decimal only.
- 7. 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

S. No	Description	Reviewed on		Rem arks
1	Status of connectivity (Inter			
	connection voltage level)			
	Connectivity start date Bay installation status			
2	Land Arrangement status			
	with Acquisition details			
	Identification (Yes/No)			
	Location (Kindly provide the			
	location co-ordinates)			
	Status of Ownership			
	Total area required for the			
	Project (in acres)			
	Extent of land acquired (in			
	acers) (%) Land procurement (Yes/No)			
	Land procurement (Tes/100)			

## Format 6.8 Regarding Timelines of the Milestones

	Land Conversion (Yes/No)		
	Land title (ownership/land lease		
	allotment in the name of		
	Developer) completed/partially		
	completed, same shall be given in		
	acres		
	Solar land- Location (Co-		
	ordinates)		
	Wind land- Location (Co-		
	ordinates)		
3	Status of financing		
	arrangements		
	Equity tie-up		
	Financial closure status		
	Financial lender details		
	Status of Debt		
	Sanction/ Disbursement from		
	Bank		
	Name of Bank		
4	Status of Clearances (if		
	applicable)		
	MoD (land area in acres to be		
	specified)		
	Forest (land area in acres to be		
	specified)		
	Mining (land area in acres to be		
	specified)		
	Local Body (land area in acres		
	to be specified)		
	Any other clearances		
5	Status of Transmission line		
	including distance and rating		
	Total distance of transmission		
	line in km		
	Voltage Rating of transmission		
	line		
6	Design status of Project		
	No. of Solar block along with		
	capacity in MW		

	Inverter capacity in MW		
	Inverter transformer capacity in		
	MVA		
	No. of WTGs along with		
	capacity (height & capacity)		
7	Design status of Substation		
	Voltage rating of Substation		
	No. of Bays planned		
	Location of Substation (land		
	Co-ordinates)		
8	Design status of Transmission		
	line towers and No. of Towers		
	foundations expected		
	Tower schedule status		
	No. of towers expected (In		
	Nos.)		
9	Supply Status		
	PO status of MMS, Modules,		
	Inverter, WTGs, Power transformer,		
	Inverter transformer, transmission		
	line tower stubs, structure)		
	Supply status of Modules to site		
	(%)		
	Supply status of Inverter (%)		
	Supply status of WTGs (%)		
	Supply status of Power		
	Transformer (%)		
	Supply status of Inverter		
	Transformer (%)		
	Supply status of transmission		
	line towers stubs (%)		
	Supply status of transmission		
	line towers structure (%)		
	Overall status of supply (%)		
10	Civil work status		
	Solar- pile works status (No. of		
	piles for the Project vs.		
	completed status)		

	Wind-Foundation work status (No. of WTG's for the Project vs. completed status)		
	Substation-foundation work		
	status (No. of equipment foundation		
	for the substation vs. completed		
	status)		
	Transmission line-Foundation		
	work status (No. of tower foundation		
	for the project vs. completed)		
11	Erection		
	Solar panels- Erected capacity		
	Wind turbine-Erected capacity		
	S/s Equipment erection status		
	T/L-Tower erection in Nos.		
	T/L-Stringing in km		
12	Pre-commissioning Status		

# Annexure **A:** Check list for Bank Guarantees

Sl. no.	Details of Checks	Yes/No
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?	

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

### List of Scheduled Commercial Banks

#### PUBLIC SECTOR BANKS

- 1 State Bank of India
- 2 Bank of Baroda (Including Vijaya Bank and Dena Bank)
- 3 Bank of India
- 4 Bank of Maharashtra
- 5 Canara Bank (Including Syndicate Bank)
- 6 Central Bank of India
- 7 Indian Bank (Including Allahabad Bank)
- 8 Indian Overseas Bank
- 9 Punjab National Bank (including Oriental Bank of Commerce and United Bank of India)
- 10 Punjab & Sind Bank
- 11 Union Bank of India (including Andhra Bank and Corporation Bank)
- 12 UCO Bank

#### PRIVATE BANKS

- Axis Bank Ltd.
   Catholic Syrian Bank Ltd.
- 3 City Union Bank Ltd.
- 4 Development Credit Bank Ltd.
- 5 Dhanlaxmi Bank Ltd.
- 6 Federal Bank Ltd.
- 7 HDFC Bank Ltd.
- 8 ICICI Bank Ltd.
- 9 IndusInd Bank Ltd.

10 Jammu & Kashmir Bank Ltd.

11 Karnataka Bank Ltd.

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

- The Royal Bank of Scotland N.V
   Abu Dhabi Commercial Bank Ltd.
- 3 Antwerp Diamond Bank N.V
- 4 Arab Bangladesh Bank Ltd.(AB Bank)
- 5 Bank International Indonesia
- 6 Bank of America
- 7 Bank of Bahrain & Kuwait B.S.C
- 8 Bank of Ceylon
- 9 Bank of Nova Scotia
- 10 Bank of Tokyo Mitsubishi Ltd.
- 11 Barclays Bank
- 12 BNP Paribas
- 13 China Trust Bank
- 14 Shinhan Bank
- 15 Citibank N.A
- 16 Credit Agricole Corporate and Investment Bank
- 17 Deutsche Bank
- 18 DBS Bank Ltd.
- 19 Hongkong and Shanghai Banking Corpn. Ltd.
- 20 J.P.Morgan Chase Bank N.A
- 21 Krung Thai Bank
- 22 Mashreqbank

- 23 Mizuho Corporate Bank Ltd.
- 24 Oman International Bank
- 25 SocieteGenerale
- 26 Sonali Bank
  - 27 Standard Chartered Bank
- 28 State Bank of Mauritius
- 29 JSC VTB Bank
- 30 UBS AG
- 31 American Express Banking Corporation
- 32 First Rand Bank Ltd.
- 33 Commonwealth Bank of Australia
- 34 United Overseas Bank Ltd.
- 35 Credit Suisse A.G
- 36 Sberbank
- 37 Australia and New Zealand Banking Group Ltd.
- 38 Rabobank International
- 39 National Australia Bank
- 40 Woori Bank
- 41 Industrial & Commercial Bank of China
- 42 Sumitomo Mitsui Banking Corporation
- 43 Westpac Banking Corporation
- 44 Doha Bank

## Annexure \_C: Special instructions to Bidders for e-Tendering

### Special instructions to Bidders for e-Tendering

### General

The Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as given in these Tender Documents. Submission of Online Bids is mandatory for this Tender.

E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Now, the Government of India has made e-tendering mandatory. Suppliers/ Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, **Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL)** has decided to use the portal **https://www.bharatelectronictender.com** through ISN Electronic Tender Services Private Limited (referred as ISN-ETS). This portal is based on the world's most 'secure' and 'user friendly' software from Electronic Tender<sup>®</sup>. A portal built using Electronic Tender's software is also referred to as Electronic Tender System<sup>®</sup> (ETS).

Benefits to Suppliers are outlined on the Home-page of the portal.

### **Instructions**

### **Tender Bidding Methodology**:

### Sealed Bid System

- Single Stage Two Envelope Auction

The sealed bid system would be followed by an 'e-Reverse Auction'

## Broad Outline of Activities from Bidder's Perspective:

- 1. Procure a Class-III Digital Signing Certificate (DSC)
- 2. Register on Electronic Tender System<sup>®</sup> (ETS)
- 3. Create Marketing Authorities (MAs), Users and assign roles on ETS. It is mandatory to create at least one MA.
- 4. View Notice Inviting Tender (NIT) on ETS
- 5. For this tender -- Assign Tender Search SCDe (TSC) to an MA
- 6. Download Official Copy of Tender Documents from ETS. Note: Official copy of Tender Documents is distinct from downloading 'Free Copy of Tender Documents'. To participate in a tender, it is mandatory to procure official copy of Tender Documents for that tender.
- 7. Bid-Submission on ETS
- 8. Participate in e-Reverse Auction on ETS

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the ETS.

## **Digital Certificates:**

For integrity of data and authenticity/ non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC). also referred to as Digital Signature Certificate (DSC), of Class-III, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <u>http://www.cca.gov.in</u>].

## Registration

To use the Electronic Tender<sup>®</sup> portal **https://www.bharat-electronictender.com**, vendors need to register on the portal. Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tendering activities. In ETS terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/portal, and click on the 'Supplier Organization' link under 'Registration' (on the Home Page), and follow further instructions as given on the site. Pay Annual Registration Fee as applicable.

## Any Instructions for Online/ Offline Payment of Registration Fee

After successful submission of Registration details and Annual Registration Fee, please contact ISN-ETS/ ETS Helpdesk (as given below), to get your registration accepted/activated

<u>Important Note</u>: To minimize teething problems during the use of ETS (including the Registration process), it is recommended that the user should peruse the instructions given under 'ETS User-Guidance Center' located on ETS Home Page, including instructions for timely registration on ETS. The instructions relating to 'Essential Computer Security Settings for Use of ETS' and 'Important Functionality Checks' should be especially taken into cognizance.

Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of users, assigning roles to them, etc.

ISN-ETS/ ETS Helpdesk:	
Telephone/ Mobile	Customer Support: +91-124 - 4229071, 4229072
E-mail ID	support@isn-ets.com
	[Please mark CC: <u>support@electronictender.com</u> ]
MSEDCL Contact:	
MSEDCL Contact Person	Mr. Nikhil Meshram,
	(Superintending Engineer) (RE)
Telephone/ Mobile	Ph: 022-26474211
	[between 10:00 hrs to 18:00 hrs on working days]
E-mail ID	ncetendermsedcl@gmail.com

## Some Bidding related Information for this Tender (Sealed Bid)

The entire bid-submission would be online on ETS (unless specified for Offline Submissions). Broad outline of submissions are as follows:

- Submission of Bid-Parts/ Envelopes
  - Technical-Part
  - Financial-Part
- Submission of information pertaining Bid Security/ Earnest Money Deposit (EMD)
- Submission of digitally signed copy of Tender Documents/ Addendum
- Submission of General Terms and Conditions (with/ without deviations)
- Submission of Special Terms and Conditions (with/ without deviations)

### **Offline Submissions**:

The bidder is requested to submit the following documents offline to the under mentioned address before the start of Public Online Tender Opening Event in a Sealed Envelope.

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 – ncetendermsedcl@gmail.com

*The envelope shall bear (the project name), the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).* 

- 1. Original copy of the Bid Security in the form of a Bank Guarantee as per Tender Documents
- 2. Original copy of the letter of authorization shall be indicated by written power-of-attorney if applicable
- 3. Bid Processing Fee as per the Tender Documents
- 4. INR 15000/ plus applicable GST towards 'ETS Bidding Fee' for use of ETS to be paid as per the way described on the e-Tendering portal. <u>Note</u>: Failure to pay this amount will result in rejection of the bid.

Note: The Bidder should also upload the scanned copies of all the above mentioned original documents as Bid-Annexures during Online Bid-Submission.

### Special Note on Security and Transparency of Bids:

Security related functionality has been rigorously implemented in ETS in a multi-dimensional manner. Starting with 'Acceptance of Registration by the Service Provider', provision for security has been made at various stages in Electronic Tender's software. Specifically for Bid Submission, some security related aspects are outlined below: As part of the Electronic Encrypter<sup>®</sup> functionality, the contents of both the 'Electronic Forms<sup>®</sup>' and the 'Main-Bid' are securely encrypted using a Pass-Phrase created by the Bidder himself. Unlike a 'password', a Pass-Phrase can be a multi-word sentence with spaces between words (eg I love this World). A Pass-Phrase is easier to remember, and more difficult to break. It is mandatory that a separate Pass-Phrase be created for each Bid-Part. This method of bid-encryption does not have the security and data-integrity related vulnerabilities which are inherent in e-tendering systems which use Public-Key of the specified officer of a Buyer organization for bid-encryption. Bid-encryption in ETS is such that the Bids cannot be decrypted before the Public Online Tender Opening Event (TOE), even if there is connivance between the concerned tender-opening officers of the Buyer organization and the personnel of e-tendering service provider.

CAUTION: All bidders must fill Electronic Forms<sup>®</sup> for each bid-part sincerely and carefully, and avoid any discrepancy between information given in the Electronic Forms<sup>®</sup> and the corresponding Main-Bid. For transparency, the information submitted by a bidder in the Electronic Forms<sup>®</sup> is made available to other bidders during the Online Public TOE. If it is found during the Online Public TOE that a bidder has not filled in the complete information in the Electronic Forms<sup>®</sup>, the TOE officer may make available for downloading the corresponding Main-Bid of that bidder at the risk of the bidder. If variation is noted between the information contained in the Electronic Forms<sup>®</sup> and the 'Main-Bid', the contents of the Electronic Forms<sup>®</sup> shall prevail.

Typically, 'Pass-Phrase' of the Bid-Part to be opened during a particular Public Online Tender Opening Event (TOE) is furnished online by each bidder during the TOE itself, when demanded by the concerned Tender Opening Officer.

Additionally, the bidder shall make sure that the Pass-Phrase to decrypt the relevant Bid-Part is submitted to MSEDCL Name in a sealed envelope before the start date and time of the Tender Opening Event (TOE).

There is an additional protection with SSL Encryption during transit from the client-end computer of a Supplier organization to the e-tendering server/ portal.

## Some Bidding related Information for this Tender (e-Reverse Auction)

e-Reverse Auction would be conducted after the opening of the Prequalification/ Financial-Part.

S#	Parameter	Value
1	Date and Time of Reverse-Auction Bidding Event	Will be informed to eligible bidders later.
2	Duration of Reverse-Auction Bidding Event	30 Minutes
3	Automatic extension of the 'Reverse-Auction Closing Time', if last bid received is within a 'Pre-defined Time-Duration' before the 'Reverse-Auction Closing Time'	Yes

The following would be parameters for e-Reverse Auction:

3.1	Pre-defined Time-Duration	8 Minutes
3.2	Automatic extension Time-Duration	8 Minutes
3.2	Maximum number of Auto-Extension	Unlimited
4	Criteria of Bid-Acceptance	A bidder can go 'decreasing' his own bid without taking into cognizance the 'Starting Price' or 'Rank-1' bid
5	Entity – Start-Price	L1 of the respective Item of Financial- Part/ Specified by Buyer organization
6	Minimum Bid-Decrement	INR 0.01

### **Other Instructions:**

For further instructions, the vendor should visit the home-page of the portal https://www.bharatelectronictender.com, and go to the User-Guidance Center.

The help information provided through 'ETS User-Guidance Center' is available in three categories –Users intending to Register/First-Time Users, Logged-in users of Buyer organizations, and Logged-in users of Supplier organizations. Various links (including links for User Manuals) are provided under each of the three categories.

<u>Important Note:</u> It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of ETS.

### SEVEN CRITICAL DO'S AND DON'TS FOR BIDDERS

Specifically for Supplier organizations, the following 'SEVEN KEY INSTRUCTIONS for BIDDERS' must be assiduously adhered to:

- 1. Obtain individual Digital Signing Certificate (DSC or DC) of Class-III, well in advance of your first tender submission deadline on ETS.
- 2. Register your organization on ETS well in advance of the important deadlines for your first tender on ETS viz 'Date and Time of Closure of Procurement of Tender Documents' and 'Last Date and Time of Receipt of Bids'. Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of -- Marketing Authority (MA) [ie a department within the Supplier/Bidder Organization responsible for responding to tenders], users for one or more such MAs, assigning roles to them, etc. It is mandatory to create at least one MA. This unique feature of creating an MA enhances security and accountability within the Supplier/Bidder Organization.
- 3. Get your organization's concerned executives trained on ETS well in advance of your first tender submission deadline on ETS.

4. For responding to any particular tender, the tender (i.e. its Tender Search SCDe or TSC) has to be assigned to an MA. Further, an 'Official Copy of Tender Documents' should be procured/ downloaded before the expiry of Date and Time of Closure of Procurement of Tender Documents.

<u>Note</u>: Official copy of Tender Documents is distinct from downloading 'Free Copy of Tender Documents'. Official copy of Tender Documents is the equivalent of procuring physical copy of Tender Documents with official receipt in the paper-based manual tendering system.

- 5. Submit your bids well in advance of tender submission deadline on ETS (There could be last minute problems due to internet timeout, breakdown, et al)
- 6. It is the responsibility of each bidder to remember and securely store the Pass-Phrase for each Bid-Part submitted by that bidder. In the event of a bidder forgetting the Pass-Phrase before the expiry of deadline for Bid-Submission, facility is provided to the bidder to 'Annul Previous Submission' from the Bid-Submission Overview page and start afresh with new Pass-Phrase(s)
- 7. ETS will make your bid available for opening during the Online Public Tender Opening Event (TOE) 'ONLY IF' your 'Status pertaining Overall Bid-Submission' is 'Complete'. For your record, you can generate and save a copy of 'Final Submission Receipt'. This receipt can be generated from 'Bid-Submission Overview Page' only if the 'Status pertaining overall Bid-Submission' is 'Complete'.

NOTE:

While the first three instructions mentioned above are especially relevant to first-time users of ETS, the fourth, fifth, sixth and seventh instructions are relevant at all times.

## Additional DO'S AND DON'TS FOR BIDDERS Participating in e-Reverse Auction

- 1. Get your organization's concerned executives trained for e-Reverse Auction related processes on ETS well in advance of the start of e-Reverse Auction.
- 2. For responding to any particular e-Reverse Auction, the e-Reverse Auction (i.e. its Reverse Auction Search SCDe or RASC) has to be assigned to an MA.
- 3. It is important for each bidder to thoroughly read the 'rules and related criterion' for the e-Reverse Auction as defined by the Buyer organization.
- 4. If applicable for an e-Reverse Auction (such as in case of a Direct e-Reverse Auction which is not preceded by a sealed-bid stage), pay the Bid Processing Fee well in advance of the start of e-Reverse Auction bidding.
- 5. It is important to digitally-sign your 'Final bid' after the end of e-Reverse Auction bidding event.

## <u>Minimum Requirements at Bidder's End</u>

Computer System having configuration with minimum Windows 7 or above, and Broadband connectivity

Microsoft Internet Explorer 7.0 or above, Digital Certificate(s)

## Self-Undertaking for identification of 100% land for Wind Solar Hybrid project

We				,	having	office at			,
registered	Company	under	the	Companies	Act	1956/2013	having	office	at
	solemnly affirm and state as under:								

Whereas, We confirm that we have identified 100% land for the required Project of the capacity of ...... MW, at ...........[Insert name of the place] for purchase of \_\_\_\_\_\_Wind Solar Hybrid Power as per power purchase agreement executed on between M/s..... and Maharashtra State Electricity Distribution Company Limited (MSEDCL).

> Name: Designation: Organization: Date: (Signature and Stamp)

#### Annexure-E

## Reference Bidders' Declaration Format associated with Implementation of ALMM Order (on the letter head of the bidder) Declaration To Whomsoever this may concern

Reference: (..... Dated .....)

1. We hereby declare that we are fully aware of the binding provisions of the ALMM order and the Lists thereunder, while quoting the tariff in the RfS no. [*tender number*] floated by MSEDCL.

2. We understand that the List – I (Solar PV Modules) of ALMM Order, Annexure – I of the OM, issued by MNRE on  $10^{\text{th}}$  March 2021 will be updated by MNRE from time to time. We also understand that the Modules to be procured for this project, shall be from the List – I of the ALMM order applicable on the date of invoicing of such modules.

3. We further understand and accept that we shall be liable for penal action, including but not limited to blacklisting and invocation of Performance Bank Guarantee, if we are found not complying with the provisions of ALMM Order, including those mentioned above.

Name: Designation: Organization: Date: (Signature and Stamp)

### 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).