

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED**

**POWER PURCHASE AGREEMENT**

**FOR PURCHASE OF POWER THROUGH COMPETITIVE BIDDING PROCESS FOLLOWED BY REVERSE E-AUCTION FROM GRID CONNECTED WIND-SOLAR HYBRID POWER PROJECTS AT IDENTIFIED SITES**

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This Power Purchase Agreement is made and entered into at Mumbai on this day of ---- 2018 between M/s----- Company having its registered office -----at -----India (hereinafter referred to as "Hybrid Power Developer", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees) as party of first 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 ELCTRICITY 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 / Wind-Solar Hybrid Power/T-1 dated 02.01.2019 has floated tender for procurement power from Wind-Solar Hybrid Power Projects through Competitive Bidding (followed by e-reverse auction) and the Hybrid Power Developer has been declared Successful Bidder pursuant to Letter of Award (LoA) dated ..... for development of Wind-Solar Hybrid Power Project of .....MW capacity located at the identified site and sale of entire of electrical energy, so produced, for commercial purposes from such Power Plant to MSEDCL.

AND, WHEREAS the Hybrid Power Developer has furnished Performance Bank Guarantee

no..... dated ..... amounting to Rs. XX Crore (Calculated at Rs. 23 Lakh / MW) as per the RfS No. MSEDCL / Wind-Solar Hybrid Power/T-1 dated 02 dated 02.01.2019.

AND, WHEREAS the Hybrid Power Developer desires to set-up Wind-Solar based Hybrid Power Plant at identified sites mentioned in the Schedule 5.

AND, WHEREAS the Hybrid Power Developer has taken responsibility to set up requisite power injection system into MSETCL/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 Hybrid Power Developer 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 HYBRID POWER DEVELOPER, EACH TOGETHER WITH THEIR RESPECTIVE SUCCESSORS AND PERMITTED ASSIGNS, A PARTY AND COLLECTIVELY THE PARTIES, HEREBY AGREE AS FOLLOWS:

## ARTICLE 1. DEFINITIONS

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

**"Agreement" or "PPA"** shall mean this Power Purchase Agreement, if not defined explicitly, 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.

**"Competent Court"** means the Supreme Court of India or any High Court, or any tribunal or any similar judicial or quasi-judicial body that has jurisdiction in relation to issues relating to the Project.

**"Contracted Capacity"** shall mean the capacity (in MW AC) contracted with MSEDCL for supply by the successful bidder at the Delivery Point of the respective site from the Wind-Solar Hybrid Power Project which shall be equal to \_\_\_\_\_ MW and specified in Schedule 5B.

**"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.

**"Capacity Utilisation Factor (CUF)"** shall have the ratio of actual gross energy generated by the project to the equivalent energy output at its rated capacity over the year;

**"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/ MSETCL.

**"Delivery Point/ Interconnection Point"** shall mean the point(s) of connection(s) at which energy is delivered into the Grid System: metering shall be at the 33 kV bus of pooling substation of MSEDCL/Maharashtra State Electricity Transmission Company limited (MSETCL).

**"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 Capacity Utilization Factor (Effective CUF)"** means ratio of the actual energy supplied from a hybrid plant over the year to the maximum possible energy that can be supplied against the declared project capacity at delivery point in a year and as specified in Article 5.2.1 of this PPA, e.g. In any Contract Year, if 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity, effective CUF=  $(X \text{ MWh} / (Y \text{ MW} * 8760)) * 100\%$ ;

**"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 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 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 Scheduled Commercial Operation Date.

**“Financial Closure”** or **“Project Financing Arrangements”** shall mean arrangement of necessary funds by the Hybrid Power Developer 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 Documents”** mean the agreements and documents (including asset leasing arrangements) entered/to be entered into between the Hybrid Power Developer and the Financing Parties relating to the financing of the Project.

**“Financing Parties”** shall mean the parties financing the Project, pursuant to the Financing Documents.

**“Force Majeure Event”** shall have the meaning set forth in ARTICLE 8.

**“Gol”** 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 Gol, the GoM and their ministries, inspectorate, departments, agencies, bodies, authorities, legislative bodies.

**“Grid System”** shall mean STU / Discom’s power transmission system / distribution system through which Delivered Energy is evacuated and distributed.

**“Hybrid Power Project”** means the wind-solar hybrid power project where the rated power capacity of one resource is at least 25% of the rated power capacity of the other resource.

**“HPD”** or **“Hybrid Power Developer”** means the Bidding Company or a Bidding Consortium participating in the bid and having been selected and allocated a hybrid project capacity by MSEDCL through a competitive bidding process.

**“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 Hybrid Power Developer for award of the Contract.

**“MERC”** means the Maharashtra Electricity Regulatory Commission.

**“MEDA”** shall mean Maharashtra Electricity Development Agency

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

**“Metering Point”** shall mean the point at which energy shall be measured and supplied to MSEDCL, metering shall be at the 33 kV bus of substation of MSEDCL/MSETCL. For the purpose of energy accounting Hybrid Power Developer would install ABT compliant meter at the metering point.

**“MNRE”** means the Ministry of New and Renewable Energy.

**“Monthly Charge”** shall have the meaning set forth in ARTICLE 5.

**“MRI”** shall mean Meter Reading Instrument.

**“MW”** means MegaWatt

**“O & M Default”** shall mean any default on the part of the Hybrid Power Developer 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 Hybrid Power Developer as per the RfS No. MSEDCL / Wind-Solar Hybrid Power/T-1 dated 02 dated 02.01.2019.

**“Project”** shall mean a Wind-Solar Hybrid Power Grid Interactive Power Station to be established by the successful bidder in line with the Wind – Solar Hybrid Policy, on the identified site(s) in Maharashtra, and shall include land, buildings, plant, machinery, ancillary equipment, material, switch-gear, transformers, protection equipment and the like necessary to deliver the Electricity generated by the Projects 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 the location details specified as per SCHEDULE 5, upon which the Project and its related infrastructure will be located as described in Schedule 1 hereto.

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

**"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 1<sup>st</sup> 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.

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

**“Scheduled COD” or “Scheduled Commercial Operation Date”** shall mean the date ..... *(Insert a date within 15 months from the date of execution of the PPA)* as declared by the Hybrid Power Developer.

**“SLDC”** means the State load dispatch center

**“SNA”** shall mean State Nodal Agency which is MEDA for the purpose of the implementation of the Wind-Solar Hybrid Projects.

**“STU or State Transmission Utility” or “Mahatransco”** shall mean the Maharashtra State Energy Transmission Company Limited (MSETCL).

**“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.

**“Wind-Solar Hybrid Policy”** means the National Wind-Solar Hybrid Policy dated 14<sup>th</sup> May, 2018 issued by Ministry of New and Renewable Energy along with the amendment issued on 13<sup>th</sup> August 2018 and further such amendments.

## **1.2. 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 Discom (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 Hybrid Power Developer, 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 Hybrid Power Developer:

- i. HPD shall develop the wind and solar projects at the site with the proportion as specified in the MNRE's National Wind Solar Hybrid policy dated 14<sup>th</sup> May, 2018.
- ii. The Hybrid Power Developer shall obtain all statutory approvals, consents, clearances and permits required for the Project as per the terms of this Agreement, at its cost in addition to those Approvals as listed in SCHEDULE 3.
- iii. The Hybrid Power Developer shall obtain financial closure within nine (9) months from date of execution of this PPA.

An extension for the attainment of the financial closure can however be considered by MSEDCL, on the sole request of the Hybrid Power Developer, on submission of a fresh Performance Bank Guarantee (PBG) with the same conditions, value and validity. This extension will not have any impact on the Scheduled Commissioning Date (SCOD). However, such amount of encashed PBG shall be returned to the Hybrid Power Developer without any interest within a period of 30 days of achievement of successful commissioning provided such commissioning is within the Scheduled Commissioning Date (SCOD) on pro-rata basis, based on the Project Capacity commissioned on SCOD.

- iv. The Hybrid Power Developer 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.
- v. The Hybrid Power Developer shall sell all available capacity from identified Wind-Solar Grid-Interactive Hybrid Power Plants to the extent of contracted capacity on first priority basis to MSEDCL and not to sell to any third party.
- vi. The Hybrid Power Developer shall obtain approval of STU/MSEDCL in respect of Grid Connectivity within 9 (nine) months from the date of execution of this PPA.
- vii. The Hybrid Power Developer 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.
- viii. All expenses including wheeling charges and losses between the Project and the Delivery Point shall be paid by the Hybrid Power Developer without any

reimbursement by MSEDCL. All expenses including wheeling charges and losses in relation to the transmission and distribution beyond the Delivery Point shall be borne by MSEDCL.

- ix. The Hybrid Power Developer shall undertake at its own cost maintenance of the Interconnection Facilities, excluding the transmission line beyond the STU's Sub-Station as per the specifications and requirements of STU/ MSEDCL, as notified to the Hybrid Power Developer, in accordance with Prudent Utility Practices.
- x. The Hybrid Power Developer shall operate and maintain the Project in accordance with Prudent Utility Practices.
- xi. The Hybrid Power Developer shall utilise the land only for the purpose of development of Hybrid project under this PPA from which the power is required to be supplied to MSEDCL. No other activity will be allowed to be carried out other than as specified above.
- xii. The Hybrid Power Developer shall operate the project, as per prevailing MERC Regulations and IEGC/State Grid Code.
- xiii. The Hybrid Power Developer 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.
- xiv. For evacuation facility and maintenance of the transmission, the Hybrid Power Developer shall enter into separate agreement with STU/MSEDCL, if applicable.
- xv. To apply for start-up power required for the plant from MSEDCL.
- xvi. In case of start-up power or net import of energy during a month, the Hybrid Power Developer shall be required to make payment to MSEDCL at the rate of HT Industrial Tariff as determined by MERC from time to time. In case of net export of energy during a month, the Hybrid Power Developer shall be eligible for the receiving agreed tariff from MSEDCL for such net delivered energy.
- xvii. Fulfilling all other obligations undertaken by him under this Agreement.
- xviii. The Hybrid Power Developer cannot inject power prior to Scheduled Commercial Operation Date from Project / Unit without MSEDCL's consent.

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

- 3.2.1. MSEDCL shall schedule the power as per prevailing MERC Regulations and IEGC/State Grid Code.
- 3.2.2. MSEDCL shall off-take and purchase the electricity generated by Hybrid Power Developer as per the terms and conditions of this Agreement.
- 3.2.3. MSEDCL to open the Letter of Credit as per terms and conditions of this agreement

### **3.3. Liquidated damages for delay in Commissioning the Grid Interactive Power Plant beyond Scheduled Commercial Operation Date**

- 3.3.1. The Projects shall be commissioned within a period of 15 (Fifteen) months from the date of execution of the PPA.
- 3.3.2. The Hybrid Power Developer 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 for the entire term of the PPA. The maximum time period allowed for commissioning of the full Project Capacity with encashment of Performance Bank Guarantee and reduction in the fixed tariff shall be limited to 25 months from the date of PPA or till the Tariff becomes zero, whichever is earlier.

### **3.4. Generation compensation due to evacuation issues at the time of COD:**

- 3.4.1. Upon the occurrence of an Emergency in STU's / MSEDCL evacuation system for safe operation of its Grid, STU / MSEDCL reserves the right to shut down the line and has no obligation to evacuate the power.
- 3.4.2. If plant is ready before Schedule Commercial Operation Date, but the offtake is constrained because of incomplete power evacuation infrastructure, no compensation shall be payable.
- 3.4.3. However, if the plant is ready but necessary evacuation is not ready on Schedule

Commercial operation date, the generation loss shall be calculated as specified in Article 5.2.

- 3.4.4. However, it is clarified that if the plant is ready before SCOD, but the offtake is constrained because of inadequate / incomplete power evacuation infrastructure beyond Delivery Point, no compensation shall be permissible.

## **ARTICLE 4. SYNCHRONISATION, COMMISSIONING AND COMMERCIAL OPERATION**

### **4.1. Synchronization, Commissioning and Commercial Operation**

- 4.1.1. The Hybrid Power Developer shall give written notice to the SLDC/SNA/MSETCL and MSEDCL at least Thirty (30) days in advance 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 Hybrid Power Developer 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 Hybrid Power Developer at its generation facility of the Power Project at its own cost. The Hybrid Power Developer shall synchronize its system with the Grid System only after the approval of STU and SLDC or MSEDCL.
- 4.1.4. The Hybrid Power Developer 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 15 (Fifteen) months from the date of execution of the PPA.
- 4.1.6. Part commissioning of the Project shall be accepted by MSEDCL subject to the condition that the Minimum Capacity for acceptance of first and subsequent part(s) commissioning shall be 50% of the capacity specified by the bidder in its bid for the site, without prejudice to the imposition of penalty, in terms of the PPA on the part which is not commissioned. Further, the installed capacity at a site shall be given the status of part commissioned only if it fulfills the configuration criteria as per definition of Hybrid Power Developer. However, the SCOD (Schedule Commercial Operation Date) will not get altered due to part-commissioning. Irrespective of dates of part commissioning or full commissioning, the PPA will remain in force for a period of 25 (twenty-five) years from the SCOD.
- 4.1.7. The early commissioning of project is permitted for full commissioning as well as part commissioning even prior to SCOD subject to the availability of evacuation arrangements. In case of early full commissioning, MSEDCL may purchase the generation till SCOD at PPA tariff. In case of part commissioning till SCOD as described in Article 4.1.6 above, MSEDCL may purchase the generation till SCOD

at 75% of PPA tariff. Further, early part/ full commissioning of the Project and subsequent energy procurement from the same shall be subject to the approval of MSEDCL.

#### **4.2. Performance Bank Guarantee:**

- 4.2.1. The Performance Bank Guarantee furnished by Hybrid Power Developer to MSEDCL as specified in the bidding documents shall be for guaranteeing the commissioning / commercial operation of the project / unit up to the Contracted Capacity within SCOD.
- 4.2.2. If the HPD fails to achieve Financial Closure within 9 months from the date of signing of PPA, 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 Hybrid Power Developer, on submission of a fresh Performance Bank Guarantee (PBG) with the same conditions, value and validity. This extension will not have any impact on the Scheduled Commissioning Date (SCOD). However, such amount of encashed PBG shall be returned to the Hybrid Power Developer without any interest within a period of 30 days of achievement of successful commissioning provided such commissioning is within the Scheduled Commissioning Date (SCOD) on pro-rata basis, based on the Project Capacity commissioned on SCOD. However, in case of any delay in commissioning of the project beyond the Scheduled Commissioning Date, the amount as deposited above by the Hybrid Power Developer shall not be refunded by MSEDCL.
- 4.2.3. If the Hybrid Power Developer 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 Hybrid Power Developer 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 Hybrid Power Developer 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 Hybrid Power Developer.

4.3.2. Hybrid Power Developer 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:

- 5.1.1. The MSEDCL shall pay for the Scheduled /Delivered Energy as certified by SLDC/ MSEDCL/Appropriate authority through Automated Meter Reading (AMR) / Meter Reading Instrument (MRI) /Joint Meter Readings (JMR)), for the Term of this Agreement from the Commercial Operation Date, to the Hybrid Power Developer every month. The Tariff payable by MSEDCL for energy purchased shall be as per Article below.
- 5.1.2. MSEDCL shall pay a **fixed rate of Rs. .... (in words Rs.----) per kWh** as discovered under the Competitive Bidding (followed by e-reverse auction) and as agreed by the Parties upon commissioning of a Unit / Project (as certified by SLDC/MSEDCL) for delivered/scheduled energy during the period of PPA.
- 5.1.3. Provided that in case of the delay for the commissioning of the project over Six (6) months from SCOD, the tariff discovered under the Competitive Bidding process (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.
- 5.1.4. **Start-up power/Auxiliary consumption:** MSEDCL shall supply electricity to the Hybrid Power Developer at the MSEDCL's prevailing HT Industrial Tariff in force from time to time and Hybrid Power Developer shall pay for the electricity consumed for start-up of the plant and for the auxiliary consumption of the generating plant at the prevailing HT Industrial Tariff. MSEDCL shall ensure that the power as required by the Hybrid Power Developer under reasonable notice shall be available without delay.
- 5.1.5. Reactive power charges shall be as per MERC regulations and shall be payable by HPD as per provisions of PPA.

### 5.2. Power Generation by HYBRID POWER DEVELOPER

#### 5.2.1. Criteria for generation:

The annual effective CUF declared by the selected Hydro Power Generator at the time of submission of response to RfS, shall be allowed to be modified at the time of signing of PPA. Thereafter, the effective CUF for the Project shall remain unchanged for the entire term of the PPA. The declared effective CUF shall in no case be less than 20.5% over a year. Hybrid Power Developer shall maintain generation so as to achieve effective CUF in the range of  $\pm 10\%$  of their declared value during PPA duration. The lower limit will, however, be relaxable by MSEDCL to the extent of grid non-availability which is beyond the

control of the Hybrid Power Developer. The annual effective CUF will be calculated every year from 1<sup>st</sup> April of the year to 31<sup>st</sup> March next year.

**5.2.2. Shortfall in minimum generation:**

During PPA period, if for any year, it is found that the Hybrid Power Developer has not been able to generate minimum energy corresponding to the lower limit of effective CUF declared by the Hybrid Power Developer, such shortfall in performance shall make Hybrid Power Developer liable to pay the compensation provided in the PPA as payable to MSEDCL. This will, however be relaxable by MSEDCL to the extent of grid non-availability for evacuation, which is beyond the control of the Hybrid Power Developer. The amount of such penalty shall ensure that the MSEDCL is offset for all potential costs associated with low generation and supply of power under the PPA, subject to 75% (Seventy-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. However, this compensation shall not be applicable in events of Force Majeure identified under this PPA affecting the supply of Hybrid power by Hybrid Power Developer.

**5.2.3. Excess generation:**

In case the availability is more than the maximum effective CUF specified, HYBRID POWER DEVELOPER will be free to sell it to any other entity provided first right of refusal will vest with MSEDCL. In case MSEDCL purchases the excess generation, over and above 10% of declared annual effective CUF, purchase shall be 75% of the PPA tariff. MSEDCL shall inform the Hybrid Power Developer for procurement of excess power within 15 days of receiving a written intimation from the Hybrid Power Developer for such excess generation. If in case MSEDCL fails to reply to the Hybrid Power Developer within the above stipulated time period then the Hybrid Power Developer shall be free to sell it to any other entity.

**5.2.4. Repowering:**

The Hybrid Power Developer shall be allowed a maximum period of six (6) months for repowering. The Hybrid Power Developer shall not be considered as 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 committed effective CUF, specified in the PPA. Any excess generation will be dealt as specified in Article 5.2.3 of this PPA. .

**5.2.5. Extension of PPA period**

Any extension to the period of PPA beyond 25 years from the SCOD of the project till the land lease period of 30 years (Land lease between MSEDCL and MEDA) shall be through mutual agreements between the Hybrid Power Developer and MSEDCL. Any extension beyond lease period (30 years) shall not be allowed in any case.

**5.3. Generation Compensation in Off take Constraint due to Transmission Infrastructure not Complete / Ready Beyond Delivery Point (Transmission Constraint)**

5.3.1. After the scheduled commissioning date, if the plant is ready but the necessary power evacuation / transmission infrastructure beyond delivery Point is not ready, for reasons not attributable to the Successful Bidder, leading to offtake constraint, the provision for generation compensation is as follows:

<b>Transmission Constraint beyond Delivery Point</b>	<b>Provision for Generation Compensation</b>
If the plant is partly or fully ready but the necessary power evacuation/ transmission infrastructure beyond Delivery Point is not ready, leading to offtake constraint	a) The committed effective CUF, for the period of grid unavailability beyond Delivery Point, shall be taken for the purpose of calculation of generation loss. Corresponding to this generation loss, the excess generation by the Successful Bidder in the succeeding 3 (three) Contract Years as per PPA to the extent of the actual generation loss, shall be procured by MSEDCL at the PPA tariff so as to offset this loss.

5.3.2. However, it is clarified that if the plant is ready before SCOD, but the offtake is constrained because of inadequate / incomplete power evacuation infrastructure beyond Delivery Point, no compensation shall be permissible.

**5.4. Generation Compensation in Offtake Constraints Due to Grid Unavailability Beyond Delivery Point**

5.4.1. During the operation of the plant, there can be some periods where the plant can generate power but due to temporary transmission unavailability beyond Delivery Point the power is not evacuated, for reasons not attributable to the Successful Bidder. In such cases the generation compensation shall be addressed by MSEDCL in following manner:

<b>Duration of Grid unavailability beyond Delivery Point</b>	<b>Provision for Generation Compensation</b>

Duration of Grid unavailability beyond Delivery Point	Provision for Generation Compensation
<p>Grid unavailability beyond Delivery Point in a contract year as defined in the PPA: (For wind: beyond 50 Hrs., For Solar: only period from 8 am to 6 pm to be counted):</p>	<p><b>Generation Loss = [(Average Generation per hour during the contract year) × (number of hours of grid unavailability beyond Delivery Point during the contract year)]</b></p> <p>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</p> <p>The excess generation by the Successful Bidder equal to this generation loss shall be procured by MSEDCL at the PPA tariff so as to offset this loss in the succeeding 3 (three) Contract Years.</p>

## 5.5. Offtake Constraints Due to Backdown

5.5.1. The Successful Bidder and MSEDCL shall follow the forecasting and scheduling process as per the regulations in this regard by the MERC. Instructions of backing down by a MSEDCL / State Load Dispatch Centre (SLDC) shall be treated as per the prevailing regulations of MERC as applicable. If the plants have must run status in accordance with the prevailing MERC regulations and eventuality of Back down arises, except for the cases where the Back down is on account of events like consideration of grid security or safety of any equipment or personnel or other such conditions, the Successful Bidder shall be eligible for a Minimum Generation Compensation, from MSEDCL, in the manner detailed below.

Duration of Back down	Provision for Generation Compensation
<p>Hours of Back down during a monthly billing cycle.</p>	<p><b><i>Minimum Generation Compensation = 50% of [(Average Generation per hour during the month) × (number of Back down hours during the month)]X PPA Tariff</i></b></p> <p>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.</p>

5.5.2. The Generation Compensation is to be paid as part of the energy bill for the successive month after receipt of report from relevant authorities/ SLDC.

5.5.3. It is clarified that Article 5.5 shall not be applicable, if in future, Merit Order

Despatch is made applicable to generation from renewable sources; from Hybrid power project in this case.

## **ARTICLE 6. BILLING AND PAYMENT**

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

6.1.1. The Hybrid Power Developer shall issue a signed monthly bill to MSEDCL. MSEDCL shall pay to the Hybrid Power Developer the monthly Tariff payment in accordance with the ARTICLE 5 of this PPA and Hybrid Power Developer based on Joint Meter reading/AMR/MRI 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:**

6.2.1. 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 modes of E-mail/Courier/Delivery by hand and as intimated by the designated office of MSEDCL.

### **6.3. Late Payment:**

6.3.1. In event of delay in payment of Monthly bill by MSEDCL beyond its due date, a late Payment charge shall be payable by MSEDCL to the Hybrid Power Developer at 1.25% in excess of the prevailing SBI one year marginal cost of funds based lending rate (MCLR per annum/ any replacement thereof by SBI..

### **6.4. Rebate:**

6.4.1. For payment of Bill on or before Due Date, the following Rebate shall be paid by the Hybrid Power Developer to MSEDCL in the following manner.

- a. A rebate of 1% shall be payable to MSEDCL for the payments made within a period of 15 days of the presentation of Tariff Invoice by modes as mentioned in Article 6.3.1 along with required supporting documents at MSEDCL office. No rebate shall be applicable for payment beyond 15 days of the presentation of Tariff Invoice.
- b. For the above purpose, the date of presentation of Bill shall be the next Business Day of delivery of the Tariff Invoice at MSEDCL.
- c. No rebate shall be payable on the Bills raised on account of taxes, duties, cess etc.

## **6.5. Payment Security:**

### **6.5.1. 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 Hybrid Power Developer for the contracted capacity. All the cost incurred by MSEDCL for opening, maintenance and other cost related to establishment of Letter of Credit shall be borne by MSEDCL.
- b) The Letter of Credit shall be established in favour of, and issued to, the Hybrid Power Developer 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 Scheduled/Nationalised 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 Hybrid Power Developer 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 Hybrid Power Developer 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.

**6.6. Payment Security Fund:**

The Payment Security Fund shall be suitable to support payment for at least 3 (three) months' billing of all the Projects tied up with such fund.

**6.7. Disputes:**

- 6.7.1. In the event of a dispute as to the amount of any Tariff Invoice, MSEDCL shall notify the Hybrid Power Developer of the amount in dispute and MSEDCL shall pay the Hybrid Power Developer 100% of the undisputed amount within the due date provided either party shall have the right to approach the MERC to effect a higher or lesser payment on the disputed amount. The Parties shall discuss within a week from the date on which MSEDCL notifies the Hybrid Power Developer of the amount in dispute and try and settle the dispute amicably.
- 6.7.2. If the dispute is not settled during such discussion then the payment made by MSEDCL shall be considered as a payment under protest. Upon resolution of the dispute, in case the Hybrid Power Developer 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 125 basis points for the period it retained the additional amount.
- 6.7.3. MSEDCL / Hybrid Power Developer 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.
- 6.7.4. Where any dispute arising out of or in connection with this agreement is not resolved mutually/amicably, then such dispute shall be raised before the MERC for adjudication of dispute.
- 6.7.5. The disputes beyond the jurisdiction of the MERC, shall be filed before the Bombay High Court, Mumbai.

## **ARTICLE 7. METERING AND COMMUNICATION**

### **7.1. Reading and Correction of Meters**

- i. Hybrid Power Developer shall install ABT compliant meter at the metering point, i.e. 33 kV Bus of MSEDCL/ MSETCL substation for the purpose of energy accounting/billing.
- ii. The installation and maintenance of energy accounting infrastructure shall be the responsibility of the Hybrid Power Developer at its own cost. Separate energy meters shall be installed for solar power projects and wind power projects for the purpose of measuring the contribution of generated electricity in fulfilling the solar and non-solar RPO compliance of MSEDCL.
- iii. Interface metering shall conform to the Central Electricity Authority (Installation and Operation of Meters) Regulations 2014 and amendment thereto. MSEDCL / MSETCL shall stipulate specifications in this regard.
- iv. For the purpose of energy accounting, the ABT compliant meter shall be installed by Hybrid Power Developer at the metering point. Interface metering shall conform to the Central Electricity Authority (Installation and Operation of Meters) Regulations 2014, Grid Code, as amended and revised time to time. MSEDCL/MSETCL shall stipulate specifications in this regard.
- v. The Hybrid Power Developer shall bear all costs pertaining to installation, testing, calibration, maintenance, renewal and repair of meters at Delivery Point.
- vi. Solar and Wind power injected from the hybrid project in to the grid will be worked out by apportioning the reading of main meter installed at 33 kV Bus of MSEDCL/MSETCL i.e. Delivery Point, on the basis of readings of meters installed on HT side of the wind and solar PV plant.
- vii. The ABT metering equipment consisting of Main and Check Meters with separate CT and PT shall be identical in make, technical standards and of 0.2s accuracy class and calibration and comply with the requirements of Electricity Rules.
- viii. The meters installed at the Metering Point shall have four quadrant, three phase, four wires and provision for on line/automatic reading and time slots as required by purchaser and SLDC.
- ix. The Hybrid Power Developer shall also establish backup metering system/check meter. In the event of the Main Metering System is not in service for the reason of maintenance, repairs or testing, then the Backup Metering System/Check Meter shall be used during the period for which the Main Metering System is not in service and the provisions above shall apply to the reading of the Backup Metering System.

## **7.2. Testing of the metering equipment:**

- 7.2.1. The Main and Check Meters shall be tested for accuracy, with a portable standard meter, by the National accredited Labs and sealed by the MSEDCL at its own cost. Purchaser shall carry out the calibration, periodical testing, sealing and maintenance of meters in the presence of the authorized representative(s) of the seller and the representative of the Seller shall sign on the results thereof.
- 7.2.2. The frequency of meter testing shall be annual. All the meters will be tested only at the Metering Point. Purchaser will provide a copy of the test reports to Seller.
- 7.2.3. If during testing, both the Main and Check Meter are found within the permissible limit of error i.e.0.2%, the energy computation will be as per the Main Meter. If during test, any of the Main Meters is found to be within the permissible limits of error but the corresponding Check Meter is beyond the permissible limit; the energy computation will be as per the Main Meter. The Check Meter shall be calibrated immediately.
- 7.2.4. If during the tests, any of the Main Meters is found to be beyond permissible limits of error, but the corresponding Check Meters is found to be within the permissible limits of error, then the energy computation for the month upto date and time of such test check shall be in accordance with Check Meter. The Main Meter shall be calibrated immediately and the energy for the period thereafter shall be as per the calibrated Main Meter.
- 7.2.5. If during any of the monthly meter readings, the variation between the Main meter and the Check meter is more than 0.5 %, all the meters shall be re-tested and calibrated at the Seller's cost immediately by Purchaser. During this period energy recorded with SCADA shall be used for billing & payment purposes.
- 7.2.6. For all times the reading of the Main meter only will be considered except in rarest conditions such as maintenance, repairs, testing or discrepancy in meter reading with compare to check meters then the Check meter reading may be considered

## **7.3. Sealing and Maintenance of Meters.**

- i. The Main Metering System and the Backup Metering System shall be sealed in the presence of representatives of Hybrid Power Developer, MSETCL 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 Hybrid Power Developer and / or MSETCL/MSEDCL at Hybrid Power Developer's cost, as soon as possible.
- iii. Any meter seal(s) shall be broken only by MSETCL/MSEDCL's representative in

the presence of Hybrid Power Developer'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 calendar 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.

#### **7.4. Records**

- 7.4.1. 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 Hybrid Power Developer 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;
  - e. The Hybrid Power Developer shall submit the reports on various parameters at its own cost to MNRE/SLDC/MEDA or any other authority, as required by the prevailing Regulations, Guidelines, if any;

## **ARTICLE 8. FORCE MAJEURE**

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

8.1.1. 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 Hybrid Power Developer 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. An event of force majeure affecting the concerned STU/MSEDCL, as the case may be, thereby affecting the evacuation of power from the delivery points by MSEDCL.
- x. damage to or breakdown of transmission facilities of STU/MSEDCL;
- xi. Exceptionally adverse weather condition which are in excess of the statistical measure of the last hundred (100) years.

8.1.2. **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:

- xii. Unavailability, Late Delivery or Change in cost of plants and machineries, equipment, materials, spares parts or consumables, etc for the project;
- xiii. Delay in performance of any contractor / sub-contractor or their agents;
- xiv. Non-performance resulting from normal wear and tear experience in power generation materials and equipment;
- xv. Strike or labour disturbances at the facilities of affected parties;

- xvi. In efficiency of finances or funds or the agreement becoming onerous to perform, and
- xvii. 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.

8.1.3. 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.

Provided that such notice shall be a pre-condition to the affected party's entitlement to claim relief under this Agreement. 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 event/situation.

- a) 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.
- b) **Duty to perform and Duty to mitigate:** 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:**

8.2.1. 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.

8.2.2. For avoidance of doubt, neither Party's obligation to make payments of money due nor 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.

- 8.2.3. 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:

9.1.1. "Change in Law" shall refer to the occurrence of any of the following events after the last date of the bid submission, resulting into any reduction or additional recurring/ non-recurring expenditure or any additional income to any party:

- the enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any law, including rules and regulations framed pursuant of such Law;
- the requirement to obtain a new consent, permit or license;
- any modification to the prevailing conditions prescribed for obtaining a consent, permit or license, not owing to any default of the Hybrid Power Developer;
- 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 Hybrid Power Developer then, in order to ensure that the Hybrid Power Developer 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 Hybrid Power Developer/ 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 Hybrid Power Developer'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 Hybrid Power Developer shall be appropriately increased or decreased with due approval of MERC.

9.2.3. The Power Procurer / MSEDCL or the Hybrid Power Developer, 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.

### **9.3. Notification of Change in Law**

- 9.3.1. If the Seller is affected by a Change in Law in accordance with ARTICLE 9.1 and wishes to claim change in Law under this Article, it shall give notice to MSEDCL of such Change in Law within 7 days after becoming aware of the same or should reasonably have known of the Change in Law.
- 9.3.2. Notwithstanding ARTICLE 9.3.1, the Hybrid Power Developer shall be obliged to serve a notice to MSEDCL if it is beneficially affected by a Change in Law. Without prejudice to the factor of materiality or other provisions contained in this Agreement, the obligation to inform the Procurer contained herein shall be material. Provided that in case MSEDCL has not provided such notice, the Hybrid Power Developer shall have the right to issue such notice to MSEDCL.
- 9.3.3. Any notice served pursuant to this Article 9.3.2 shall provide, amongst other thing, precise details of:
  - a. The Change in Law: and
  - b. The effect on MSEDCL of the matters referred to in Article 9.2

### **9.4. Tariff Adjustment Payment on account of Change in Law.**

- 9.4.1. Subject to the application and Principles for computing impact of Change in Law mentioned in this ARTICLE 9, the adjustment in Monthly Tariff Payment shall be effective from:
  - i. The date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or
  - ii. The date of Order/Judgement of the Competent Court or Tribunal or Indian Governmental Instrumentality, if the Change in Law is on account of a change in interpretation of Law.
- 9.4.2. 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 authorised officers, and copies delivered to each Party, as of the day and year first above stated.
- 9.4.3. The payment for Change in Law shall be through Supplementary Bill. However, in case of any change in Tariff by reason of change in Law, as determined in accordance with this Agreement, the Monthly Invoice to be raised by the Hybrid Power Developer after such Change in Tariff shall appropriately reflect the changed Tariff.

## **ARTICLE 10. TERM, TERMINATION AND DEFAULT**

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

10.1.1. 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 Scheduled Commercial Operation Date.

10.1.2. Any extension of the PPA period beyond 25 years from the SCOD of the project till the land lease period of 30 years (Land lease between MSEDCL and MEDA) shall be through mutual agreements between the Successful Bidder and MSEDCL with such mutually agreed terms and conditions at least one hundred eighty (180) days prior to the PPA Expiry Date. Any extension beyond lease period (30 years) shall not be allowed in any case.

### **10.2. Survival:**

10.2.1. 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:**

#### **A. Hybrid Power Developer'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 Hybrid Power Developer:

- 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 Hybrid Power Developer.
- c) Failure or refusal by Hybrid Power Developer to perform any of its material obligations under this Agreement including but not limited to financial closure.
- d) The Hybrid Power Developer 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 Hybrid Power Developer.

- e) In case HPD is found to use the land for the purpose other than to develop the Hybrid Power Project on the site for the capacity under this agreement.
- f) If the Hybrid Power Developer (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.
- g) If the Hybrid Power Developer 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 the Hybrid Power Developer 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 Hybrid Power Developer and expressly assumes all obligations under this agreement and is in a position to perform them; or
- h) The Hybrid Power Developer repudiates this agreement.
- i) Change in controlling shareholding before the expiry of 1 (one) year from the COD or SCOD whichever is later.
- j) If Hybrid Power Developer fails to deposit an amount of Rs. 10 Lakh per Project per Transaction as Facilitation Fee (non-refundable), 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.
- k) Occurrence of any other event which is specified in this Agreement to be a material breach / default of the Hybrid Power Developer.

10.3.1. Upon being in default, the Hybrid Power Developer shall be liable to pay MSEDCL, damages, as detailed in the PPA. MSEDCL 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.

10.3.2. In addition to the levy of damages as aforesaid, in the event of a default by the Hybrid Power Developer, 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 MSEDCL. However, in the event the lenders are unable to substitute the defaulting Hybrid Power Developer within the stipulated period, MSEDCL 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.

10.3.3. On completion of contract period or termination of the contract, the selected bidder shall hand-over the provided land/sites to MSEDCL.

**B. 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 Hybrid Power Developer, 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 Hybrid Power Developer, or if no offer of novation is made by the defaulting Procurer within the stipulated period, then the Hybrid Power Developer 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 Hybrid Power Developer, 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 Hybrid Power Developer.

(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 Hybrid Power Developer's Default:**

Upon the occurrence of an event of default as set out in Article 10.3 (A) above, MSEDCL may deliver a Default Notice to the Hybrid Power Developer in writing which shall specify in reasonable detail the Event of Default giving rise to the default notice, and calling upon the Hybrid Power Developer 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 Hybrid Power Developer. MSEDCL may terminate this Agreement by delivering such a Termination Notice to the Hybrid Power Developer 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 Hybrid Power Developer 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 Capacity Utilization Factor of 20.5%.

Where a Default Notice has been issued with respect to an Event of Default, which requires the co-operation of both MSEDCL and the Hybrid Power Developer 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 Article 10.3 (B) above, the Hybrid Power Developer 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 Hybrid Power Developer 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 Hybrid Power Developer 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 Hybrid Power Developer and third parties.

Till expiry of the Suspension Period, MSEDCL will be entitled to cure its default and buy power from the Hybrid Power Developer. In the event MSEDCL fails to cure the default, the Hybrid Power Developer 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 Hybrid Power Developer equivalent to 6 (six) months, or balance PPA period whichever is less, of charges for its contracted capacity on committed effective CUF of 20.5%, with the Project assets being retained by the Hybrid Power Developer.

## **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.** In the event of a dispute as to the amount of any Tariff Invoice, MSEDCL shall notify the Hybrid Power Developer of the amount in dispute and MSEDCL shall pay the Hybrid Power Developer 100% of the undisputed amount within the due date provided either party shall have the right to approach the MERC to effect a higher or lesser payment on the disputed amount.
- 11.3.** The Parties shall discuss within a week from the date on which MSEDCL notifies the Hybrid Power Developer of the amount in dispute and try and settle the dispute amicably.
- 11.4.** The Parties hereto agree to attempt to resolve all disputes arising hereunder promptly, equitably and in good faith.
- 11.5.** 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.
- 11.6.** 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.
- 11.7.** Where any dispute arises from a claim made by any change in or determination of Tariff or any matter related to Tariff or claims made by any party which partly or wholly relate to any change in the Tariff or determination of any matter agreed to be referred to the MERC, such dispute shall be submitted to adjudication by the MERC. Appeal against the decision of the MERC shall be made only as per the provisions of the Electricity Act, 2003, as amended from time to time.
- 11.8.** If the Disputes arises out of or in connection with any claims not covered in Article 11.7, such disputes shall be resolved by arbitration under Indian Arbitration and Conciliation Act, 1996 and any amendments thereto.
- i. The arbitration tribunal shall consist of three arbitrators. Each party shall appoint an arbitrator and the arbitrators so appointed shall appoint the President Arbitrator.
  - ii. The place of the arbitration shall be Mumbai, India. The language of the arbitration shall be English.
  - iii. The arbitration tribunal's award shall be substantiated in writing. The arbitration tribunal shall also decide on the costs of the arbitration proceeding and the allocation thereof.
  - iv. Courts in Mumbai shall have exclusive jurisdiction to enforce any award under

this agreement, subject to the applicable Laws

- v. The provisions of this clause shall survive the termination of this PPA for any reason whatsoever

**11.9.** The disputes beyond the jurisdiction of MERC shall be filed before the Bombay High Court, Mumbai.

## **ARTICLE 12. INDEMNITY**

### **12.1. Hybrid Power Developer's Indemnity:**

12.1.1. The Hybrid Power Developer 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 Hybrid Power Developer, or by an officer, director, sub-contractor, agent or employee of the Hybrid Power Developer 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:**

12.2.1. MSEDCL agrees to defend, indemnify and hold harmless the Hybrid Power Developer, 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, sub-contractor, 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 Hybrid Power Developer, or by an officer, director, sub-contractor, agent or employee of the Hybrid Power Developer.

## 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 Hybrid Power Developer 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 Hybrid Power Developer 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, if sent by fax when dispatched (provided if the sender's transmission report shows the entire fax to have been received by the recipient and only if the transmission was received in legible form), to :

#### In case of the Hybrid Power Developer:

Name: \_\_\_\_\_ Designation: \_\_\_\_\_ Address : \_\_\_\_\_

Ph. Nos.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

#### In case of Maharashtra State Electricity Distribution Company Limited:

Designation: Chief Engineer (PP)

Address: 5<sup>th</sup> Floor, Prakashgad, Bandra (East), Mumbai – 400 051.

Ph. Nos.: 022- 26474211

**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 nor shall any portion hereof without the prior written consent of the other Party, provided further that any assignee 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.

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

In furtherance of the foregoing, MSEDCL acknowledges that the Financing Documents may provide that upon an event of default by the Hybrid Power Developer under the Financing Documents, the Financing Parties may cause the Hybrid Power Developer to assign to a third party the interests, rights and obligations of the Hybrid Power Developer 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 Hybrid Power Developer 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 Hybrid Power Developer thereafter arising under this Agreement.

**13.10. Entire Agreement, Appendices:**

This Agreement constitutes the entire agreement between MSEDCL and the Hybrid Power Developer, 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 Hybrid Power Developer 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.

<p>FOR AND ON BEHALF OF HYBRID POWER DEVELOPER</p> <p>M/S.</p> <p><b>Authorised Signatory</b></p> <p><b>WITNESSES</b></p> <p>1. _____ ( )</p> <p>2. _____ ( )</p>	<p>FOR AND ON BEHALF OF</p> <p>MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED</p> <p><b>MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED</b></p> <p><b>WITNESSES</b></p> <p>1. _____ ( )</p> <p>2. _____ ( )</p>
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## 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 Hybrid Power Developer 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 Hybrid Power Developer 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 Hybrid Power Developer 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 Hybrid Power Developer 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 3: APPROVALS**

1. Consent from the STU /MSEDCL for the evacuation of the power generated by Wind-Solar Grid Interactive Hybrid Power Projects.
2. Approval of the Electrical Inspectorate, Government of Maharashtra for commissioning of the transmission line and the wind-solar power project installed at the Project Site.
3. Certificate of Commissioning of the Wind-Solar 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 Hybrid Power Developer 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 Hybrid Power Developer 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 Wind-Solar Hybrid Power 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) Hybrid Power Developer shall ensure that the equipment up to the rated Capacity has been installed and completed in all respects before the Scheduled Commissioning Date.

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

#### **The Hybrid Power Developer 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 Hybrid Power Developer to collect the certificate.
8. Hybrid Power Developer 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.
11. In case any additional supporting/revised documents are asked by MSEDCL, the same have to be submitted/uploaded by the Hybrid Power Developer.
12. The Hybrid Power Developer shall have to submit commissioning date along with commissioning order issued by State Nodal Agency/State Utility.
13. Early Commissioning of a Wind-Solar Power Project prior to the scheduled commissioning date is permitted on acceptance of power by MSEDCL. In order to facilitate this, the Hybrid Power Developer 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 Hybrid Power

Developer shall be required to give an advance notice of at least 90 days prior to the proposed commissioning date.

14. 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 HYBRID POWER DEVELOPER and to be submitted at least 10 days prior to commissioning date by Appropriate Authority of State)*

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

**Appendix-A-3**

**Sample Connectivity Report**

*(To be provided by concerned STU/Transmission Utility/Discoms)*

This is in compliance to the office order of the ----- Discom, <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> Wind-Solar Power Generation Plant (having <technology>) with Grid installed at <Village>, <Tehsil>, <District> in the <State> on <date>. The details of Wind-Solar Power Plant are as under: -

S. No	Name of Developer & Location	Capacity Mentioned in PPA	Connectivity	Details of Power Plant (Transformer, Inverter, Modules, Switchgear)
1	<M/s> <Village> <Tehsil> <District.	<> MW	Metering Detail at Delivery Point (<Village>) S.No. of <kV> CT i) <R-Phase> ii) <Y-Phase> iii) <B-Phase> S.No. of <kV> PT i) <R-Phase> ii) <Y-Phase> iii) <B-Phase> S.No. of Main<ABT> Meter> S.No. of Check <ABT Meter> Metering Equipment installed at Receiving end on dated: <> 33 kV GSS, <>, <>, (<Distt.>)	Transformer <Make/Type:> <Sr. No.> Inverters <Make/Type:> <Sr. No.> Modules <Make: > <W>, < W > <Total: Nos.> Switchgear Panels <Make/Type:> <Sr. No.> Protection Provided: Under/Over voltage, Over current & Earth fault.

The Commissioning date of various equipment is as under:

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

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

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

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

Complete system commissioned on date-----

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

**Appendix-A-4**

**Sample Synchronization Certificate**

It is certified that ---- MW (Capacity) Wind-Solar Hybrid 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/Discoms
- (ii) Copy of duly signed MRI is to be enclosed.

## **Appendix-A-5**

### **Sample Part Commissioning / Full Commissioning Certificate of Wind-Solar Hybrid 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 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**

- a) The generation voltage from the Wind-Solar Grid Interactive Power Project of M/s. \_\_\_\_\_ is \_\_ KV. It uses unit connection of generator, generator transformer and unit transformer.
- b) 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.

**SCHEDULE 5A: PROJECT SITES FOR HYBRID POWER PROJECTS.**

Sr. No.	Site Name	Capacity of existing wind project (MW)	Total land in hectare	Spare land available in hectare	Minimum Capacity (MW)
1	Motha, Tal. Chikhaldara Dist. Amaravati	2	51.93	38.93	25
2	Chalkewadi, Satara	2.25	79.4	39.4	40
		3.75			
3	Gudhepanchgani, Sangli	1.84	44.16	27.66	25
4	Vijaydurg, Sindhudurg	1.5	47.6	41	25
5	Sautada, Tal Patoda, Beed	Nil	54.23	54.23	30

**SCHEDULE 5B: CONTRACTED CAPACITY FOR THE PROJECT SITES FOR HYBRID POWER PROJECTS.**

<b>Sr. No.</b>	<b>Location (Village, Taluka, Dist.)</b>	<b>Solar Capacity (MW)</b>	<b>Wind Capacity (MW)</b>	<b>EFFECTIVE CUF (%)</b>	<b>Sub-station Details</b>
01					
02					
....					

\* - a single effective CUF for the entire project capacity at the identified sites