

DRAFT POWER PURCHASE AGREEMENT (PPA)

BETWEEN

TORRENT POWER LIMITED

AND

This Power Purchase Agreement (PPA) is made and entered into at Ahmedabad on this ____ day of ____ 2025 (Effective Date) between

Torrent Power Limited-Distribution (TPL-D) a unit of Torrent Power Limited (TPL) which is incorporated under Companies Act, 1956 having its registered Office at Samanvay, 600 Tapovan, Ambawadi, Ahmedabad 380015 (hereinafter referred to as "TPL-D" or "Power Procurer", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees) as party of first part.

AND

_____ incorporated under the Companies Act _____ having its Registered office at _____, (hereinafter referred to individually, as "_____" or "Power Producer" or "Successful Bidder", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees) as party of the second part.

AND, WHEREAS TPL-D vide RfS No _____ dated _____ floated tender for purchase of Firm and Dispatchable RE power through Competitive Bidding Process (followed by e-reverse auction) from _____ MW grid connected Project to be setup and the Power Producer has been declared Successful Bidder pursuant to Letter of Award (LoA) _____ [insert date] for sale of electrical energy, so produced, for commercial purposes from such Project to TPL-D including fulfilment of TPL-D's Renewable Purchase Obligation. The terms of RfS No _____ dated _____ are an integral part of this PPA.

AND WHEREAS, TPL-D shall approach the Appropriate Commission for adoption of tariffs by the Appropriate Commission within 30 (Thirty) days of the discovery of the tariffs, subsequent to approaching the Appropriate Commission for adoption of tariffs under Section 63 of the Act, in case, Appropriate Commission does not decide upon the same within 60 days of such submission or within 120 days from the date of Power Purchase Agreement (PPA), whichever is more, the Power Procurer shall grant appropriate extension of time in Financial Closure to the Power Producer, corresponding to the delay [beyond 60 days of submission or 120 days of PPA whichever is more] in adoption / approval by the Appropriate Commission till the date of adoption/ approval by the Appropriate Commission. Therefore, this Power Purchase Agreement shall be subject to the adoption of tariff by the Appropriate Commission.

AND, WHEREAS the Power Producer desires to set-up grid interactive power Project MW (AC) capacity as per technical parameters detailed in the Annexure- B (for solar); For Wind, to ensure that only quality systems are installed, and in order to bring-in advantage of latest development/Models, the type-certified wind turbine models listed in Revised List of Models and Manufacturers (RLMM) issued by MNRE as updated as on the date of commissioning of the Projects will be allowed for deployment under the RfS and Annexure C (for ESS) of this PPA at the location details specified in Schedule 4.

AND, WHEREAS the Parties hereby agree to execute this Power Purchase Agreement setting out the Terms & Conditions for sale of power by Power Producer to TPL-D.

NOW THEREFORE IN VIEW OF THE FOREGOING PREMISES AND IN CONSIDERATION OF THE MUTUAL COVENANTS AND CONDITIONS HEREINAFTER SET FORTH, TPL-D AND THE POWER PRODUCER, 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:

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

"Affiliate" shall mean a company that, directly or indirectly,

i. controls, or

ii. is controlled by, or

iii. is under common control with, a company developing a Project or a Member in a Consortium developing the Project and control means ownership, directly or indirectly, of more than 50% (fifty percent) of the voting shares of such company or right to appoint majority Directors.

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

"Appropriate Commission" shall mean the State/Centre Electricity Regulatory Commission where the Distribution Licensee(s) is located.

"Approvals" shall mean the permits, clearances, licenses and consents as are listed in Schedule 2 hereto and any other statutory approvals;

"Backdown" shall mean part of Contracted capacity available for scheduling but not scheduled based on instructions from Power Procurer/SLDC /RLDC, as the case may be;

"Base rate of Late Payment Surcharge" means the marginal cost of funds based lending rate for one year of the State Bank of India, as applicable on the 1st April of the financial year in which the period lies, plus five percent and in the absence of marginal cost of funds based lending rate, any other arrangement that substitutes it, which the Central Government may, by notification, in the Official Gazette, specify:

Provided that if the period of default lies in two or more financial years, the Base Rate of Late Payment Surcharge shall be calculated separately for the periods falling in different years;

"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;

"Bid Deadline" shall mean the last date of submission of bid under RfS No. _____ dated _____ and Addendums thereto, if any;

"Bidding Consortium" or "Consortium" refers to a group of Companies that has collectively Submitted the response in accordance with the provisions of this Rfs;

“Business Day” shall mean a Day other than Sunday or a statutory holiday on which banks remain open for business in Ahmedabad;

“CERC” means Central Electricity Regulatory Commission;

“Central Transmission Utility (CTU)” shall mean the Central Transmission Utility as defined in Sub-Section (1) of Section 38 of the Electricity Act, 2003;

“Change in Law” shall have the meaning ascribed thereto in Article 9 of this Agreement;

“Commercial Operation Date (COD)” shall mean the date certified by appropriate authority and/or commissioning committee constituted by TPL-D upon successful commissioning of full capacity of Project or the last Unit of the Project as the case may be and such date as specified in a written notice given at least 10 days in advance by the Successful Bidder to TPL-D.

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

“Commissioning” with respect to the Project as certified by appropriate authority and/or commissioning committee constituted by TPL-D shall mean that all equipments as per rated capacity has been installed and energy has flown into the grid;

“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 AC capacity in MW contracted with TPL-D for supply by the Power Producer to TPL-D at the Delivery Point from the Project;

“Contract Year” shall mean, with respect to the initial Contract Year, the period beginning on the Commercial Operation Date and ending at 12.00 midnight on 31st March of that Fiscal Year. Fiscal Year is 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;

“Control” shall mean the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such Company or right to appoint majority Directors;

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

“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.

All transmission charges, losses and any associated costs upto Delivery Point shall be to the account of the Power Producer. No change in charges / losses upto Delivery Point shall be covered under Change in Law;

"Delivery Point" Shall mean the point at the CTU Sub Station where the power from the RE Power Project is injected into the Inter State Transmission System (ISTS).

All expenses including transmission and wheeling charges and losses between the Project and the Delivery Point shall be paid by the Power Producer without any reimbursement by TPL-D. All expenses including transmission and wheeling charges and losses in relation to the transmission and distribution beyond the Delivery Point shall be borne by TPL-D.

"Due Date of Payment" in respect of a Tariff Invoice means the date, which is following on 30th Day from the date of receipt of such invoices by the designated official of the TPL-D;

"Electricity" shall mean the electrical energy in kWh (kilowatt-hours);

"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 CERC/GERC from time to time;

"Energy Storage Systems" or "ESS" shall mean the system(s) installed in addition to the RE power capacity as part of the Project, that can capture energy produced at one time for use at a later time;

"Emergency" means a condition or situation of physical damage to STU/ PGCIL/TPL-D 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/ PGCIL/ TPL-D 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 of the project;

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

"Financial Closure" means arrangement of necessary funds by the Power Producer 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 sanction of a loan or letter agreeing to finance;

"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;

"GERC" shall mean Gujarat Electricity Regulatory Commission.

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

"Government Instrumentality" shall mean the Gol, the state Government and their ministries, inspectorate, departments, agencies, bodies, authorities, legislative bodies;

"Grid System" shall mean CTU / STU / Discom's power transmission system / distribution system through which Delivered Energy is evacuated and distributed;

"Group Company" of a Company means

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

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

"Indian Governmental Instrumentality" shall mean the Government of India, Governments of State (Gujarat) and any ministry, department, board, authority, agency, corporation, commission under the direct or indirect control of Government of India or the above state Government or both, any political sub-division of any of them; including any court or Appropriate Commission(s) or tribunal or judicial or quasi-judicial body in India;

"Interconnection Facilities" in respect of the Power Producer shall mean all the facilities installed by the Power Producer to enable TPL-D to receive the Delivered Energy from the Project at the Delivery Point, including transformers, and associated equipment, relay and switching equipment, protective devices and safety equipment and transmission lines from the project to CTU/STU sub-station;

"Installed Capacity" shall mean the capacity of the Project at the generating terminal(s);

"KV" shall mean Kilovolts;

"kWh" shall mean Kilowatt-hour;

“Late Payment Surcharge” means the charges payable by a TPL-D to Power Producer, on account of delay in payment of monthly charges beyond the Due Date of Payment;

“Law” shall mean any valid legislation, statute, rule, regulation, notification, directive or order, issued or promulgated by any Governmental Instrumentality;

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

“Letter of Award (LoA)” shall mean the letter dated _____ issued by TPL-D to the Power Producer for award of the Project;

“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 shall be the interconnection point of generating station with CTU;

“Monthly Charge” shall have the meaning set forth in Article 5;

“MW” means Megawatts;

“Paid-up share capital” shall include mean the paid-up share capital as defined in Section 2 of the Companies Act, 2013;

“Payment on Order instrument” means Letter of Undertaking from Indian Renewable Energy Development Agency Limited (IREDA) or Power Finance Corporation Limited (PFC) or REC Limited (REC), to pay in case situation of default of Successful Bidder/Power Producer in terms of tender conditions/Power Purchase Agreement (PPA) arises. Such Letter(s) will have same effect as that of a Bank Guarantee issued by any public sector bank. Such "Payment on Order instrument" should have terms and conditions similar to that of any Bank Guarantee given by any public sector bank and would promise to pay the Power Procurer on demand within stipulated time;

“Peak Hours” shall mean 1900 Hour to 2300 Hour in March to September and 0700 hour to 0900 hour and 1800 hours to 2000 hours in October to February. TPL-D has right for modifying the four Peak Hours by advance notice to Successful Bidder.

“Performance Guarantee” shall mean the irrevocable unconditional bank guarantee or Payment on Order instrument submitted by the Power Producer as per the RFS no. _____ dated _____ and Addendums thereto, if any;

“Project” shall mean the RE Power generation facility located at single or multiple locations for supplying Contracted Capacity power to TPL-D. Each location shall have a separate control system, metering and a single point or separate points of injection into the grid at Delivery/Interconnection/Metering point(s) at GETCO/CTU substation. This includes all units and auxiliaries such as water supply, treatment or storage facilities; bay/s for transmission system in the switchyard, transmission connectivity/access upto the Delivery Point and all the other assets, buildings/structures, equipment, plant and machinery, facilities and related

assets required for the efficient and economic operation of the power generation facility; whether completed or at any stage of development and construction or intended to be developed and constructed for the purpose of supply of power as per this Agreement;

"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 4, 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 Delivery Point and to be contracted with TPL-D for supply from the 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;

"Reference Exchange rate" shall mean, in respect of any one currency that is to be converted into another currency in accordance with the provisions of this agreement, the buying rate of such currency as of 12:00 noon on the relevant date notified by the State Bank of India, and in absence of such rate, the average of similar rates notified by Bank of India and Bank of Baroda;

"Renewable (RE) Power" means the term 'RE Power', or 'Renewable Power', or 'Renewable Energy Power', wherever used in these RfS, shall refer to power from Solar Power Generating System, Wind Power Generating System, Wind Solar hybrid; or any other renewable energy resource based Generating system or a combination thereof, with Energy Storage System (ESS). It is clarified that ESS charged using a source other than RE power would not qualify as RE power.

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

"Scheduled COD" or "Scheduled Commercial Operation Date" shall mean the date as declared by the Successful Bidder in the PPA which shall not exceed 24 (Twenty-Four) months from the date of execution of the PPA.

"SEA/REA" means the State Energy Account/Regional Energy Account issued by State Load Dispatch Centre/Regional Load Dispatch Centre and amendment thereto;

"Selected Bidder or Successful Bidder" shall mean the Bidder selected pursuant to the RfS no. _____ dated _____ to set up the Project and supply electrical output as per the terms of this PPA;

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

“STU or State Transmission Utility” shall mean the State Transmission Utility;

“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 10.1;

Article 1: Interpretation:

- 1.1 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.
- 1.2 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 Power Producer, 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 this Agreement.

ARTICLE 3: OBLIGATIONS

3.1 Obligations of the Power Producer:

- 3.1.1 The Power Producer shall obtain all statutory approvals, clearances and permits necessary for the Project at its own cost in addition to those Approvals as listed in Schedule 2.
- 3.1.2 Successful Bidder(s) shall achieve Financial Closure six (6) months prior to the SCOD. At the stage of Financial Closure, the Successful Bidder(s) shall report 100% tie-up of Financing Arrangements for the Projects. In this regard, the Successful Bidder(s) shall submit a certificate/necessary document from all financing agencies regarding the tie-up of 100% of the funds indicated for the Project, including arrangements of funds in the form of Equity. The Successful Bidder(s) shall also submit details of all planned/proposed solar panels, inverters and wind turbine, along with necessary purchase order/agreements for the Project. The Power Producer shall also indicate the rated capacity of any storage facility, if proposed at the Project site. Checklist of documents to be submitted at this stage is provided at Schedule 3 of the PPA.

The Successful Bidder will have to submit the required documents to TPL-D at least 14 days prior to completion of six (6) months of SCOD. In case of delay in submission of documents mentioned above, TPL-D shall not be liable for delay in verification of documents and subsequent delay in Financial Closure.

An extension for the attainment of the Financial Closure can however be considered by TPL-D, on the sole request of the Successful Bidder(s), on advance payment of extension charges of Rs. 1,000/- per day per MW plus GST as applicable. In case of any delay in payment for this extension charge, the Successful Bidder(s) has to pay an interest on this extension charge for the days lapsed beyond due date of Financial Closure @ 1-year SBI MCLR. If the extension charges are not paid by the Successful Bidder(s), TPL-D shall have the right to recover the extension charges including interest thereon by encashing the PG. In case the PG is encashed for recovery of extension charges, the Successful Bidder(s) shall restore the PG to its original value within 7 days. This extension will not have any impact on the SCOD. Any extension charges paid so, shall be returned to the Successful Bidder(s) without any interest on achievement of successful commissioning within the 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 SCOD, the amount as deposited above by the Successful Bidder(s) or PG encashed shall not be refunded by TPL-D.

- 3.1.3 The Power Producer shall sell all available capacity from identified Power Plant to the extent of contracted capacity on first priority basis to TPL-D and not to sell to any third party.
- 3.1.4 Deviation Settlement Mechanism (DSM): For deviations from schedule, the DSM (Deviation Settlement Mechanism) shall be applicable as per the prevailing regulations. The DSM charges at the Power Producer ends shall be settled by the Power Producer.

3.2 Criteria for Generation:

- 3.2.1 The Successful Bidder shall supply RE power in Firm and Dispatchable manner, matching the demand profile provided at Annexure-A of this PPA. The demand profile has been provided in hourly basis for a representative day of each month of the year. The same profile shall be applicable for each Contract Year during the Term of the PPA and shall be matched by RE supply scheduled by the Successful Bidder. TPL-D has right to modify peak hours on month ahead basis.
- 3.2.2 The Successful Bidder shall schedule power on day-ahead basis, to match the demand profile. Intra-day variation from day ahead schedule would be allowed to the extent that it does not exceed the demand specified in the corresponding hour. Intra-day variation (if any) shall be intimated at least one time-block prior to the Real Time Market (RTM) gate closure. The Power Procurer shall compulsorily off-take all the power, subject to the maximum power scheduled in any hourly block being equal to the demand specified in the corresponding hourly block.
- 3.2.3 Demand Fulfilment Ratio (DFR): The Successful Bidder shall be required to maintain a Demand Fulfilment Ratio (DFR) of at least 75% on monthly basis for non-Peak Hours and 75% on monthly basis in Peak Hours. "Demand Fulfilment Ratio" for a particular time-block shall be calculated as follows: $DFR = \frac{\text{Power Injection Scheduled by the Successful Bidder (MW)}}{\text{Demand (MW) specified by the Power Procurer (MW) for the corresponding time block}}$, subject to the max value of DFR being 1. The Successful Bidder's performance against this metric will be measured by calculating the average DFR of all the time-blocks during the month in a Contract Year in which power has been scheduled.
- 3.2.4 The RE Power (including Energy Storage System (ESS) component charged with RE sources) bought under this RfS shall be eligible for RPO compliance. The apportionment of RPO between the different RE components shall be on the lines of the principle adopted in case of hybrid plants.
- 3.2.5 The Successful Bidder can, source up to 5% RE power (in energy terms), on annual basis, from the green market sources/bilateral agreements, towards meeting the supply conditions stipulated in the RfS/PPA.

3.3 Shortfall In Generation:

- 3.3.1 In case the average DFR during Non-Peak Hours demonstrated by the Successful Bidder is less than 75% DFR on a monthly basis, save and except in case of Force Majeure, such shortfall in performance shall make the Successful Bidder liable to pay the penalty. The amount of such penalty will be calculated at 1.5 times of the PPA Tariff for the shortfall units in energy terms.
- 3.3.2 Successful Bidder shall supply average DFR during Peak Hours on monthly basis. If the Successful bidder supply less than 75% DFR during Peak Hours on monthly basis, save and except in case of Force Majeure, such shortfall in performance shall make the Successful Bidder liable to pay the penalty. The amount of such penalty will be calculated at 1.5 times of the PPA Tariff for the shortfall units in energy terms.
- 3.3.3 The detailed list of documents required for verification of energy supply and performance of the Project will be intimated to the Successful Bidder subsequent commencement of power supply. For each month in a Contract Year, the above data will be required to be submitted by the respective Successful Bidder to TPL-D within 10 days after expiry of the previous month, for verification of the performance parameters for calculating applicable penalty on account of shortfall, if any.
- 3.3.4 However, the shortfall in power supply will not be applicable in events of Force Majeure identified under the PPA, affecting supply of power by the Successful Bidder.

3.4 Excess generation:

- 3.4.1 In order to allow optimization of operation of RE Power generating systems, the Successful Bidder is allowed to supply power from Project in excess of the Contracted Capacity in any time block, to any third party or power exchange, without requiring any No-Objection Certificate (NOC) from Power Procurer. The Successful Bidder may also sell the power which was offered on day ahead basis to the Procurer (within Contracted Capacity) but not scheduled by the Procurer, to any third party or in power exchange without requiring NOC from the Procurer.

3.5 Minimum Shareholding requirements:

- 3.5.1 In case of the Successful Bidder itself executing the PPA, it shall ensure that its promoters shall not cede control (Control shall mean the ownership, directly or indirectly, of more than 50% of the voting shares of such Company or right to appoint majority Directors) of the Bidding Company/Consortium until one (1) year after the SCOD, except with the prior approval of TPL-D.
- 3.5.2 In case of companies having multiple promoters (but none of the shareholders having more than 50% of voting rights and paid up share capital), it shall be considered as a

company under joint control. In such cases, the shareholding pattern in the company as submitted at the time of bidding, shall be maintained upto one (1) year after SCOD.

- 3.5.3 In case of Project being executed through SPVs: The Successful Bidder, if being a single company, shall ensure that its shareholding in the SPV/ Project Company executing the PPA shall not fall below 51% at any time prior to one (1) year after SCOD, except with the prior approval of SECI. In the event the Successful Bidder is a consortium, then the combined shareholding of the consortium members in the SPV/ Project Company executing the PPA, shall not fall below 51% at any time prior to one (1) year after SCOD, except with the prior approval of TPL-D. Further, the successful bidder shall ensure that its promoters shall not cede control of the bidding company till one (1) year from the SCOD, except with the prior approval of TPL-D.
- 3.5.4 Any change in the shareholding after the expiry of one (1) year after SCOD can be undertaken under intimation to TPL-D.

3.6 Obligations of power producer:

- 3.6.1 The project should be designed as per the applicable regulations for supplying energy at Delivery Point.
- 3.6.2 The responsibility of getting the transmission connectivity shall be of the Successful Bidder and at the cost of the Successful Bidder, in line with applicable regulations.
- 3.6.3 The responsibility of getting the grid connectivity and access to the corresponding transmission system upto Delivery Point shall be of the Successful Bidder.
- 3.6.4 The cost of transmission infrastructure including cost of construction of line, maintenance, losses, any other operational and / or financial cost etc. upto the Delivery Point for the term of the PPA will be borne by the Successful Bidder.
- 3.6.5 The transmission of power up to the Delivery Point and energy accounting infrastructure shall be the responsibility of the Successful Bidder at his own cost.
- 3.6.6 The Power Producer shall undertake at its own cost maintenance of the Interconnection Facilities, excluding the transmission line beyond the Delivery point as per the specifications and requirements of CTU/STU, as notified to the Power Producer, in accordance with Prudent Utility Practices.
- 3.6.7 The Power Producer shall operate and maintain the Project in accordance with Prudent Utility Practices.
- 3.6.8 The Power Producer shall be responsible for all payments on account of any taxes, cesses, duties or levies imposed by the 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.

3.6.9 If the commissioning of the Project or part thereof is delayed beyond the start date of grant of transmission open access, then transmission charges shall be borne by Successful Bidder till full commissioning of the Contracted Capacity.

3.6.10 To procure start up power required for the plant from local Discom at its own cost.

3.6.11 Fulfilling all other obligations undertaken by him under this Agreement.

3.7 Site-related project preparatory activities including clearances.

3.7.1 The Successful Bidder(s) are required to obtain all necessary clearances and permits and submit as required for setting up the Projects, including but not limited to the following:

- a) Land acquisition: Submission of documents, Lease Agreement to establish possession and right to use 100 % (hundred per cent) of the required land in the name of the Successful Bidder(s) for a period not less than the complete term of PPA, on or before the Scheduled Commissioning Date (SCOD). Wherever leasing of private land is involved, the lease should allow transfer of land lease rights to the lenders or Power Procurer, in case of default of the Power Producer.
- b) No Objection Certificate (NoC)/ Environmental clearance (if applicable) for the Project.
- c) Forest Clearance (if applicable) for the Project.
- d) No Objection Certificate (NoC) from Ministry of Defence (if applicable).
- e) A letter from Central Transmission Utility (CTU) confirming technical feasibility of connectivity of the plant to CTU substation.
- f) Any other clearances/permissions/approvals (if any), as may be legally required.

3.8 Obligations of TPL-D:

- a) TPL-D shall grant Must Run Status to the Project.
- b) TPL-D shall make payment of Monthly Charge as per Article 5 of this PPA.

3.9 Liquidated Damages for delay in Commissioning the Project beyond Scheduled Commercial Operation Date (SCOD)

3.9.1 The Project shall be commissioned by the SCOD, which will be the date as on 24 months from the date of execution of the PPA. Subject to Force Majeure as per Article 8 of the PPA, delay in commissioning, beyond the SCOD shall involve penalties, on the Successful Bidder(s) as detailed below:

- a. For delay in commissioning upto 6 months from SCOD, encashment of Performance Bank Guarantee on per day basis and proportionate to the capacity not commissioned. For example, in case of a Project of 250 MW capacity, if commissioning of 100 MW capacity is delayed by 18 days beyond the SCOD, then the liquidated damages shall be: $PBG \text{ amount} \times (100/250) \times (18/180)$. For the purpose of calculations of liquidated damages, 'month' shall be considered consisting of 30 days.
- b. For delay in commissioning beyond six months from SCOD:
 - a. Successful Bidder's Event of Default, as per Clause 10.2.1 of the PPA "Power Producer's Default", shall be considered to have occurred and the contracted capacity shall stand reduced to the project capacity that has commenced supply of power within the period of SCOD + 6 months. The PPA for the balance Contracted Capacity that has not commenced supply of power shall stand terminated. However, TPL-D may allow the further extension subject to mutual discussion & Successful Bidder(s) concurrence to comply with the appropriate commercial mechanism as may be required by the Power Procurer and subject to approval by the Appropriate Commission.

It may be noted that commissioning/part commissioning of the Project will not be declared until the Successful Bidder(s) demonstrates possession of land in line with Clause 3.7 of this PPA, in addition to the other conditions as established by the Power Procurer. For part commissioning portion of land on which the part of the project is commissioned should be with Successful Bidder(s) in accordance with clause 3.7.

Power Producer shall approach the Appropriate Commission for adoption of tariffs by the Appropriate Commission within 30 (fifteen) days of the discovery of the tariffs, subsequent to approaching the Appropriate Commission for adoption of tariffs under Section 63 of the Act, in case, Appropriate Commission does not decide upon the same within 60 days of such submission or within 120 days from the date of Power Purchase Agreement (PPA), whichever is more, the Procurer shall grant appropriate extension of time in SCOD to the Power Producer, corresponding to the delay [beyond 60 days of submission or 120 days of PPA whichever is more] in adoption / approval by the Appropriate Commission till the date of adoption/ approval by the Appropriate Commission.

In the event of termination of PPA or part thereof, any damages or charges payable to the STU/ CTU, for the Open Access of the Project, shall be borne by the Successful Bidder(s).

3.10 Generation Compensation for Off-take Constraints: The Power Procurer may be constrained not to schedule power on account of unavailability of the Transmission

Infrastructure/Grid or in the eventuality of a Back down in accordance with the Electricity (Promotion of Generation of Electricity from Must-Run Power Plant) Rules, 2021, as amended from time to time.

3.10.1 Offtake constraints due to Grid Unavailability:

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

Duration of Grid unavailability	Provision for Generation Compensation
Grid unavailability	<p>Generation Compensation = ((Tariff X RE power (MW) offered but not scheduled by Procurer)) X 1000X No. of hours of grid unavailability.</p> <p>However, in the case of third-party sale or sale in the power exchange, as price taker, the 95% of the amount realized, after deducting expenses, shall be adjusted against the Generation compensation payable, on monthly basis.</p>

3.10.2 Payment in case of reduced offtake

- a. In case the plant is available to supply power but the off take of power is not done by the procurer, including non-dispatch of power due to noncompliance with “electricity (late payment surcharge and related matters) rules, 2022 notified by the ministry of power vide gazette notification dated 3rd June 2022” and any clarifications or amendment thereto, considering the principle of ‘must run’ status for re power, the procurer shall pay to the Power Producer, corresponding to the reduced off take, in terms of following manner:

Duration of Reduced Offtake	Provision for Generation Compensation
Reduced off-take	<p>Generation Compensation = ((Tariff X RE power (MW) offered but not scheduled by Power Procurer)) X 1000 X No. of hours of Reduced Offtake.</p> <p>However, in the case of third-party sale or sale in the power exchange, as price taker, the 95% of the amount realized, after deducting expenses, shall be adjusted against the Generation compensation payable, on monthly basis.</p>

For claiming compensation, the Bidder(s) must sell their power in the power exchange as a price taker. Thus, the compensation would be limited to the difference of the actual generation up to declared capacity subject to a maximum of up to the contracted capacity and the quantum of power scheduled by the Power Procurer.

ARTICLE 4: SYNCHRONISATION, COMMISSIONING AND COMMERCIAL OPERATION

4.1 Synchronization, Commissioning and Commercial Operation

- 4.1.1 The Power Producer shall give at least thirty (30) days written notice to the SLDC/RLDC and TPL-D, of the date on which it intends to synchronize the Project/unit to the Grid System.
- 4.1.2 Subject to Article 4.1.1, the Project may be synchronized by the Power Producer 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 Power Producer at its generation facility of the Power Project at its own cost. The Power Producer shall synchronize its system with the Grid System only after the approval of CTU/STU/RLDC/SLDC.
- 4.1.4 The Power Producer shall immediately after each synchronization/ tripping of Power Producer, 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 Power Producer shall commission the Project within SCOD.
- 4.1.6 The Power Producer shall be required to obtain Developer and/ or Transfer Permission, Key Plan drawing etc. prior to mounting of panels and submit the same to TPL-D prior to actual commissioning of the Project / unit.

- 4.2 **Part Commissioning:** Part Commencement of supply of power from the Project shall be accepted by Power Procurer subject to the condition that the minimum capacity for acceptance of first and subsequent part(s) shall be 50 MW (with the last part being the balance Contracted Capacity), without prejudice to the imposition of penalty, in terms of the PPA on the part which has not yet commenced supply of power. However, the SCOD will not get altered due to part commencement of supply of power. Irrespective of dates of part or full commencement of supply of power, the PPA will remain in force for 25 years from SCOD.

4.3 Early Commissioning:

In case of multiple project components and if one or more such component (wind or solar or other RE power generating system) is ready for injection of power into the grid, but the remaining component is unable to commence supply of power, the Successful Bidder will be allowed to commence supply of power from such component which is ready outside the ambit of PPA.

The developer shall give fifteen (15) days advance notice to TPL-D regarding the advance commissioning of full or part capacity. TPL-D shall give acceptance for availing such power within 15 days from the date of service of notice. In case TPL-D do not give their acceptance to purchase power within the stipulated period, the Successful Bidder can sell the power to the extent not accepted by TPL-D in the power exchanges or through bilateral arrangements.

Provided that in case TPL-D give their acceptance to purchase power, the TPL-D will be accorded priority in availing such power.

Provided further that in such cases tariff payable by TPL-D shall be up to 50% of the PPA tariff.

4.4 Performance Guarantee

- 4.4.1 The Bank Guarantee or Payment on Order instrument or insurance surety bond of Rs. _____ furnished by Power Producer to TPL-D shall be for guaranteeing the Financial Closure, Commissioning/ commercial operation of the Project up to the Contracted Capacity within SCOD.
- 4.4.2 If the Power Producer fails to commission the Project on or before Scheduled Commercial Operation Date or fails to pay extension charges on account of extension of Financial Closure, TPL-D shall have the right to encash the Bank Guarantee or Payment on Order instrument without prejudice to the other rights of the TPL-D under this Agreement as per Article 3.9.
- 4.4.3 PG shall be returned to the Power Producer within 45 days of the Commissioning of the project. In case of part Commissioning, PG, corresponding to the part capacity Commissioned, shall be released within 45 days of such part-Commissioning. TPL-D to release PG, if successful Bidder is able to replace the same with "Payment on Order instrument"/Letter(s) of Undertaking from IREDA or PFC or REC.

4.5 Delay in Commissioning of power supply on Account of Delay in Transmission system

- 4.5.1 The GNA is required to be obtained by TPL, subsequent to grant of connectivity, in case there is a delay in grant/operationalization of GNA by the CTU/STU and/or there is a delay in readiness of the ISTS/STU substation at the Delivery Point, including readiness of the power evacuation and transmission infrastructure of the CTU/STU network until SCOD of the Project, and it is established that:
 - a) The Power Producer has complied with the complete application formalities as per the Detailed Procedure as issued by the CTU/STU.
 - b) The Power Producer has adhered to the applicable regulations/procedures in this regard as notified by the CERC/CEA.

- c) The delay in grant of GNA by the CTU/STU and/or delay in readiness of the ISTS/STU substation at the Delivery Point, including readiness of the power evacuation and transmission infrastructure of the ISTS/STU network, is a factor attributable to the CTU/transmission licensee and is beyond the control of the Power Producer.

The above shall be treated as delays beyond the control of the Power Producer and SCOD for the Project shall be received as the date as on 60 days subsequent to the readiness of the Delivery Point and power evacuation infrastructure and/or grant/operationalization of GNA. Decision on requisite extension of SCOD on account of the above factor shall be taken by TPL.

In case of delay in commencement of power supply from the Project due to reasons beyond the reasonable control of the Power Producer, TPL may extend the SCOD after examining the issue on the case-to-case basis. In case of change of Project location(s) by the Power Producer, extension request(s) under this clause shall be dealt by TPL on case-to-case basis.

Further, in case of delay in commencement of power supply on account of reasons solely attributable to the Power Producer, resulting in any Liquidated Damages/penalty levied on the TPL including transmission charges under the GNA regulations and/or applicable regulation as notified by CERC, such damages/penalty shall be passed on to the Power Producer.

ARTICLE 5: RATES AND CHARGES

- 5.1 TPL-D shall pay for the Delivered Energy as certified in the SEA issued by SLDC, for the Term of this Agreement from the SCOD, to the Power Producer every month ("Monthly Charge"). The Tariff payable by TPL-D for energy purchased shall be as per Article below.
- 5.2 The Applicable Tariff under this agreement shall be a fixed Tariff Rs. ____ per unit (Rupees _____ per unit) as discovered under the Competitive Bidding (followed by e-reverse auction) for Delivered Energy from the Project as certified in SEA issued by SLDC during the Term of this Agreement.
- 5.3 For each kVARh drawn from the grid, the Power Producer shall pay at the rate determined by CERC/SERC to CTU/STU from time to time.
- 5.4 The energy certified by RLDC/SLDC in the REA / SEA shall be considered for monthly energy bill. The other provisions of open access/GNA and other regulations of CERC / GERC and its amendments thereto from time to time shall be applicable.

ARTICLE 6: BILLING AND PAYMENT

6.1 Billing Provision:

- 6.1.1 The Billing will be on monthly basis. TPL-D will be billed by the Power Producer based on Delivered Energy as certified in SEA by SLDC following the end of each month for the energy supplied and payment will be due on the 30th (Thirtieth) day following the receipt of the billing invoice.

6.2 Payment:

- 6.2.1 TPL-D shall make payment of the amounts due in Indian Rupees within thirty (30) Business days from the date of receipt of the Tariff Invoice by the designated office of the TPL-D by 5:00 PM.

6.3 Late Payment:

- 6.3.1 Late Payment Surcharge shall be payable, on the payment outstanding after the Due Date of the Payment, at the Base Rate of Late Payment Surcharge applicable for the period for the first month of default.
- 6.3.2 The rate of Late Payment Surcharge for the successive months of default shall increase by 0.5 percent for every month of delay provided that the Late Payment Surcharge shall not be more than 3 percent higher than the base rate at any time.
- 6.3.3 Further, all payments by a TPL-D to Power Producer shall be first adjusted towards Late Payment Surcharge and thereafter, towards monthly charges, starting from the longest overdue bill.

6.4 Rebate:

For payment of Monthly Bill by TPL-D, if paid before Due Date of Payment, a Rebate shall be deducted by TPL-D at the rate of seven (7) percent in excess of the applicable SBI 1-year Marginal Cost of Funds Based Lending Rate (MCLR) per annum / any replacement thereof by SBI, on the amount paid before due date, calculated on a week or part thereof basis viz.

$$= \frac{(\text{SBI MCLR rate} + 7\%)}{52} \quad \text{per week or part thereof.}$$

6.5 Payment Security:

6.5.1 Letter of Credit (LC)

6.5.1.1 TPL-D shall provide a revolving Letter of Credit in favour of, and for the sole benefit of, the Power Producer for the contracted capacity. All the cost incurred by TPL-D for opening, maintenance and other cost related to establishment of Letter of Credit shall be borne by TPL-D.

6.5.1.2 The Letter of Credit shall be established in favour of, and issued to, the Power Producer and made operational thirty (30) days prior to due date of first invoice and shall be maintained consistent herewith by TPL-D at all times during the Term of the Agreement.

6.5.1.3 Such Letter of Credit shall be in form and substance acceptable to both the Parties and shall be issued by any Scheduled Bank and be provided on the basis that:

- i. In the event a Tariff Invoice or any other amount due and undisputed payable by TPL-D pursuant to the terms of this Agreement is not paid in full by TPL-D as and when due, the Letter of Credit may be called by the Power Producer for payment of undisputed amount.
- ii. The amount of the Letter of Credit shall be equal to an amount not less than one month's average billing of the Project
- iii. The TPL-D shall replenish the Letter of Credit to bring it to the original amount within 30 days in case of any valid drawdown.

6.5.1.4 The Letter of Credit shall be renewed and/or replaced by the TPL-D not less than 30 days prior to its expiration.

6.5.1.5 The drawl under the Letter of Credit in respect of a Tariff Invoice (excluding supplementary bills) shall require:

- i. a copy of the Tariff Invoice along with relevant extract of the REA / SEA, supporting the payments attributable to the Delivered Energy in respect of such Tariff Invoice.
- ii. a certificate from the Power Producer stating that the amount payable by TPL-D in respect of such Tariff Invoice has not been paid and not disputed by TPL-D till the Due Date of Payment of the Tariff Invoice.

6.6 Disputes:

In the event of a dispute as to the amount of any Tariff Invoice, TPL-D shall notify the Power Producer of the amount in dispute and TPL-D shall pay the Power Producer 100% of the undisputed amount plus 50% of the disputed amount within the due date provided either party shall have the right to approach the Appropriate Commission to effect a higher or lesser payment on the disputed amount. The

Parties shall discuss within a week from the date on which TPL-D notifies the Power Producer of the amount in dispute and try and settle the dispute amicably. Where any dispute arising out of or in connection with this agreement is not resolved mutually then such dispute shall be submitted to adjudication by the Appropriate Commission under Section 86 of Electricity Act 2003 and the Appropriate Commission may refer the matter to Arbitration as provided in the said provision read with Section 158 of Electricity Act 2003. If the dispute is not settled during such discussion then the payment made by TPL-D shall be considered as a payment under protest. Upon resolution of the dispute, in case the Power Producer 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 7% for the period it retained the additional amount. Neither TPL-D nor Power Producer shall have the right to challenge any Tariff Invoice or to bring any court or administrative action of any kind questioning/modifying a Tariff Invoice after a period of three years from the date of the Tariff Invoice is due and payable.

ARTICLE 7: METERING AND COMMUNICATION

7.1 Reading and Correction of Meters

- (i) The Metering Point, which is the point at which energy supplied to the Power Procurer shall be measured, shall be the low voltage bus bar of the STU / CTU substation. All expenses including wheeling charges and losses between the Project and the Delivery Point shall be paid by the Power Producer without any reimbursement by the Power Procurer.
- (ii) For the purpose of energy accounting the Power Producer shall install ABT compliant meter at the metering point.
- (iii) Interface metering shall confirm to the Central Electricity Authority (Installation and Operation of Meters) Regulations 2006 and amendment thereto. STU/CTU shall stipulate specifications in this regard.
- (iv) In the event that the Main Metering System is not in service as a result of maintenance, repairs or testing, then the Backup Metering System shall be used during the period the Main Metering System is not in service and the provisions above shall apply to the reading of the Backup Metering System.

7.2 Sealing and Maintenance of Meters

- (i) The Main Metering System and the Backup Metering System shall be sealed in the presence of representatives of Power Producer, TPL-D and STU/CTU.
- (ii) When the Main Metering System and / or Backup 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 Power Producer and / or TPL-D / STU / CTU at Power Producer's cost, as soon as possible.
- (iii) Any meter seal(s) shall be broken only by STU/CTU's representative in the presence of Power Producer'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 three years.
- (v) In case, both the Main Meter and Check Meter are found to be beyond permissible limit of error, both the meters shall be calibrated immediately and the correction applicable to main meter shall be applied to the energy registered by the Main Meter at the correct energy for the purpose of energy accounting / billing for the actual period during which inaccurate measurements were made, if such period can be determined or, if not readily determinable, shall be the shorter of:

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

7.3 Records

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

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

ARTICLE 8: FORCE MAJEURE

8.1 Force Majeure Events & Exclusions:

8.1.1 Force Majeure Events: 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:

- a. Acts of God;
- b. Typhoons, floods, lightning, cyclone, hurricane, drought, famine, epidemic, plague or other natural calamities;
- c. Acts of war (whether declared or undeclared), invasion or civil unrest;
- d. 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 Power Producer or TPL-D of any Law or any of their respective obligations under this Agreement);
- e. Earthquakes, explosions, accidents, landslides, fire;
- f. Expropriation and/or compulsory acquisition of the Project in whole or in part by Government Instrumentality;
- g. Chemical or radioactive contamination or ionizing radiation; or
- h. Damage to or breakdown of transmission facilities of Transmission Utilities;
- i. 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:

1. Unavailability, Late Delivery or Change in cost of plants and machineries, equipment, materials, spare parts or consumables for the project;
2. Delay in performance of any contractor / sub contractor or their agents;
3. Non-performance resulting from normal wear and tear experience in power generation materials and equipments;
4. Strike or Labour Disturbances at the facilities of affected parties;
5. Inefficiency of finances or funds or the agreement becoming onerous to perform, and

6. Non-performance caused by, or concerned with, the affected party's

- I. Negligent and intentional acts, errors or omissions;
- II. Failure to comply with Indian law or Indian Directive; or
- III. Breach of, or default under this agreement or any Project agreement or Government agreement.

8.1.3 The affected Party shall intimate to other party about occurrence of force Majeure within 15 days of the start of the force majeure and other party shall respond on his claim within 15 days of the receipt of the intimation. If any event of Force Majeure results in a breakdown of communication rendering it not reasonable to give notice within the applicable time limit specified herein, then the party claiming Force Majeure shall give notice as soon as reasonably practicable after reinstatement of communication, but not later than one day after such reinstatement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed, and the Affected Party shall give the other Party regular (and not less than monthly) reports on the progress of those remedial measures and such other information as the other party may reasonably request about the situation.

8.1.4 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.

8.1.5 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 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.

For avoidance of doubt, neither Party's obligation to make payments of money due and payable prior to occurrence of Force Majeure events under this Agreement shall be suspended or excused due to the occurrence of a Force Majeure Event in respect of such Party.

ARTICLE 9: CHANGE IN LAW

9.1 Definitions

9.1.1 The term “Change in Law” shall refer to the occurrence of the following events related to the project from seven (7) days prior to the last date of Bid Submission:

- i. the enactment of any new law; or
- ii. any amendment, modification or repeal of an existing law or requirement of new consent, permit or license; or
- iii. any modification to the prevailing conditions prescribed for obtaining a consent, permit or license, not owing to any default of the Power Producer;
- iv. any change in the rates of any taxes which have a direct effect on the Project.

But does not include-

- A. Any change in taxes on corporate income or any change in withholding tax on income or dividends distributed to the shareholders;
- B. Change in respect of deviation settlement charges or frequency intervals by an Appropriate Commission;

9.2 Relief for Change in Law

9.2.1 In the event a change in Law results in any increase or decrease in the cost of generation, the said increase / decrease in cost shall be passed on in tariff in the following manner:

- a. For the purpose of ensuring that the pass through happens in an expeditious manner within 30 days of the Change in Law event, the following formula may be followed:

Let Financial impact of change in law = P

Then, the modification in PPA Tariff (M.T.) for compensating the financial impact is given by:

$$M.T. = Y/X$$

Where, X = estimated monthly electricity generation (in kWh) = (1/12) [contracted capacity (MW) x Annual CUF derived based on clause 3.2 PPA (%) x 8760 hours x 10];

and

$$Y = [(P \times Mr) \{ (1 + Mr)^n \}] / [\{ (1 + Mr)^n \} - 1]$$

where,

n = no. of months over which the financial impact has to be paid; and

Mr= monthly rate of interest; where R = annual rate of interest on loan component (%) as considered by Central Electricity Regulatory Commission (CERC) in its Order for Tariff determination from Renewable Energy Sources for the year in which the project is commissioned. In absence of relevant CERC Orders for the concerned year, the interest rate shall be average interest rate plus 200 basis points above the average State Bank of India Marginal Cost of Funds based leading rate (MCLR of one year tenor) prevalent during the last available six months for such period.

Further, the M. T. shall be trued up annually based on actual generation of the year so as to ensure that the payment to the Power Producer is capped at the yearly annuity amount.

- b. The pass through according to the formula stipulated above shall be calculated and shall come into effect automatically after 30 days of the Change in Law event.
- c. Within 30 days of the pass through coming into effect the Power Producer shall submit the relevant documents/calculation sheets to the Appropriate Commission for truing up the rate of pass through per unit.
- d. Appropriate Commission shall verify the calculation and do the truing up within 60 days of the pass through coming into effect after which the rates of pass through shall be adjusted if necessary, according to the truing up.

ARTICLE 10: TERM, TERMINATION AND DEFAULT

10.1 Term of the Agreement: This Agreement shall become effective upon the execution and delivery thereof by the Parties hereto and unless terminated pursuant to other provisions of the Agreement, shall continue to be in force for such time until the completion of a period of 25 years (Twenty-Five) from the Scheduled Commercial Operation Date of the Project. This Agreement may be extended for a further period on mutually agreed terms and conditions at least one hundred eighty (180) days prior to the Expiry Date and approved by Appropriate Commission, provided the arrangements with land & infrastructure owning agencies, relevant transmission utilities / system operators permit operation beyond this period of 25 years.

Survival: The expiry or termination of this Agreement shall not affect any accrued rights, obligations and liabilities of the Parties under this Agreement, including the right to receive penalty as per the terms of this Agreement, nor shall it affect the survival of any continuing obligations for which this Agreement provides, either expressly or by necessary implication, which are to survive after the Expiry Date or termination including those under Article 8 (Force Majeure), Article 10 (Term, Termination and Default), 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.

10.2 Events of Default:

10.2.1 Power Producer'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 Power Producer:

- a) Delay in commencement of supply of power beyond six months from SCOD, the Power Producer event of default shall be construed to have occurred and consequences shall be in accordance with Clause 3.9.
- b) Failure to maintain minimum supply of power requirement (i.e. DFR and Peak Hours requirement) as per Clause 3.2 for a period of 6 consecutive months after commencement of power supply throughout the Term of this Agreement.
- c) In the event that the Power Producer assigns or novates any of its rights or obligations contrary to the terms of the PPA.
- d) O&M Default on part of Power Producer
- e) Failure or refusal by Power Producer to perform any of its material obligations under this Agreement including but not limited to Financial Closure.
- f) In case of non-achievement of Financial Closure within stipulated time or failure to pay extension charges in advance to TPL-D and consequent non extension of Financial Closure deadline.

- g) If the Power Producer (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.
- h) If the Power producer 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 Power producer 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 the Power Producer and expressly assumes all obligations under this agreement and is in a position to perform them.
- i) The Power Producer repudiates this agreement.
- j) Failure to maintain the shareholding as per Clause 3.5 of this PPA.
- k) Occurrence of any other event which is specified in this Agreement to be a material breach / default of the Power Producer or commits any other acts or omissions as laid down in the PPA and is also unable to cure any of the aforesaid within the cure period, as may be provided in the PPA, the Power Producer shall be construed to be in default.
- l) Breach of representations and warranties as specified in Article 13.13 of this PPA.

10.2.2 TPL-D's Default: The occurrence of any of the following at any time during the Term of this Agreement shall constitute an Event of Default by TPL-D:

- a) If the TPL-D is in default on account of reasons including failure to pay the monthly and/or supplementary bills within the stipulated time period
- b) If TPL-D 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 TPL-D 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 TPL-D and expressly assumes all obligations under this agreement and is in a position to perform them
- c) Occurrence of any other event which is specified in this Agreement to be a material breach or default of TPL-D
- d) Repudiation of the PPA

10.3 Termination:

10.3.1 Termination for Power Producer's Default:

- a) Upon the occurrence and continuation of any Power Producer's Event of Default under Article 10.2.1, TPL-D shall have the right to deliver to the Power Producer, with a copy to the representative of the lenders to the Power Producer with whom the Power Producer has executed the Financing Agreements, a notice stating its intention to terminate this Agreement (Preliminary Default Notice), which shall specify in reasonable detail, the circumstances giving rise to the issue of such notice.
- b) Following the issue of a Preliminary Default Notice, the Consultation Period of ninety (90) days or such longer period as Power Producer and TPL-D may agree, shall apply and it shall be the responsibility of Power Producer and TPL-D to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances. During the Consultation Period, Power Producer and TPL-D shall continue to perform their respective obligations under this Agreement.
- c) Within a period of seven (7) days following the expiry of the Consultation Period unless Power Producer or TPL-D shall have otherwise agreed to the contrary or the Power Producer's Event of Default giving rise to the Consultation Period shall have ceased to exist or shall have been remedied, TPL-D may terminate this Agreement under intimation the Buying Entities by giving a written Termination Notice of sixty (60) days to the Power Producer and Power Producer is liable to pay to the TPL-D, damages, equivalent to 24 (twenty-four) months, or balance PPA period whichever is less, of Tariff for its energy generated at the Contracted Capacity. The Power Procurer shall have the right to recover the said damages by way of forfeiture of bank guarantee, if any, without prejudice to resorting to any other legal course or remedy.
- d) In addition to the levy of damages as aforesaid, the lenders shall be entitled to exercise their rights of substitution, in concurrence with the Power Procurer. However, in the event the lenders are unable to substitute the defaulting Power Producer within the stipulated period, the Power Procurer may terminate the PPA.

10.3.2 Termination for TPL-D's Default:

- a) Upon the occurrence and continuation of any TPL-D's Event of Default specified in Article 10.2.2, the Power Producer shall have the right to deliver to TPL-D, a Power Producer Preliminary Default Notice, which notice shall specify in reasonable detail the circumstances giving rise to its issue.
- b) Following the issue of a Preliminary Default Notice, the Consultation Period of

ninety (90) days or such longer period as the Power Producer and TPL-D may agree, shall apply and it shall be the responsibility of the Power Producer and TPL-D to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.

- c) During the Consultation Period, the Power Producer and TPL-D shall continue to perform their respective obligations under this Agreement.
- e) After a period of two hundred ten (210) days following the expiry of the Consultation Period and unless the Power Producer and TPL-D shall have otherwise agreed to the contrary or TPL-D's Event of Default giving rise to the Consultation Period shall have ceased to exist or shall have been remedied, Power Producer may terminate the PPA and at its discretion. TPL-D shall pay to the Power Producer, damages, equivalent to 24 (twenty-four) months, or balance PPA period whichever is less, of charges calculated at the energy generated its Contracted Capacity.

ARTICLE 11: DISPUTE RESOLUTION

- 11.1** Disputes or differences between the Parties other than disputes which may result in change in tariff arising out of or in connection with this Agreement may also be tried to be settled through mutual negotiation.
- 11.2** The Parties hereto agree to attempt to resolve all disputes as referred in Article 11.1 promptly, equitably and in good faith.
- 11.3** Each Party shall designate in writing and communicate to the other Party its own representative who shall be authorized to resolve any dispute arising under this Agreement in an equitable manner and, unless otherwise expressly provided herein, to exercise the authority of the Parties hereto to make decisions by mutual agreement.
- 11.4** Notwithstanding anything contained in this agreement, all disputes arising out under the contractual documents will be adjudicated by the Appropriate Commission.

ARTICLE 12: INDEMNITY

- 12.1 Power Producer's Indemnity:** The Power Producer agrees to defend, indemnify and hold harmless TPL-D, 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 wilful misconduct of the Power Producer, or by an officer, director, sub-contractor, agent or employee of the Power Producer except to the extent of such injury, death or damage as is attributable to the wilful misconduct or negligence of, or breach of this Agreement by, TPL-D, or by an officer, director, sub-contractor, agent or employee of the TPL-D.
- 12.2 TPL-D's Indemnity:** TPL-D agrees to defend, indemnify and hold harmless the Power Producer, 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 wilful misconduct of TPL-D, or by an officer, director, sub-contractor, agent or employee of TPL-D except to the extent of such injury, death or damage as is attributable to the wilful misconduct or negligence of, or breach of this Agreement by, the Power Producer, or by an officer, director, sub-contractor, agent or employee of the Power Producer.

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 Power Producer 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 Power Producer 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 Power Producer:

Name:

Designation:

Address:

Ph. Nos.:

Fax No.:

In case of Power Procurer

Name:

Designation:

Address:

Ph. Nos.:

Fax No.:

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, TPL-D 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 TPL-D for the assignment by the Power Producer 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, TPL-D acknowledges that the Financing Documents may provide that upon an event of default by the Power Producer under the Financing Documents, the Financing Parties may cause the Power Producer to assign to a third party the interests, rights and obligations of the Power Producer thereafter arising under this Agreement. TPL-D further acknowledges that the Financing Parties, may, in addition to the exercise of their rights as set forth in this Section, cause the Power Producer 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 Power Producer thereafter arising under this Agreement.

13.10 Entire Agreement, Appendices:

This Agreement constitutes the entire agreement between TPL-D and the Power Producer, 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 TPL-D and the Power Producer 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.

13.12 Performance Monitoring: Project shall install necessary equipment to continuously measure wind and solar resource data and other weather parameters and electrical parameters. Power Producer is required to submit this data through online portal to TPL-D, National Institute of Wind Energy (NIWE), National Institute of Solar Energy (NISE) and/ or other designated agency for monitoring the performance for the entire life of the project. In addition to the above, the Power Producer shall also submit information, as required by TPL-D, for regular monitoring of status of the project. TPL-D may develop a standard monitoring template /parameter for capturing regular progress of the project.

13.13 Representations and warranties

Parties hereby represent and warrant to the other Party that as at the date of this Agreement:

- 13.12.1 It is validly incorporated, in existence and duly registered under the Laws of India and has full power to conduct its business as conducted as at the date of this Agreement.
- 13.12.2 It has obtained all corporate authorisations and all other Consents required to empower it to enter into and perform its obligations under this Agreement where failure to obtain them would adversely affect to a material extent its ability to enter into and perform its obligations under this Agreement.
- 13.12.3 This Agreement will, when executed, constitute its valid and binding obligations; and entry into and performance by it of this Agreement will not (i) breach any provision of its memorandum and articles of association, bylaws or equivalent constitutional documents; (ii) result in a breach of any Laws or of any order, decree or judgment of any court or any governmental or regulatory authority, where any such breach would affect to a material extent its ability to enter into or perform its obligations under this

Agreement; and (iii) breach any agreement or understanding (oral or written) to which it may be bound.

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 TORRENT POWER LIMITED</p> <p>Authorised Signatory</p> <p>Name _____ Designation _____</p> <p>WITNESSES</p> <p>1. _____ Name _____ Designation _____</p> <p>2. _____ Name _____ Designation _____</p>	<p>FOR AND ON BEHALF OF ____</p> <p>Authorised Signatory</p> <p>Name _____ Designation _____</p> <p>WITNESSES</p> <p>1. _____ Name _____ Designation _____</p> <p>2. _____ Name _____ Designation _____</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: 400/220/
132/66 kV

Short circuit rating: As a part of the detailed design process, the Power Producer shall calculate the short circuit rating (minimum and maximum), and supply this information to the TPL-D.

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

2. Quality of Service

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

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 Power Producer shall maintain the Power Factor as per the prevailing Appropriate Commission regulations and as may be stipulated / specified by STU from time to time. The Power Producer shall provide suitable protection devices, so that the Electric Power Producers 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.

4. Technical Limits of Voltage

1. The nominal steady state electrical characteristics of the system are as follows:
 - a) Three phase alternating current at 50 Hertz plus or minus 0.5 Hertz

b) Nominal voltage of ___KV with +10% to – 12.5% variation.

2. The Project shall be designed and capable of being synchronized and operated within a frequency range as per relevant Grid Code and voltage of ___KV
3. Operation of the Project outside the nominal voltage and frequency specified above will result in reduction of power output consistent with Power Producer capability curves.

5. Specification of Electrical Energy Delivery

- a) The generation voltage from the Project of M/s. _____ is ___ KV. It uses unit connection of Power Producer, Power Producer 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 2: Approvals

1. Consent from the STU / CTU for the evacuation scheme for evacuation of the power generated by the ___ MW Project.
2. Approval of the relevant authority for commissioning of the transmission line and Project installed at the Project Site.
3. Certificate of Commissioning of the Project issued by relevant authority.
4. Permission from all other statutory and non-statutory bodies required for the Project
5. Clearance from Department of Forest, Ecology and Environment, if required
6. Any other clearances as may be legally required.

SCHEDULE 3: CHECK LIST FOR FINANCIAL CLOSURE

Last Date for submission of documents related to Financial Closure is 6 months prior to SCOD

Project Company Name:

LoA No:

Date:

Effective Date of PPA:

Scheduled Commissioning Date:

1. Financial Closure:

Details	Presently indicated in PPA
Location	
Technology	
Certificate from all financial institutions	<p>In case of tie up through Bank / Financial Institutions: -</p> <p>Document from Bank / Financial Institutions certifying arrangement of necessary funds by way of sanction of Loan (to be enclosed).</p> <p>In case of Internal Resources: -</p> <p>Copy of Board Resolution, Audited/Certified Balance sheet, Profit & Loss Account Statement, Bank Statement and Cash Flow Statement in support of availability of Internal resources of the Project Company and of the Company other than Project Company (in case the required funding will be raised from Company other than Project Company) (to be enclosed).</p> <p>Performa for the cases where funding will be from Company other than Project Company.</p>

Note:-

- (i) Copy of Final Detailed Project Report (DPR)
 - (ii) Undertaking by the Project Company that all Consents, clearances and permits required for supply of Power to TPL-D as per the terms of PPA have been obtained is to be enclosed
2. Copy of Agreement/ MOU entered into / Purchase Order with acceptance, for the supply of Plants and Equipment (to be enclosed)
3. Technical Parameters of the Project
- a) Certificate from Project Company that Technical specifications and directives given in Annexure-A of the RfS will be adhered to (to be enclosed)

- b) Proposed Project configuration as part of DPR of the Project (to be enclosed)
- 4. Ownership of the Successful Bidder: Latest Shareholding Pattern of the Project Company (including Compulsorily Convertible Debentures (CCDs), Compulsorily Convertible Preferential Shares (CCPS) of the Project Company certified by Chartered Accountant (to be enclosed)

Shareholding pattern is not required to be submitted by a Listed Company.

Note: Declaration of Shareholding Pattern of the Project Company is to be submitted to TPL-D on monthly basis, i.e., by the 10th day of every month for shareholding status of the Company upto the end of the previous month, till 1 year from the date of commissioning of the project.

- 5. The above checklist is to facilitate financial closure of projects. For any interpretation the respective provision of RfS / PPA shall prevail.

SCHEDULE 4: Project Location Details

Sl. no	Capacity (MW)	Location Details	Sending Substation/Pooling Station
01			
02			

Annexure A: Discom Demand Profile Requirements (MW)

Hour	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
00-01	50	50	50	50	50	50	50	50	50	50	50	50
01-02	50	50	50	50	50	50	50	50	50	50	50	50
02-03	50	50	50	50	50	50	50	50	50	50	50	50
03-04	50	50	50	50	50	50	50	50	50	50	50	50
04-05	50	50	50	50	50	50	50	50	50	50	50	50
05-06	50	50	50	50	50	50	50	50	50	50	50	50
06-07	50	50	50	50	50	50	50	50	50	50	50	50
07-08	50	50	50	50	50	50	200	200	200	200	200	50
08-09	120	120	120	120	120	120	200	200	200	200	200	120
09-10	120	120	120	120	120	120	120	120	120	120	120	120
10-11	120	120	120	120	120	120	120	120	120	120	120	120
11-12	120	120	120	120	120	120	120	120	120	120	120	120
12-13	120	120	120	120	120	120	120	120	120	120	120	120
13-14	120	120	120	120	120	120	120	120	120	120	120	120
14-15	120	120	120	120	120	120	120	120	120	120	120	120
15-16	120	120	120	120	120	120	120	120	120	120	120	120
16-17	50	50	50	50	50	50	120	120	120	120	120	50
17-18	50	50	50	50	50	50	50	50	50	50	50	50
18-19	50	50	50	50	50	50	200	200	200	200	200	50
19-20	200	200	200	200	200	200	200	200	200	200	200	200
20-21	200	200	200	200	200	200	50	50	50	50	50	200
21-22	200	200	200	200	200	200	50	50	50	50	50	200
22-23	200	200	200	200	200	200	50	50	50	50	50	200
23-24	50	50	50	50	50	50	50	50	50	50	50	50

Annexure – B

Technical Parameter of PV Module and various other components for use in Grid Connected Solar Power Plants

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

1. PV Module Qualification

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

Crystalline Silicon Solar Cell Modules IEC 61215

Thin Film Modules IEC 61646

Concentrator PV modules IEC 62108

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

2. Power Conditioners/ Inverters

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

Efficiency Measurements	IEC 61683
Environmental Testing	IEC 60068-2/ IEC 62093
Electromagnetic Compatibility (EMC)	IEC 61000-6-2, IEC 61000-6-4
Electrical Safety	IEC 62103/ 62109-1&2
Protection against Islanding of Grid	IEEE1547/IEC 62116/ UL1741 or equivalent EN/BIS Standards
LVRT Compliance	As per the latest GERC/ CERC Guidelines/ Order/ Regulations
Grid Connectivity	Relevant GERC/ CERC Regulations (including LVRT compliance) and Grid Code as amended and revised from time to time.
Rated capacity	Nominal/ Rated output power of the inverter (if different power ratings are mentioned at different temperatures, then power rating at 50°C shall be considered) in kW will be considered as inverter rated capacity.

3. Cables and connectors:

All cables and connectors for used for installation of solar field must be of solar grade which can withstand harsh environment conditions for 25 years from the SCOD of the project and voltages as per latest IEC standards. (Note: IEC Standard for DC cables for PV systems is under development. It is recommended that in the interim, the Cables of 600-1800 Volts DC for outdoor installations should comply with the EN50618/ TUV 2pfg 1169/08/07 or equivalent IS for service life expectancy of 25 years).

4. Other Sub-systems/Components

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

5. Authorized Test Centres

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

6. Warranty

- a. PV modules used in grid connected solar power plants must be warranted for Peak output wattage, as per the requirement of RfS.
- b. The modules shall be warranted for at least 10 years for failures due to material defects and workmanship.
- c. The mechanical structures, electrical works and overall workmanship of the grid solar power plants must be warranted for a minimum of 5 years.
- d. The Inverters/PCUs installed in the solar power plant must have a warranty for 5 years.

7. Identification and Traceability

Each PV module used in any solar power Project must use a RF identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions):

- i) Name of the manufacturer of PV Module

- ii) Name of the Manufacturer of Solar cells
- iii) Month and year of the manufacture (separately for solar cells and module)
- iv) Country of origin (separately for solar cells and module)
- v) I-V curve for the module at Standard Test Condition (1000 W/m², AM 1.5, 250C)
- vi) Wattage, I_m, V_m and FF for the module
- vii) Unique Serial No. and Model No. of the module
- viii) Date and year of obtaining IEC PV module qualification certificate
- ix) Name of the test lab issuing IEC certificate
- x) Other relevant information on traceability of solar cells and module as per ISO 9000

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

8. Performance Monitoring:

All grid solar PV power projects must install necessary equipment to continuously measure solar radiation, ambient temperature, wind speed and other weather parameters and simultaneously measure the generation of DC power as well as AC power generated from the plant. They will be required to submit this data to TPL-D and MNRE or GEDA on line and/or through a report on regular basis every month for the entire duration of PPA. In this regard they shall mandatorily also grant access to TPL-D and MNRE or GEDA to the remote monitoring portal of the power plants on a 24X7 basis.

9. Safe Disposal of Solar PV Modules:

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

Annexure C: Safety Standards To Be Followed For Battery Energy Storage Systems

Battery Energy Storage Systems (BESS)

Standard/ Code (or equivalent Indian Standards)	Description
IEC 61427-2 /IEC 62619:2017	Secondary cells and batteries for renewable energy storage for On-grid applications
IEC 62485-2 / UL1642	Safety requirements for secondary batteries and battery installations - to meet requirements on safety aspects associated with the erection, use, inspection, maintenance and disposal: Non-chemistry Specific (applicable to all secondary battery types)
IEC 61508 / UL 9540	Functional Safety of Electrical/Electronic/Programmable Electronic Safety-related Systems: Applicable for all Battery Energy Storage Systems
IEC 62133-1:2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 1: Nickel systems
IEC 62133-2 :2017	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems
IEC 62281/UN 38.3	Safety of primary and secondary lithium cells and batteries during transport: Applicable for storage systems using Lithium Ion chemistries
IEC 61850/ DNP3	Communications networks and management systems. (Plant SCADA and the BESS control system communication)
IEC TS 62933-5-1:2017	Electrical energy storage (EES) systems - Part 5-1: Safety considerations for grid-integrated EES systems - General specification

For other technologies being used in ESS, the Developer shall adhere to the relevant environmental and safety standards issued by Government of India from time to time.