# MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED

**DRAFT PPA** 

# FOR PROCUREMENT OF 50 MW (AC) SOLAR POWER FROM PROJECTS TO BE DEVELOPED IN AURANGABAD DISTRICT/CIRCLE OF MSEDCL THROUGH COMPETITIVE BIDDING PROCESS

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This Power Purcha	se Agreement is made and entered into at Mumbai o	n this d	lay of	
2018 between	M/sCe	ompany	having	its
registered office	at	Indi	a (hereina	fter
referred to as "Sola	ar Power Generator", which expression shall, unless	repugnant	to the con	text
or meaning thereof,	, include its successors and assignees) as party of first	t part.		

#### AND

Maharashtra State Electricity Distribution Company Limited incorporated under the Companies Act 1956 (1 of 1956) having its Registered office at Prakashgad, Bandra (East), Mumbai – 400 051, (hereinafter referred to individually, as "MSEDCL" or "Power Procurer", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees) as party of the second part.

MAHARASHTRA ELCRTICITY DISTRIBUTION COMPANY LIMITED incorporated under The Companies Act 1956 (1 of 1956) having its Registered office at **Prakashgad**, **Plot G 9, Prof. Anant Kanekar Marg, Bandra (East), Mumbai 400 051**, (hereinafter referred to individually, as "MSEDCL" or "Power Procurer", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees) as party of the second part.

WHEREAS MSEDCL vide RfS No. MSEDCL/CE/RE/FY2018-19/1400 MW/ Solar/T-24 dated 15/09/2018 has floated tender for procurement of 50 MW (AC) SOLAR POWER FROM PROJECTS TO BE DEVELOPED IN AURANGABAD DISTRICT/CIRCLE of MSEDCL THROUGH COMPETITIVE BIDDING PROCESS and the Solar Power Generator has been declared Successful Bidder pursuant to Letter of Award (LoA) dated ..... for development of Solar Power Project of .....MW capacity located at------ and sale of entire of electrical energy, so produced, for commercial purposes from such Power Plant to MSEDCL.

AND, WHEREAS the Solar Power Generator has taken responsibility to set up requisite power injection system into MSEDCL network.

AND, WHEREAS the Parties hereby agree to execute this Power Purchase Agreement setting out the terms and conditions for the sale of power by Solar Power Generator to MSEDCL.

NOW THEREFORE IN VIEW OF THE FOREGOING PREMISES AND IN CONSIDERATION OF THE MUTUAL COVENANTS AND CONDITIONS HEREINAFTER SET FORTH, MSEDCL AND THE SOLAR POWER GENERATOR, EACH TOGETHER WITH THEIR RESPECTIVE SUCCESSORS AND PERMITTED ASSIGNS, A PARTY AND COLLECTIVELY THE PARTIES, HEREBY AGREE AS FOLLOWS:

# **Article 1: DEFINITIONS**

# **1.** For all purposes of this Agreement, the following words and expressions shall have the respective meanings set forth below:

"Agreement" shall mean this Power Purchase Agreement executed hereof, including the schedules hereto, amendments, modifications and supplements made in writing by the Parties from time to time.

"AMR" shall mean Automated Meter Reading.

"**Approvals**" means the permits, clearances, licenses and consents as are listed in Schedule 3 hereto and any other statutory approvals.

"**Billing Period**" means (subject to Article 6.1 of the Agreement) the calendar month ending with the Metering Date. The first Billing Period shall commence from the Commercial Operation Date and end with the Metering Date corresponding to the month in which the Commercial Operation Date occurs.

"Billing Date" shall be the first Business Day after the Metering Date of each Billing Period.

**"Business Day"** shall mean a Day other than Sunday or a statutory holiday on which banks remain open for business in Mumbai.

"Change in Law" shall have the meaning ascribed thereto in Article 9 of this Agreement.

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

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

"CERC" means Central Electricity Regulatory Commission.

"**Contracted Capacity**" means the AC capacity of the project at the generating terminal(s) and contracted with MSEDCL for supply from the Solar Power Project which shall be equal to......(Insert MW).

"Contract Year" shall mean, with respect to the initial Contract Year, the period beginning

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

CTU" means Central Transmission Utility.

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

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

**"Due Date of Payment"** in respect of a Tariff Invoice means the date, which is 30 (thirty) days from the date of receipt of such invoices by the designated official of the MSEDCL.

"Effective Date" shall mean the date of execution of Power Purchase Agreement (PPA) by both the parties;

"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 the MERC / CERC from time to time.

"**Emergency**" means a condition or situation of physical damage to CTU/STU electrical system including the Grid System, which threatens the safe and reliable operation of such system or which is likely to result in disruption of safe, adequate and continuous electric supply by CTU/STU or MSEDCL Grid System or could endanger life or property.

**"Expiry Date"** shall mean the date occurring after twenty five (25) years from the Commercial Operation Date of proposed / new solar power projects.

"**Financing Documents**" mean the agreements and documents (including asset leasing arrangements) entered/to be entered into between the Solar Power Generator and the Financing Parties relating to the financing of the Project.

"**Financial Closure**" or "**Project Financing Arrangements**" shall mean arrangement of necessary funds by the Bidder / Solar Power Generator either by way of commitment of funds by the Company from its internal resources and/or tie up of funds through a bank / financial institution by way of a legally binding agreement for commitment of such finances.

"Financing Parties" shall mean the parties financing the Project, pursuant to the Page 7

Financing Documents.

"Force Majeure Event" shall have the meaning set forth in Article 8.

"MERC" means the Maharashtra Electricity Regulatory Commission.

"GoI" shall mean the Government of the Republic of India and any agency, legislative body, department, political subdivision, authority or instrumentality thereof.

"**GoM**" shall mean the Government of the State of Maharashtra and any agency, legislative body, department, political subdivision, authority or instrumentality thereof.

"Government Instrumentality" shall mean the GoI, the GoM and their ministries, inspectorate, departments, agencies, bodies, authorities, legislative bodies.

"Grid System" shall mean STU / MSEDCL power transmission system / distribution system through which Delivered Energy is evacuated and distributed.

"Interconnection Facilities" in respect of the Solar Power Generator shall mean all the facilities installed by the Solar Power Generator to enable MSEDCL to receive the Delivered Energy from the Project at the Delivery Point, including transformers, and associated equipment, relay and switching equipment, protective devices and safety equipment and transmission lines from the project to nearest sub-station.

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

"kV" shall mean kiloVolts.

"kWh" shall mean kiloWatt-hour.

"Law" shall mean any valid legislation, statute, rule, regulation, notification, directive or order, issued or promulgated by any Governmental Instrumentality.

"Letter of Award (LoA)" shall mean the letter dated ..... issued by MSEDCL to the Solar Power Generator for award of the Contract.

"Metering Date" for a Billing Period, means the midnight of the last Day of the calendar month.

"Metering Point"; Metering shall be at 11 / 22 kV level substation of MSEDCL.

"Monthly Energy Charge" shall have the meaning set forth in Article 5.

"MRI" shall mean Meter Reading Instrument.

"MW" means MegaWatts.

**"O & M Default"** shall mean any default on the part of the Solar Power Generator for a continuous period of ninety (90) days to (i) operate and/or (ii) maintain (in accordance with Prudent Utility Practices), the Project at all times.

"Performance Bank Guarantee" shall mean the irrevocable unconditional bank guarantee submitted by the Solar Power Generator as per the MSEDCL/CE/RE/FY2018-19/1400 MW/ Solar/T-24 dated 15/09/2018.

**"Project"** shall mean a Solar Photovoltaic Grid Interactive Power Station to be established by the Solar Power Generator at ------, Taluka: ------, Dist: ------ in Maharashtra comprising of ------ number of units at single/multiple locations, aggregating to capacity of ------ MW and shall include land, buildings, plant, machinery, ancillary equipment, material, switch- gear, transformers, protection equipment and the like necessary to deliver the Electricity generated to MSEDCL at the Delivery Point.

"**Project Site**" means any and all parcels of real property, rights-of-way, easements and access roads located at Village-\_\_\_\_\_, Taluka-\_\_\_\_\_, District-\_\_\_\_\_, Maharashtra, upon which the Project and its related infrastructure will be located.

"**Prudent Utility Practices**" shall mean those practices, methods, techniques and standards, that are generally accepted for use in electric utility industries taking into account conditions in India, and commonly used in prudent electric utility engineering and operations to design, engineer, construct, test, operate and maintain equipment lawfully, safely, efficiently and economically as applicable to power stations of the size, service and type of the Project, and that generally conform to the manufacturers' operation and maintenance guidelines.

"SBI 1 Year MCLR Rate" means 1 year Marginal Cost of Funds Based Lending Rate (MCLR) fixed by State Bank of India (SBI) / any replacement thereof by SBI for the time being in effect applicable for 1 year period, as on 1st April of the respective financial year in accordance with regulations and guidelines of Reserve Bank of India. In absence of such rate, any other arrangement that substitutes such rate as mutually agreed to by the Parties.

"Scheduled COD" or "Scheduled Commercial Operation Date" means {insert date} (not exceeding 13 (Thirteen) months from the date of execution of PPA.

"SEA" means the State Energy Account issued by State Load Dispatch Centre.

"SLDC" means the State load dispatch center as notified by the State Government.

"SNA" means State Nodal Agency i.e Maharashtra Energy Development Agency (MEDA). Page 9 **"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.

"Tariff" shall have the meaning set forth in Article 5.

"Tariff Invoices" shall have the meaning set forth in Article 6.

**"Technical Limits"** means the limits and constraints described in Schedule 2, relating to the operations, maintenance and dispatch of the Project.

"Term" means the term of the Agreement as defined in Article 10.

"Unit" means one set of Solar Photovoltaic Grid Interactive power plant and auxiliary equipment and facilities forming part of the Project.

"Voltage of Delivery" means the voltage at which the Electricity generated by the Project is required to be delivered and shall be 11 / 22 kV.

# 2. Interpretation:

- a) Unless otherwise stated, all references made in this Agreement to "Articles" and "Schedules" shall refer, respectively, to Articles of, and Schedules to, this Agreement. The Schedules to this Agreement form part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement.
- b) In this Agreement, unless the context otherwise requires (i) the singular shall include plural and vice versa; (ii) words denoting persons shall include partnerships, firms, companies and MSEDCL (iii) the words "include" and "including" are to be construed without limitation and (iv) a reference to any Party includes that Party's successors and permitted assigns.

# **Article 2: LICENCES, PERMITS**

The Solar Power Generator, at its sole cost and expense, shall acquire and maintain in effect all clearances, consents, permits, licenses and approvals required from time to time by all regulatory / statutory competent authority (ies) in order to enable it to perform its obligations under the Agreement.

#### **Article 3: OBLIGATIONS**

#### 3.1. Obligations of the Solar Power Generator:

- i) The Solar Power Generator shall obtain all statutory approvals, clearances and permits necessary for the Project at his cost in addition to those Approvals as listed in Schedule 3.
- ii) The Solar Power Generator shall obtain financial closure within Seven (7) months from date of execution of this PPA.
- iii) The Solar Power Generator shall construct, operate and maintain the Project during the term of PPA at his cost and risk including the required Interconnection Facilities and in close co-ordination with STU/MSEDCL's feasibility.
- iv) The Solar Power Generator shall sell all available capacity from identified Solar Photovoltaic Grid-Interactive Power Plants to the extent of contracted capacity on first priority basis to MSEDCL and not to sell to any third party.
- v) The Solar Power Generator shall seek approval of STU/MSEDCL in respect of interconnection Facilities.
- vi) The Solar Power Generator shall undertake at its own cost construction/ upgradation of

   (a) the Interconnection Facilities,
   (b) the Transmission Lines and as per the
   specifications and requirements of STU/MSEDCL, as notified to the Solar Power
   Generator at schedule 4.
- vii) The Solar Power Generator shall undertake at its own cost maintenance of the Interconnection Facilities, excluding the transmission line beyond the Sending Station as per the specifications and requirements of STU / MSEDCL, as notified to the Solar Power Generator, in accordance with Prudent Utility Practices.
- viii) The Solar Power Generator shall operate and maintain the Project in accordance with Prudent Utility Practices.
- ix) The Solar Power Generator shall be responsible for all payments on account of any taxes, cesses, duties or levies imposed by the GoI/State Government or its competent statutory authority on the land, equipment, material or works of the Project or on the Electricity generated or consumed by the Project or by itself or on the income or assets owned by it.
- x) For evacuation facility and maintenance of the transmission, the Solar Power Generator shall enter into separate agreement with STU/MSEDCL, if applicable.
- xi) To apply for start up power required for the plant from MSEDCL.
- xii) Fulfilling all other obligations undertaken by him under this Agreement.
- xiii) The Solar Power Generator cannot inject power three months earlier to Scheduled Commercial Operation Date from Project / Unit without MSEDCL's consent.

#### **3.2. Obligations of MSEDCL**

- 3.2.1. MSEDCL shall off-take and purchase the electricity generated by Solar Power Generator as per the terms and conditions of this Agreement.
- 3.2.2. MSEDCL to open the Letter of Credit as per terms and conditions of this agreement.

# 3.3. Liquidated damages for delay in Commissioning the Project/Solar Photovoltaic Grid Interactive Power Plant beyond Scheduled Commercial Operation Date:

- 3.3.1. The Projects shall be commissioned within a period of 13 (thirteen) months from the date of execution of the PPA.
- 3.3.2. The Solar Power Generator shall have to submit Commissioning Certificate as verified, inspected and certified by SLDC/MSEDCL. In case of failure to achieve this milestone, MSEDCL shall forfeit the Performance Bank Guarantee (PBG) in the following manner:
  - a) **Delay upto six (6) months from SCOD** MSEDCL will forfeit total Performance Bank Guarantee on per day basis and proportionate to the balance capacity not commissioned.
  - b) In case the commissioning of the project is delayed beyond Six (6) months from SCOD, the tariff discovered after e-Reverse Auction shall be reduced at the rate of 0.50 paise/kWh per day of delay for the delay in such remaining capacity which is not commissioned. The maximum time period allowed for commissioning of the full Contracted Capacity with encashment of Performance Bank Guarantee and reduction in the fixed tariff shall be limited to 25 months from the date of execution of PPA or till the Tariff becomes zero, whichever is earlier.
  - c) In case, the Commissioning of the Project is delayed beyond this period as mentioned in Article (b) above, the PPA capacity shall stand reduced / amended to the Capacity commissioned and the PPA for the balance Capacity will stand terminated and shall be reduced from the Contracted Capacity.

# Article 4: SYNCHRONISATION, COMMISSIONING AND COMMERCIAL OPERATION

# 4.1. Synchronization, Commissioning and Commercial Operation:

- 4.1.1 The Solar Power Generator shall give at least Thirty (30) days written notice to the SLDC/SNA and MSEDCL, of the date on which it intends to synchronize the Power Project to the Grid System.
- 4.1.2 Subject to Article 4.1.1, the Power Project may be synchronized by the Solar Power Generator to the Grid System when it meets all the connection conditions prescribed in the Grid Code and otherwise meets all other Indian legal requirements for synchronization to the Grid System.
- 4.1.3 The synchronization equipment and all necessary arrangements/ equipment including Remote Terminal Unit (RTU) for scheduling of power generated from the Project and transmission of data to the concerned authority as per applicable regulation shall be installed by the Solar Power Generator at its generation facility of the Power Project at its own cost. The Solar Power Generator shall synchronize its system with the Grid System only after the approval of SLDC or MSEDCL.
- 4.1.4 The Solar Power Generator shall immediately after each synchronization / tripping of generator, inform the sub-station of the Grid System to which the Power Project is electrically connected in accordance with applicable Grid Code.
- 4.1.5 The Projects shall be commissioned within a period of 13 (thirteen) months from the date of execution of the PPA.
- 4.1.6 The part commissioning of the project may be accepted by MSEDCL subject to the condition that minimum capacity for acceptance of first and subsequent part commissioning shall be 2 MW.
- 4.1.7 The early commissioning of solar power Generator is permitted for full commissioning as well as part commissioning prior to 3 months before SCOD. In case of early full commissioning, MSEDCL will purchase the generation till SCOD at PPA tariff. In case of part commissioning till SCOD as described in Section 4.1.6, MSEDCL will purchase the generation till SCOD at 75% of PPA tariff. Irrespective of the dates of the part commissioning or full commissioning, the PPA will remain in force for a period of 25 (Twenty five) years from the SCoD.

# 4.2. Performance Bank Guarantee:

- 4.2.1 The Performance Bank Guarantee furnished by Solar Power Generator to MSEDCL as prescribed in the RfS shall be for guaranteeing the commissioning / commercial operation of the project / unit up to the Contracted Capacity within SCOD.
- 4.2.2 If the Successful Bidder fails to achieve Financial Closure as prescribed in Clause 3.13 of the RfS, the MSEDCL shall encash the Performance Bank Guarantee (PBG) unless the delay is on account of delay caused due to a Force Majeure. An extension for the attainment of the financial closure can however be considered by MSEDCL, on the sole request of the Solar Power Generator.

upon submission of a fresh Performance Bank Guarantee (PBG) with the same conditions, value and validity as stated in Section 3.9 of the RfS. This extension will not have any impact on the Scheduled Commissioning Date (SCOD). However such amount of encashed PBG shall be returned to the Solar Power Generator without any interest within a period of 30 days of achievement of successful commissioning provided such commissioning is within the Scheduled Commissioning Date (SCOD).

- 4.2.3 If the Power Producer fails to commission the project / Unit on or before Scheduled Commercial Operation Date, MSEDCL shall have the right to forfeit the Performance Bank Guarantee without prejudice to the other rights of the Solar Power Generator under this Agreement as per Article 3.3.
- 4.2.4 MSEDCL shall release the Performance Bank Guarantee upon successful commissioning of full contracted capacity after adjusting Liquidated Damages (if any) as per Article 3.3.

#### 4.3. Dispatch and Scheduling:

- 4.3.1 The Solar Power Generator shall be required to Schedule its power as per the applicable regulations / requirements / guidelines of MERC and maintain compliance to the Grid Code requirements and directions, as specified by SLDC from time to time. Any deviation from the Schedule will attract the provisions of applicable regulation / guidelines / directions and any financial implication on account of this shall be to the account of the Solar Power Generator.
- 4.3.2 Solar Power Generator shall be responsible for deviations made by it from the dispatch schedule and for any resultant liabilities on account of charges for deviation as per applicable regulations.

#### **Article 5: RATES AND CHARGES**

- 5.1. Monthly Energy Charges: The MSEDCL shall pay for the Delivered Energy as certified by SLDC/ MSEDCL / Appropriate authority through SEA/Joint Meter Reading (AMR/MRI), for the Term of this Agreement from the Commercial Operation Date, to the Solar Power Generator every month. The Tariff payable by MSEDCL for energy purchased shall be as per Article below.
- 5.2. MSEDCL shall pay a **fixed rate of INR** ..... (in words Rupees ----) per kWh as discovered under the Competitive Bidding and as agreed by the Parties upon commissioning of a Unit / Project (as certified by SLDC/MSEDCL) for delivered energy during the period of PPA.
- 5.3. If the commissioning of the project is delayed over Six (6) months from SCOD, the tariff discovered under the Competitive Bidding (followed by reverse auction) shall be reduced at the rate of 0.50 paise/kWh per day of delay, for the delay in such remaining capacity which is not commissioned for entire term of PPA.
- 5.4. Start-up power/Auxiliary consumption:

MSEDCL shall supply electricity to the Solar Power Generator at the MSEDCL's prevailing HT Industrial Tariff rate in force from time to time and Generator shall pay for this electricity (Fixed Demand (kVA) & variable power in kWh) at that rate. MSEDCL shall ensure that the power as required by the Solar Power Generator under reasonable notice shall be available without delay.

# 5.5. Capacity Utilisation Factor (CUF):

# 5.5.1 **Criteria for generation:**

The Solar Power Generator has declared the CUF of their project as \_\_\_\_\_% and It will be allowed to revise the same once within first year of COD. The declared CUF shall in no case be less than 19% over a year. Solar Power Generator shall maintain generation so as to achieve CUF in the range of  $\pm 10$  % of their declared value during the entire PPA duration of 25 years from the Commercial Operation Date of proposed / new solar power projects. The lower limit will, however, be relaxed by MSEDCL to the extent of grid non-availability for evacuation which is beyond the control of the Solar Power Generator.

# 5.5.2 Shortfall in minimum generation:

During the PPA period, if for any contract year, it is found that the Solar Power Generator has not been able to generate minimum energy corresponding to the lower limit of CUF declared by the Solar Power Generator, such shortfall in performance shall make Solar Power Generator liable to pay the compensation to MSEDCL as mentioned in this Article. The amount of such compensation will be 25% (twenty-five per cent) of the cost of this shortfall in energy terms, calculated at PPA tariff. This compensation shall be applied to the amount of shortfall in generation during the year. This will, however be relaxable by MSEDCL to the extent of grid non-availability for evacuation, which is beyond the control of the Solar Power Generator.

### 5.5.3 **Excess generation:**

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

#### 5.5.4 **Repowering:**

The Solar Power Generator shall be allowed a maximum period of six (6) months for repowering during the entire PPA term of 25 years. The generator shall not be in default for non-supply of power during this period of repowering. However, the Procurer will be obliged to buy power only within the range of CUF, specified in the PPA. Any excess generation will be dealt as specified in Article 5.5.3 of this PPA.

#### 5.6. Generation Compensation in offtake constraint due to transmission:

During the operation of the plant, due to temporary transmission unavailability(during 8 am to 6 pm), if the power is not evacuated, for reasons not attributable to Solar Power Generator, then the generation loss shall be procured by MSEDCL at the PPA tariff so as to offset this loss in the succeeding 3 (three) Contract Years.

Duration of Grid	Provision for Generation Compensation
unavailability	
Grid unavailability in a contract year as defined in the PPA: (only period from 8 am to 6 pm to be counted):	Generation Loss = [(Average Generation per hour during the contract year) × (number of hours of grid unavailability during the contract year)] Where, Average Generation per hour during the contract year (kWh) = Total generation in the contract year (kWh) ÷ Total hours of generation in the contract year The excess generation by the Solar Power Generator equal to this generation loss shall be procured by the

Procurer at the PPA tariff so as to offset this loss in the
succeeding 3 (three) Contract Years.

# 5.7. Generation compensation due to Backed Down:

The Solar Power Generator shall follow the forecasting and scheduling process as per prevailing MERC regulations as amended from time to time.

The Government of India, as per Clause 5.2(u) of the Indian Electricity Grid Code (IEGC), encourages a status of "must-run" to solar power projects. Accordingly, no solar power plant, duly commissioned, should be directed to back down by a MSEDCL/SLDC. In case such eventuality of Backdown arises, except for the cases where the back down is on account of events like consideration of grid security/ an emergency in CTU / STU's / MSEDCL's evacuation system for safe operation of its Grid or safety of any personnel or the other such condition, the Solar Power Generator shall suitably back down their generation.

In case of backing down situation, the Solar Power Generator will be eligible for Minimum Generation Compensation from MSEDCL after receipt of State Energy Account or any other relevant documents certified by MSEDCL/SLDC as under:

Duration of Back down	Minimum Generation Compensation	
Hours of backdown during	Minimum Generation Compensation =	
monthly billing cycle	50% of (Average Generation per hour during the	
	month) x (number of backdown hours during the	
	month) x PPA tariff	
	Where, Average Generation per hour during the	
	month(kWh) = Total generation in the	
	month(kwh)/Total hours of generation in the month	

The Generation Compensation is to be paid as part of the energy bill for the successive month after receipt of State Energy Accounts (SEA) or any other relevant documents certified by MSEDCL/SLDC.

#### **Article 6: BILLING AND PAYMENT**

#### **6.1. Billing Provision:**

The Billing will be on monthly basis. MSEDCL will be billed by the Solar Power Generator based on Joint Meter reading/AMR/SEA as certified by Maharashtra SLDC or MSEDCL authority as may be applicable following the end of each month for the energy supplied and payment will be due on the thirtieth day following the delivery of the billing invoice.

#### 6.2. Payment:

MSEDCL shall make payment of the amounts due in Indian Rupees within thirty (30) days from the date of receipt of the Tariff Invoice by the designated office of the MSEDCL.

#### 6.3. Late Payment:

In regards to the payments against the Monthly bill, if paid beyond the 30 (Thirty) days of its due date, a late Payment charge shall be payable by MSEDCL to the Solar Power Generator at the rate of 1.25% (percent) in excess of the SBI, 1 year Marginal Cost of Funds Based Lending Rate (MCLR) per annum / any replacement thereof by SBI.

Provided that in case of unavailability of the above mentioned MCLR rates or the replacement thereof, the rates for calculations of Late payment charges shall be decided by mutual agreement of MSEDCL and the Solar Power Generator.

#### 6.4. Rebate:

For payment of any Bill on or before Due Date, the following Rebate shall be paid by the solar power generator to MSEDCL in the following manner.

a. A rebate of 2% shall be payable to MSEDCL for the payments made within a period of 10 days of the presentation of hard copy of Bill along with required supporting documents at MSEDCL office.

b. Any payments made beyond a period of 10 days of the date of presentation of hard copy of Bill along with required supporting documents at MSEDCL office up to the due date shall be allowed a rebate of 1%.

c. For the above purpose, the date of presentation of Bill shall be the next Business Day of delivery of the physical copy of the Bill at MSEDCL.

d. No rebate shall be payable on the Bills raised on account of taxes, duties, cess etc.

# 6.5. Payment Security:

# 1) Letter of Credit:

- a) MSEDCL shall establish and maintain irrevocable and unconditional revolving Letter of Credit in favour of, and for the sole benefit of, the Solar Power Generator for the contacted capacity. All the cost incurred by MSEDCL for opening, maintenance and other cost related to establishment of Letter of Credit shall be borne by the Solar Power Generator.
- b) The Letter of Credit shall be established in favour of, and issued to, the Solar Power Generator on the date hereof and made operational thirty (30) days prior to due date of first invoice and shall be maintained consistent herewith by MSEDCL and all times during the Term of the Agreement.
- c) Such Letter of Credit shall be in form and substance acceptable to both the Parties and shall be issued by any Nationalized or Scheduled Bank and be provided on the basis that:
  - i. In the event a Tariff Invoice or any other amount due and undisputed amount payable by MSEDCL pursuant to the terms of this Agreement is not paid in full by MSEDCL as and when due, the Letter of Credit may be called by the Solar Power Generator for payment of undisputed amount.
  - ii. The amount of the Letter of Credit shall be equal to one month's projected payments during first contract year and thereafter during each contract year, the amount of Letter of Credit shall be equal to one month's average billing of previous contract year.
  - iii. The MSEDCL shall replenish the Letter of Credit to bring it to the original amount within 30 days in case of any valid drawdown.
- d) The Letter of Credit shall be renewed and/or replaced by the MSEDCL not less than 30 days prior to its expiration.
- e) Payment under the Letter of Credit: The drawl under the Letter of Credit in respect of a Tariff Invoice (excluding supplementary bills) shall require:
  - i. a copy of the metering statement jointly signed by the official representatives of both the Parties, supporting the payments attributable to the Delivered Energy in respect of such Tariff Invoice.
  - ii. a certificate from the Solar Power Generator stating that the amount payable by MSEDCL in respect of such Tariff Invoice has not been paid and disputed by MSEDCL till the Due Date of Payment of the Tariff Invoice.
- 2) <u>Payment Security Fund –</u> <u>The Payment Security Fund shall be suitable to support payment for at least 3</u>

### 6.6. Disputes:

In the event of a dispute as to the amount of any Tariff Invoice, MSEDCL shall notify the Solar Power Generator of the amount in dispute and MSEDCL shall pay the Solar Power Generator 100% of the undisputed amount within the due date.

The Parties shall discuss within a week from the date on which MSEDCL notifies the Solar Power Generator of the amount in dispute and try and settle the dispute amicably.

If the dispute is not settled during such discussion then the payment made by MSEDCL shall be considered as a payment under protest.

Provided that either party shall have the right to approach the MERC to effect a higher or lesser payment on the disputed amount.

Where any dispute arising out of or in connection with this agreement is not resolved mutually then such dispute shall be submitted for adjudication by the MERC under Section 79 or 86 of the Electricity Act, 2003.

For dispute beyond the power conferred upon the MERC, such dispute shall be subject to jurisdiction of Bombay High Court at Mumbai,

Upon resolution of the dispute, if Solar Power Generator is subsequently found to have overcharged, then it shall return the overcharged amount with an interest of SBI 1 year Marginal Cost of Funds Based Lending Rate (MCLR) per annum plus 1.25% for the period it retained the additional amount.

MSEDCL / Solar Power Generator shall not have the right to challenge any Tariff Invoice, or to bring any court or administrative action of any kind questioning/modifying a Tariff Invoice after a period of three years from the date of the Tariff Invoice is due and payable.

# Article 7: METERING AND COMMUNICATION

### 7.1. Reading and Correction of Meters

- i. The metering point will be shall be at 11 / 22 kV level substation of MSEDCL.
- ii. For the purpose of energy accounting, the ABT compliant meter shall be installed by Solar Power Generator at the metering point. Further, Solar Power Generator shall have to provide ABT Compliant Meters. Interface metering shall conform to the Central Electricity Authority (Installation and Operation of Meters) Regulations 2014 and amendment thereto. STU/MSEDCL shall stipulate specifications in this regard.
- iii. The Solar Power Generator shall bear all costs pertaining to installation, testing, calibration, maintenance, renewal and repair of meters at Delivery Point.
- iv. In the event that the Main Metering System is not in service as a result of maintenance, repairs or testing, then the Backup Metering System/Check Meter shall be used during the period the Main Metering System is not in service and the provisions above shall apply to the reading of the Backup Metering System.

# 7.2. Sealing and Maintenance of Meters.

- i. The Main Metering System and the Backup Metering System shall be sealed in the presence of representatives of Solar Power Generator and MSEDCL.
- ii. When the Main Metering System and / or Backup Metering System/Check Metering System and / or any component thereof is found to be outside the acceptable limits of accuracy or otherwise not functioning properly, it shall be repaired, re-calibrated or replaced by the Solar Power Generator or MSEDCL at Solar Power Generator's cost, as soon as possible.
- iii. Any meter seal(s) shall be broken only by MSEDCL's representative in the presence of Solar Power Generator's representative whenever the Main Metering System or the Backup Metering System is to be inspected, tested, adjusted, repaired or replaced.
- iv. All the Main and Check Meters shall be calibrated at least once in a period of one year.
- v. In case, both the Main Meter and Check Meter are found to be beyond permissible limit of error, both the meters shall be calibrated immediately and the correction applicable to main meter shall be applied to the energy registered by the Main Meter at the correct energy for the purpose of energy accounting / billing for the actual period during which inaccurate measurements were made, if such period can be determined or, if not readily determinable, shall be the shorter of:

- a) the period since immediately preceding test of the relevant Main meter, or
- b) one hundred and eighty (180) days immediately preceding the test at which the relevant Main Meter was determined to be defective or inaccurate.

#### 7.3. Records

Each Party shall keep complete and accurate records and all other data required by each of them for the purposes of proper administration of this Agreement and the operation of the Power Plant. Among such other records and data, the Solar Power Generator shall maintain an accurate and up-to-date operating log at the Power Plant with records of:-

- a) Fifteen (15) minutes logs of real and reactive power generation, frequency, transformer tap position, bus voltage(s), Main Meter and Back up Meter Readings and any other data mutually agreed;
- b) any unusual conditions found during operation / inspections;
- c) chart and printout of event loggers, if any, for system disturbances/ outages;
- d) All the records will be preserved for a period of 36 months.

#### **Article 8: FORCE MAJEURE**

#### **8.1. Force Majeure Events:**

- a) Neither Party shall be responsible or liable for or deemed in breach hereof because of any delay or failure in the performance of its obligations hereunder (except for obligations to pay money due prior to occurrence of Force Majeure events under this Agreement) or failure to meet milestone dates due to any event or circumstance (a "Force Majeure Event") beyond the reasonable control of the Party experiencing such delay or failure, including the occurrence of any of the following:
  - i. acts of God;
  - ii. typhoons, floods, lightning, cyclone, hurricane, drought, famine, epidemic, plague or other natural calamities;
  - iii. acts of war (whether declared or undeclared), invasion or civil unrest;
  - iv. any requirement, action or omission to act pursuant to any judgment or order of any court or judicial authority in India (provided such requirement, action or omission to act is not due to the breach by the Solar Power Generator or MSEDCL of any Law or any of their respective obligations under this Agreement);
  - v. inability despite complying with all legal requirements to obtain, renew or maintain required licenses or Legal Approvals;
  - vi. earthquakes, explosions, accidents, landslides; fire;
  - vii. expropriation and/or compulsory acquisition of the Project in whole or in part by Government Instrumentality;
  - viii. chemical or radioactive contamination or ionizing radiation; or
  - ix. Exceptionally adverse weather condition which are in excess of the statistical measure of the last hundred (100) years.
- b) Force Majeure Exclusions: Force Majeure shall not include the following conditions, except to the extent that they are consequences of an event of Force Majeure:
  - i. Unavailability, Late Delivery or Change in cost of plants and machineries, equipment, materials, spares parts or consumables for the project;
  - ii. Delay in performance of any contractor / sub-contractor or their agents;
  - iii. Non performance resulting from normal wear and tear experience in power generation materials and equipments;
  - iv. Strike or Labour Disturbances at the facilities of affected parties;
  - v. In efficiency of finances or funds or the agreement becoming onerous to perform, and
  - vi. Non performance caused by, or concerned with, the affected party's

- Negligent and intentional acts, errors or omissions;
- Failure to comply with Indian law or Indian Directive; or
- Breach of, or default under this agreement or any Project agreement or Government agreement.
- c) The affected Party shall give notice to other party of any event of Force Majeure as soon as reasonably practicable, but not later than 7 days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If any event of Force Majeure results in a breakdown of communication rendering it not reasonable to give notice within the applicable time limit specified herein, then the party claiming Force Majeure shall give notice as soon as reasonably practicable after reinstatement of communication, but not later than one day after such reinstatement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed, and the Affected Party shall give the other Party regular (and not less than monthly) reports on the progress of those remedial measures and such other information as the other party may reasonably request about the situation.
- d) The affected Party shall give notice to the other Party of (1) cessation of relevant event of Force Majeure; and (2) cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this agreement, as soon as practicable after becoming aware of each of these cessations.
- e) To the extent not prevented by a Force Majeure event, the affected party shall continue to perform its obligations pursuant to this agreement. The affected party shall use its reasonable efforts to mitigate the effect of any event of Force Majeure as soon as practicable.

# 8.2. Available Relief for a Force Majeure Event:

- a) No Party shall be in breach of its obligations pursuant to this Agreement except to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure event. However, adjustment in tariff shall not be allowed on account of Force Majeure event.
- b) For avoidance of doubt, neither Party's obligation to make payments of money due and payable prior to occurrence of Force Majeure events under this Agreement shall be suspended or excused due to the occurrence of a Force Majeure Event in respect of such Party.
- c) Provided that no payments shall be made by either Party affected by a Force Majeure Event for the period of such event on account of its inability to perform its obligations due to such Force Majeure Events

#### Article 9: CHANGE IN LAW

#### 9.1. Definitions In this Article 9, the following terms shall have the following meanings:

"Change in Law" shall refer to the occurrence of any of the following events after the last date of the bid submission, including (i) the enactment of any new law; or (ii) an amendment, modification or repeal of an existing law; or (iii) the requirement to obtain a new consent, permit or license; or (iv) any modification to the prevailing conditions prescribed for obtaining an consent, permit or license, not owing to any default of the Solar Power Generator; or (v) any change in the rates of any Taxes, Duties and Cess which have a direct effect on the Project. However, Change in Law shall not include any change in taxes on corporate income or any change in any withholding tax on income or dividends.

#### 9.2. Relief for Change in Law

- 9.2.1 In the event a Change in Law results in any adverse financial loss/ gain to the Solar Power Generator then, in order to ensure that the Solar Power Generator is placed in the same financial position as it would have been had it not been for the occurrence of the Change in Law, the Solar Power Generator/ Procurer shall be entitled to compensation by the other party, as the case may be, subject to the condition that the quantum and mechanism of compensation payment shall be determined and shall be effective from such date as may be decided by the MERC.
- 9.2.2 If a Change in Law results in the Solar Power Generator's costs directly attributable to the Project being decreased or increased by one percent (1%), of the estimated revenue from the Electricity for the Contract Year for which such adjustment becomes applicable or more, during Operation Period, the Tariff Payment to the Solar Power Generator shall be appropriately increased or decreased with due approval of MERC.
- 9.2.3 The Power Procurer / MSEDCL or the Solar Power Generator, as the case may be, shall provide the other Party with a certificate stating that the adjustment in the Tariff Payment is directly as a result of the Change in Law and shall provide supporting documents to substantiate the same and such certificate shall correctly reflect the increase or decrease in costs.
- 9.2.4 The revised tariff shall be effective from the date of such Change in Law as approved by MERC, the Parties hereto have caused this Agreement to be executed by their fully authorized officers, and copies delivered to each Party, as of the day and year first above stated.
- 9.2.5 For the excess amount to be recovered against the approved change in Law events, shall not attract any carrying costs or any other interest on such amount.

#### Article 10: TERM, TERMINATION AND DEFAULT

#### **10.1.** Term of the Agreement:

This Agreement shall become effective upon the execution and delivery thereof by the Parties hereto and unless terminated pursuant to other provisions of the Agreement, shall continue to be in force for such time until the completion of a period of 25 years from the Commercial Operation Date of proposed / new solar power projects. This Agreement may be extended for a further period on mutually agreed terms and conditions at least one hundred eighty (180) days prior to the Expiry Date.

#### 10.2. Survival:

The expiry or termination of this Agreement shall not affect any accrued rights, obligations and liabilities of the Parties under this Agreement, including the right to receive penalty as per the terms of this Agreement, nor shall it affect the survival of any continuing obligations for which this Agreement provides, either expressly or by necessary implication, which are to survive after the Expiry Date or termination including those under Article 8 (Force Majeure), Article 10 (Events of Default and Termination), Article 11 (Dispute Resolution), Article 12 (Indemnity), Article 13 (Miscellaneous Provisions), and other Articles and Schedules of this Agreement which expressly or by their nature survive the Term or termination of this Agreement shall continue and survive any expiry or termination of this Agreement

#### **10.3.** Events of Default and the consequences thereof:

#### 10.3.1 Solar Power Generator's Default:

The occurrence of any of the following events at any time during the Term of this Agreement shall constitute an Event of Default by Solar Power Generator:

- a) Failure to commission the project by scheduled commercial operation date or fails to supply power in terms of the PPA, or assigns or novates any of its rights or obligations contrary to the terms of the PPA.
- b) O&M Default on part of Solar Power Generator.
- c) Failure or refusal by Solar Power Generator to perform any of its material obligations under this Agreement including but not limited to financial closure.
- d) Solar Power Generator fails to make any payment required to be made to Power Procurer under this agreement within three (3) months after the due date of a valid invoice raised by MSEDCL on the Solar Power Generator.
- e) If the Solar Power Generator (i) assigns or purports to assign its assets or rights in violation of this agreement; or (ii) transfers or novates any of its rights and / or obligations under this agreement, in violation of this agreement.
- f) If the Power producer becomes voluntarily or involuntarily the subject of proceeding under any bankruptcy or insolvency laws or goes into liquidation Page 28

or dissolution or has a receiver appointed over it or liquidator is appointed, pursuant to Law, except where such dissolution of the Solar Power Generator is for the purpose of a merger, consolidated or reorganization and where the resulting entity has the financial standing to perform its obligations under this Agreement and creditworthiness similar to the Solar Power Generator and expressly assumes all obligations under this agreement and is in a position to perform them; or

- g) The Solar Power Generator repudiates this agreement.
- h) Change in controlling shareholding before the specified time frame as mentioned in the RfS.
- i) Occurrence of any other event which is specified in this Agreement to be a material breach / default of the Solar Power Generator.
- 10.3.2 Upon being in default, the Solar Power Generator shall be liable to pay MSEDCL, damages, as detailed in the PPA, the Procurer shall have the right to recover the said damages by way of forfeiture of bank guarantee without prejudice to resorting to any other legal course or remedy.
- 10.3.3 In addition to the levy of damages as aforesaid, in the event of a default by the Solar Power Generator, the lenders shall be entitled to exercise their rights of substitution, in accordance with the substitution agreement provided in the PPA and in concurrence with the Procurers. <u>However, in the event the lenders are unable to substitute the defaulting Solar Power Generator within the stipulated period, the Procurer may terminate the PPA and acquire the Project assets for an amount equivalent to 90% of the debt due, failing which, the lenders may exercise their mortgage rights and liquidate the Project assets.</u>

#### 10.3.4 MSEDCL's Default:

(a) If MSEDCL is in default on account of reasons including inter alia:

- (i) Default by MSEDCL in performing its obligation under this agreement,
- (ii) Failure to pay the monthly and / or supplementary bills beyond 90 days,

(iii) If MSEDCL becomes voluntarily or involuntarily the subject of proceeding under any bankruptcy or insolvency laws or goes into liquidation or dissolution or has a receiver appointed over it or liquidator is appointed, pursuant to Law, except where such dissolution of MSEDCL is for the purpose of a merger, consolidation or reorganization and where the resulting entity has the financial standing to perform its obligations under this Agreement and creditworthiness similar to MSEDCL and expressly assumes all obligations under this agreement and is in a position to perform them.

The defaulting Procurer shall, subject to the prior consent of the Solar Power Generator, novate its part of the PPA to any third party, including its Affiliates within the stipulated period. (b) In the event the aforesaid novation is not acceptable to the Solar Power Generator, or if no offer of novation is made by the defaulting Procurer within the stipulated period, then the Solar Power Generator may terminate the PPA and at its discretion require the defaulting Procurer to either:

*i)* takeover the project assets by making a payment of the termination compensation equivalent to the amount of the debt due and the 150% (one hundred and fifty per cent) of the adjusted equity as detailed in the PPA or

*ii)* pay to the Solar Power Generator, damages, equivalent to 6 (six) months, or balance PPA period whichever is less, of charges for its contracted capacity, with the project assets being retained by the Solar Power Generator.

(c) In the event of termination of PPA, any damages or charges payable to the STU, for the connectivity of the plant, shall be borne by MSEDCL.

#### **10.4.** Termination:

#### 10.4.1 Termination for Solar Power Generator's Default:

Upon the occurrence of an event of default as set out in sub-clause 10.3.1 above, MSEDCL may deliver a Default Notice to the Solar Power Generator in writing which shall specify in reasonable detail the Event of Default giving rise to the default notice, and calling upon the Solar Power Generator to remedy the same.

At the expiry of 30 (thirty) days from the delivery of this default notice and unless the Parties have agreed otherwise, or the Event of Default giving rise to the default notice has been remedied, MSEDCL may deliver a Termination Notice to the Solar Power Generator. MSEDCL may terminate this Agreement by delivering such a Termination Notice to the Solar Power Generator and intimate the same to the MERC. Upon delivery of the Termination Notice this Agreement shall stand terminated and MSEDCL shall stand discharged of all its obligations. The Solar Power Generator shall have liability to make payment within 30 days from the date of termination notice towards compensation to MSEDCL equivalent to three years billing based on normative Capacity Utilization Factor of 19%.

Where a Default Notice has been issued with respect to an Event of Default, which requires the co-operation of both MSEDCL and the Solar Power Generator to remedy, MSEDCL shall render all reasonable co-operation to enable the Event of Default to be remedied without any legal obligations.

#### 10.4.2 Termination for MSEDCL's Default:

Upon the occurrence of an Event of Default as set out in sub-clause 10.3.4 above, the Solar Power Generator may deliver a Default Notice to MSEDCL in writing which shall specify in reasonable detail the Event of Default giving rise to the Default Notice, and calling upon MSEDCL to remedy the same.

At the expiry of 30 (thirty) days from the delivery of the Default Notice and unless the Parties have agreed otherwise, or the Event of Default giving rise to the Default Notice has been remedied, the Solar Power Generator may serve a "Suspension Notice" to MSEDCL for a duration not exceeding one year ("Suspension Period").

During the "Suspension Period" mentioned herein above, MSEDCL shall allow the Solar Power Generator to sell power from the project, to any third party, in the open market either by finding the said consumers on its own or through any Central / State power trading utilities. In case of wheeling of power to such third parties, the transmission charges, transmission losses, wheeling charges and losses SLDC charges and cross subsidy surcharge etc. shall be applicable as per MERC's regulation in force from time to time and paid directly to respective agencies by third party. No banking facility shall be allowed to Solar Power Generator and third parties.

Till expiry of the Suspension Period, MSEDCL will be entitled to cure its default and buy power from the Solar Power Generator. In the event MSEDCL fails to cure the default, the Solar Power Generator may terminate this Agreement by delivering a Termination Notice to MSEDCL / its successor entity and in such an event MSEDCL shall have liability to make payment within 30 days from the date of termination notice toward compensation to Solar Power Generator equivalent to 6 (six) months, or balance PPA period whichever is less, of charges for its contracted capacity on normative CUF of 19%., with the Project assets being retained by the Solar Power Generator.

#### **Article 11: DISPUTE RESOLUTION**

- **11.1.** All disputes or differences between the Parties arising out of or in connection with this Agreement shall be first tried to be settled through mutual negotiation.
- **11.2.** The Parties hereto agree to attempt to resolve all disputes arising hereunder promptly, equitably and in good faith.
- **11.3.** Each Party shall designate in writing and communicate to the other Party its own representative who shall be authorized to resolve any dispute arising under this Agreement in an equitable manner and, unless otherwise expressly provided herein, to exercise the authority of the Parties hereto to make decisions by mutual agreement.
- **11.4.** In the event that such differences or disputes between the Parties are not settled through mutual negotiations within sixty (60) days, after such dispute arises, then it shall be adjudicated by MERC in accordance with Law.

#### **Article 12: INDEMNITY**

- **12.1.** Solar Power Generator's Indemnity: The Solar Power Generator agrees to defend, indemnify and hold harmless MSEDCL, its officers, directors, agents, employees and affiliates (and their respective officers, directors, agents and employees) from and against any and all claims, liabilities, actions, demands, judgments, losses, costs, expenses, suits, actions and damages arising by reason of bodily injury, death or damage to property sustained by third parties that are caused by an act of negligence or the willful misconduct of the Solar Power Generator, or by an officer, director, sub-contractor, agent or employee of the Solar Power Generator except to the extent of such injury, death or damage as is attributable to the willful misconduct or negligence of, or breach of this Agreement by, MSEDCL, or by an officer, director, sub-contractor, agent or employee of the MSEDCL.
- **12.2. MSEDCL's Indemnity**: MSEDCL agrees to defend, indemnify and hold harmless the Solar Power Generator, its officers, directors, agents, employees and affiliates (and their respective officers, directors, agents and employees) from and against any and all claims, liabilities, actions, demands, judgments, losses, costs, expenses, suits, actions and damages arising by reason of bodily injury, death or damage to property sustained by third parties that are caused by an act of negligence or the willful misconduct of MSEDCL, or by an officer, director, subcontractor, agent or employee of MSEDCL except to the extent of such injury, death or damage as is attributable to the willful misconduct or negligence of, or breach of this Agreement by, the Solar Power Generator, or by an officer, director, sub-contractor, agent or employee of the Solar Power Generator.

#### **Article 13: MISCELLANEOUS PROVISIONS**

- **13.1.** Governing Law: This Agreement shall be interpreted, construed and governed by the Laws of India.
- **13.2. Insurance**: The Solar Power Generator shall obtain and maintain necessary policies of insurance during the Term of this Agreement consistent with Prudent Utility Practice.
- **13.3.** Books and Records: The Solar Power Generator shall maintain books of account relating to the Project in accordance with generally accepted Indian accounting principles.
- **13.4.** Waivers: Any failure on the part of a Party to exercise, and any delay in exercising, exceeding three years, any right hereunder shall operate as a waiver thereof. No waiver by a Party of any right hereunder with respect to any matter or default arising in connection with this Agreement shall be considered a waiver with respect to any subsequent matter or default.
- **13.5.** Limitation Remedies and Damages: Neither Party shall be liable to the other for any consequential, indirect or special damages to persons or property whether arising in tort, contract or otherwise, by reason of this Agreement or any services performed or undertaken to be performed hereunder.
- **13.6.** Notices: Any notice, communication, demand, or request required or authorized by this Agreement shall be in writing and shall be deemed properly given upon date of receipt if delivered by hand or sent by courier, if mailed by registered or certified mail at the time of posting to :

In case of the Solar Power Generator:

Name:	
Designation:	Address :
Ph. Nos.:	
Email address <u>:</u>	

In case of Maharashtra State Electricity Distribution Company Limited: Designation: Chief Engineer (RE) Address: 5<sup>th</sup> Floor, Prakashgad, Bandra (East), Mumbai – 400 051. Ph. Nos.: 022- 26474211 Email address:

#### 13.7. Severability:

Any provision of this Agreement, which is prohibited or unenforceable in any jurisdiction, shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without

invalidating the remaining provisions hereof and without affecting the validity, enforceability or legality of such provision in any other jurisdiction.

#### 13.8. Amendments:

This Agreement shall not be amended, changed, altered, or modified except by a written instrument duly executed by an authorized representative of both Parties. However, MSEDCL may consider any amendment or change that the Lenders may require to be made to this Agreement.

#### 13.9. Assignment:

Neither Party shall assign this Agreement or any portion hereof without the prior written consent of the other Party, provided further that any assignee shall expressly assume the assignor's obligations thereafter arising under this Agreement pursuant to documentation satisfactory to such other Party. However, such assignment shall be permissible only for entire contracted capacity.

<u>Provided however, no approval is required from MSEDCL for the assignment by the Solar Power</u> <u>Generator of its rights herein to the Financing Parties and their successors and assigns in</u> <u>connection with any financing or refinancing related to the construction, operation and</u> <u>maintenance of the Project.</u>

In furtherance of the foregoing, MSEDCL acknowledges that the Financing Documents may provide that upon an event of default by the Solar Power Generator under the Financing Documents, the Financing Parties may cause the Solar Power Generator to assign to a third party the interests, rights and obligations of the Solar Power Generator thereafter arising under this Agreement. MSEDCL further acknowledges that the Financing Parties, may, in addition to the exercise of their rights as set forth in this Section, cause the Solar Power Generator to sell or lease the Project and cause any new lessee or purchaser of the Project to assume all of the interests, rights and obligations of the Solar Power Generator thereafter arising under this Agreement.

#### **13.10. Entire Agreement, Appendices:**

This Agreement constitutes the entire agreement between MSEDCL and the Solar Power Generator, concerning the subject matter hereof. All previous documents, undertakings, and agreements, whether oral, written, or otherwise, between the Parties concerning the subject matter hereof are hereby cancelled and shall be of no further force or effect and shall not affect or modify any of the terms or obligations set forth in this Agreement, except as the same may be made part of this Agreement in accordance with its terms, including the terms of any of the appendices, attachments or exhibits. The appendices, attachments and exhibits are hereby made an integral part of this Agreement and shall be fully binding upon the Parties.

In the event of any inconsistency between the text of the Articles of this Agreement and the appendices, attachments or exhibits hereto or in the event of any inconsistency between the provisions and particulars of one appendix, attachment or exhibit and those of any other appendix, attachment or exhibit MSEDCL and the Solar Power Generator shall consult to resolve the inconsistency.

#### **13.11. Further Acts and Assurances:**

Each of the Parties after convincing itself agrees to execute and deliver all such further agreements, documents and instruments, and to do and perform all such further acts and things, as shall be necessary or convenient to carry out the provisions of this Agreement and to consummate the transactions contemplated hereby.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their fully authorized officers, and copies delivered to each Party, as of the day and year first above stated.

FOR AND ON BEHALF POWER GENERATOR M/S.	OF SOLAR	FOR AND ON BEHALF OF
TOWER GENERATOR M/S.		MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED
Authorised Signatory		MSEDCL
WITNESSES		WITNESSES
<b>1.</b> ()	_	<b>1.</b> ()
2	-	2

### SCHEDULE 1: PARAMETERS AND TECHNICAL LIMITS OF SUPPLY

#### 1. Electrical characteristics

Three phase alternating current
 Nominal declared frequency : 50.0 Hz
 Final Voltage at Delivery Point: kV

Short circuit rating: As a part of the detailed design process, the Solar Power Generator shall calculate the short circuit rating (minimum and maximum), and supply this information to the MSEDCL.

**Note:** The tolerances & Electrical characteristics variations and Basic Insulation level will be as per relevant grid code and CEA standards.

# 2. Quality of Service

The Power Producer shall be responsible for the delivery of energy conforming Performance Standards for Transmission and Bulk Supply as approved by MERC.

The maximum current and voltage waveform distortion shall be in accordance with the limits prescribed under Central Electricity Authority (Grid Standards) Regulations 2010, as amended from time to time.

# 3. **Power Factor:**

The Generator shall maintain the Power Factor as per the prevailing MERC/CERC regulations and as may be stipulated / specified by STU/MSEDCL from time to time. The Solar Power Generator shall provide suitable protection devices, so that the Electric Generators could be isolated automatically when grid supply fails.

Connectivity criteria like short circuit level (for switchgear), neutral Grounding, fault clearance time, current unbalance (including negative and zero sequence currents), limit of harmonics etc. shall be as per Grid Code.

# **SCHEDULE 2: TECHNICAL LIMITS**

- 1. The nominal steady state electrical characteristics of the system are as follows:
  - a) Three phase alternating current at 50 Hertz plus or minus 0.5 Hertz
  - b) Nominal voltage of 11/22\_kV with 6% on higher side to 9% on the lower side variation.
- 2. The Project shall be designed and capable of being synchronized and operated within a frequency range as per relevant Grid Code and voltage of 11/22 kV
- 3. Operation of the Project outside the nominal voltage and frequency specified above will result in reduction of power output consistent with generator capability curves.

# **SCHEDULE 3: APPROVALS**

- 1. Consent from the STU /MSEDCL for the evacuation scheme for evacuation of the power generated by the \_\_\_\_ MW Solar Photovoltaic Grid Interactive Power Projects.
- 2. Approval of the Electrical Inspectorate, Government of Maharashtra for commissioning of the transmission line and the solar project installed at the Project Site.
- 3. Certificate of Commissioning of the Solar Photovoltaic Grid Interactive Power Project issued by STU/MSEDCL/SLDC/MEDA.
- 4. SNA/MEDA registration certificate.
- 5. Permission from all other statutory and non-statutory bodies required for the Project.
- 6. Clearance from Department of Forest, Ecology and Environment, if required

# Appendix-A-1

- i) The Solar Power Generator shall give to the concerned SLDC, State Nodal Agency (SNA) and MSEDCL at least Thirty (30) days advance written notice, of the date on which it intends to synchronize the Power Project to the Grid System. The Solar Power Generator shall be solely responsible for any delay or non-receipt of the notice by the concerned agencies, which may in turn affect the Commissioning Schedule of the Project.
- ii) A Solar PV Project will be considered as commissioned if all equipment as per rated project capacity has been installed and energy has flown into the grid.
- iii) Solar Power Generator shall ensure that the equipment up to the rated Capacity has been installed and completed in all respects before the Schedule Commissioning Date.

# Documents to be submitted to MSEDCL within 30 days after synchronization:

The Solar Power Generator shall have to submit the hardcopies to MSEDCL:

- 1. Covering Letter
- 2. Board resolution for authorized signatory.
- 3. Invoice of the major equipment (including but not limited to modules, Inverters/PCUs, Weather Monitoring Stations/ DC Cables and for all the equipment's).
- 4. All supporting documents towards meeting the technical compliance along with datasheet/ warranty certificates/ contract agreement etc. as mentioned in Annexure-A.
- 5. Installation report duly signed by the authorized signatory as per Appendix-A-2
- 6. Plant Layout clearly mentioning the details of rows and number of modules in each row.
- 7. Electrical inspector report along with all annexures/attachments. It would be the responsibility of the Solar Power Generator to collect the certificate.
- 8. Solar Power Generator shall ensure Connectivity to the grid from concerned STU/ Transmission Utility/MSEDCL. Connectivity report as per the Appendix-A-3
- 9. Synchronization Certificate as per prescribed format issued by respective STU/Transmission Utility/MSEDCL for ascertaining injection of power into grid as per Appendix-A-4.
- 10. Relevant document from SLDC acknowledging successful data communication between plant end and SLDC.
- iv) In case any additional supporting/revised documents are asked by MSEDCL, the same have to be submitted/uploaded by the Solar Power Generator.
- v) The Solar Power Generator shall have to submit commissioning date along with commissioning order issued by State Nodal Agency/State Utility.
- vii) Early Commissioning of a Solar Project prior to the scheduled commissioning date is permitted on acceptance of power by MSEDCL. In order to facilitate this, shall inform the concerned SLDC and MSEDCL well in advance the date on which it intends to synchronize the Power Project to the Grid System. The SOLAR POWER GENERATOR shall be required to give an advance notice of at least 90 days prior to the proposed commissioning date.
- xi) Joint Meter Reading (JMR) shall be taken at Delivery Point and Pooling Substation (if applicable)/plant premise at the time of connectivity of the Project with Grid. This shall include information of respective meters installed at delivery/ interconnection point and pooling substation/plant premises.

# Appendix-A-2

# **Installation Report**

(To be provided by SOLAR POWER GENERATOR and to be submitted at least 10 days prior to commissioning date by Appropriate Authority of State)

Sr. No.	Consists of the Duriest (MW)		
SI. INO.	Capacity of the Project (MW)		
	Capacity already commissioned (MW)		
	Capacity proposed to be commissioned (MW)		
I.	Technology used		
	(Mono/Multi Crystalline / thin film / Others; please specify along with capacity of each type)		
II.	Rating of the each module (Wp)		
III.	Angle from horizontal at which array is installed		
IV.	Number of modules installed of each type		
V.	Source(s) of the cells installed of each type		
VI.	Source(s) of the Modules installed of each type		
VII.	Number of PCUs / Inverters installed		
VIII.	Source of the PCUs / Inverters (Name of supplier with address)		
IX.	Rating of PCUs / Inverters		
Х.	Date of installation of full capacity (as per capacity proposed to be commissioned)		
	PV arrays		
	PCUs / Inverters		
	Transformers		

# Sample Connectivity Report

(To be provided by concerned STU/Transmission Utility/MSEDCLs)

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

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

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

S. No	Name of Solar Power Generator	Capacity Mentioned in PPA	Connectivity	Details of Solar Power Plant (Transformer, Inverter, Modules, Switchgear)
	& Location			
1	<m s=""></m>	<> MW	Metering Detail at Delivery	Transformer
			Point	
	<village></village>			<make type:=""></make>
			( <village>)</village>	
	<tehsil></tehsil>			<sr. no.=""></sr.>
			S.No. of $\langle kV \rangle$ CT	Inverters
	<district.< td=""><td></td><td></td><td><make type:=""></make></td></district.<>			<make type:=""></make>
			i) <r- phase=""></r->	
			ii) <y-phase></y-phase>	<sr. no.=""></sr.>
			iii) <b- phase=""></b->	
				Modules <make:></make:>
			S.No. of $\langle kV \rangle$ PT	
				<w>, &lt; W &gt;</w>
			i) <r- phase=""></r->	
			ii) <y-phase></y-phase>	<total: nos.=""></total:>
			iii) <b- phase=""></b->	Switchgear Panels
				<make type:=""></make>
			S.No. of Main <abt></abt>	
			Meter>	<sr. no.=""></sr.>
			S.No. of Check <abt< td=""><td>Protection Provided:</td></abt<>	Protection Provided:
			Meter>	Under/Over voltage,
			Metering Equipment	Over current & Earth fault.
			installed at Receiving end	
			on dated: <>	

The Commissioning date of various equipment is as under:  $\langle kV \rangle$  line from --- to -----, completed on date -----. Line Bay at  $\langle kV \rangle$  GSS, ----- charged for ---- on -----.  $\langle kV \rangle$  line charged from -----to------ on date-----. Main & check metering commissioned on ..... (initial record of main/Check meters at the time of Commissioning is to be taken and enclosed) Complete system commissioned on date------

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

# Appendix-A-4

# Sample Synchronization Certificate

It is certified that ----- MW (Capacity) Solar Photovoltaic Power Project of M/s. -----, Village -

----- Tehsil/Taluka ------, District ----- was Grid connected on ...... (Date) at---------- Hrs.

It is further certified that the Project was synchronized and supply of power into the grid from the

Project connected on ..... (Date) at ------ Hrs.

The above certificate is issued on the basis of MRI record. NB: (i) The above certificate shall be issued by concerned STU/ Transmission Utility/MSEDCLs (ii) Copy of duly signed MRI is to be enclosed.

# Appendix-A-5

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

This is to certify that <M/s> having its registered office at ------ has successfully commissioned Capacity < MW > out of total <MW> installed Capacity on (Date) of their Solar PV Power Generation Project at Village -----, Tehsil/Taluka ------ & Dist. ----- The Commissioning Certificate has been issued on the basis of the following documents enclosed:

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

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

### SCHEDULE 4: SPECIFICATION OF ELECTRICAL ENERGY DELIVERY

- The generation voltage from the Solar Photovoltaic Grid Interactive Power Project of M/s.
   \_\_\_\_\_\_ is \_\_\_\_\_ KV. It uses unit connection of generator, generator transformer and unit transformer.
- 2. The generated power at \_\_\_\_ KV will be stepped up to \_\_\_\_\_ KV at the Project Site and connected \_\_\_ KV at for the purpose of interconnection with the Grid System.