

Wind Energy Purchase Agreement

This agreement made at _____ on this _____ day of _____ two thousand _____ between M/s. _____ (Wind Energy Generator name and address) (hereinafter called the Wind Energy Generator) (which expression shall wherever the context so permits, means and includes the successors in interests, executors, administrators and assigns) represented by Thiru. _____ as party of the first part and M/s. _____ (Name of the Distribution Licensee) _____ and having its office at _____ (hereinafter called the Distribution Licensee), (which expression shall wherever the context so permits, means and includes the successors in interest, administration and assigns) represented by the _____ (Designation of the Distribution Licensee's officer) as party of the Second part.

WHEREAS the Wind Energy Generator (WEG) has sent to the Distribution Licensee, his proposal to sell wind energy generated from his Wind Energy Generator No _____ No. of Generators of _____ make having capacity of _____ KW each installed at SF.No. _____ of _____ village _____ taluk in _____ district / commissioned on _____ to the Distribution Licensee.

AND WHEREAS the Distribution Licensee has accepted the said proposal and agreed to buy the energy from the party of the first part from their _____ No. of Generators of _____ KW capacity vide Lr.No. _____ on the terms and conditions hereinafter agreed to.

NOW THESE PRESENTS WITNESSETH AND THE PARTIES HEREBY RESPECTIVELY AGREE AS FOLLOWS:

1. Definitions

- (1) **“Interface line”** is defined as the electric line between the interconnection point and the nearest point at which the electric line could technically be connected to the existing grid or distribution system.
- (2) **“Inter connection point”** is defined as the wind energy generator’s switchyard at which point the interconnection is established between the wind energy generator and the grid / distribution system.
- (3) **“Force Majeure”** events means any event which is beyond the control of the agencies involved which they could not foresee or with a reasonable amount of diligence could not have foreseen or which could not be prevented and which substantially affect the performance by either agency such as but not limited to :-
 - (a) Acts of natural phenomena, including but not limited to floods, droughts, earthquakes and epidemics;
 - (b) Acts of any Government domestic or foreign, including but not limited to war declared or undeclared, hostilities, priorities, quarantines, embargoes;
 - (c) Riot or Civil Commotion
 - (d) Grid / distribution system’s failure not attributable to agencies involved

2. Interfacing and evacuation facilities:

- (1) The Distribution Licensee / State Transmission Utility agrees to bear the cost of interfacing lines up to the interconnection point in the case of sale of entire power to the Distribution Licensee by Wind Energy Generator. The Wind Energy Generator agrees to reimburse the entire cost of interfacing lines to the Distribution Licensee / State Transmission Utility in case the Wind Energy Generator decides to use such agreed power to be sold to the Distribution Licensee, for his captive use or for sale of such power to a third person or to a other Distribution Licensee, before the

wheeling of such power to his captive use or sale to third person or other Distribution Licensee.

(2) The Wind Energy Generator and the State Transmission Utility / Distribution Licensee shall comply with the provisions contained in Central Electricity Authority (CEA) (Technical Standards for connectivity to the Grid) Regulations, 2007 which includes the following namely;

- (a) Connection Agreement
- (b) Site responsibility schedule
- (c) Access at Connection site
- (d) Site Common Drawings
- (e) Safety
- (f) Protection System and Co-ordination
- (g) Inspection, Test, Calibration and Maintenance prior to Connection.

(3) The Wind Energy Generator agrees to comply with the safety measures contained in Indian Electricity Rules 1956 till such time Central Electricity Authority (Safety and Electric Supply) Regulations come into force;

(4) Both the parties shall comply with the provisions contained in the Indian Electricity Grid Code, Tamil Nadu Electricity Grid Code, the Electricity Act, 2003, other Codes and Regulations issued by the Commission / CEA and amendments issued thereon from time to time.

3. Operation and Maintenance:

(1) The Wind Energy Generator agrees that the starting current of the Generators shall not exceed the full load current of the machine and to provide the necessary current limiting devices like thyristor during starting.

(2) The Wind Energy Generators agrees to minimize drawal of reactive power from the Distribution Licensee's grid at an interchange point when the voltage at that point is below 95% of rated voltage and shall not inject

reactive power supply when the voltage is above 105% rated voltage subject to payment of required charges as per the order in force

- (3)** The Wind Energy Generator agrees to provide suitable automatic safety devices so that the Generators shall isolate automatically when the grid supply fails.
- (4)** The Wind Energy Generator agrees to maintain the Generators and the equipments including the transformer, switch gear and protection equipments and other allied equipments at the generator end at his cost to the satisfaction of the authorized officer of the Distribution Licensee / State Transmission Utility.
- (5)** The changing of the rupturing capacity of the switch gear and settings of the relays, if any, shall be subject to the approval of the authorized officer of the Distribution Licensee / State Transmission Utility.
- (6)** The interfacing lines shall be maintained by the Distribution Licensee / State Transmission Utility at their cost.
- (7)** There shall be no fluctuations or disturbances to the grid or other consumers supplied by the grid due to paralleling of the Generators. The Wind Energy Generator shall provide at his cost adequate protection as required by the Distribution Licensee to facilitate safe parallel operation of the Generators with grid and to prevent disturbances to the grid.
- (8)** The Wind Energy Generator agrees that the Distribution Licensee / State Transmission Utility shall not be responsible for any damage to his Generators resulting from parallel operation with the grid and that the Distribution Licensee / State Transmission Utility shall not be liable to pay any compensation for any such damage.
- (9)** The generators shall be maintained effectively and operated by competent and qualified personnel.
- (10)** In case of unsymmetrical fault on HV Bus, the wind energy generators shall share the fault current according to impedance of the circuit. To meet such contingency and for safe operation of the

Generator, the Wind Energy Generator shall provide the following scheme of protection namely;

- (a) Separate overload relays on each phase and earth fault relays shall be installed by the Wind Energy Generator. Under no circumstances, these relays shall be by passed.
- (b) With suitable current transformer and relay connections, the load sharing by the Wind Energy Generator and Distribution Licensee / State Transmission Utility shall be limited to their rated capacity.
- (c) Adequate indication and control metering for proper paralleling of the generators on the HV bus shall be made available.
- (d) Protection co-ordination shall be done by the Distribution Licensee / State Transmission Utility in consultation with Regional Power Committee and relays and the protection system shall be maintained as per site responsibility schedule.
- (e) Grid availability shall be subject to the restriction and control as per the orders of the SLDC and as per Tamil Nadu Electricity Grid Code.

4. Metering Arrangements:

- (1) The metering arrangements with facilities to record export and import of energy shall be provided in accordance with the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, Commission's Intra State Open Access Regulations 2005, Tamil Nadu Electricity Distribution Code, 2004 and Tamil Nadu Grid Code, 2004 in consultation with Distribution Licensee / State Transmission Utility. The periodicity of testing, checking, calibration etc., will be governed by the Regulations issued by the Central Electricity Authority / Commission in this regard.

- (2)** Main and Check Meters shall have facility to communicate its reading to State Load Dispatch Centre on real time basis or otherwise as may be specified by the Commission. Meter reading shall be taken as per the procedure devised by the Distribution Licensee / State Transmission Utility.
- (3)** The term 'Meter' shall mean a 'Meter' as defined in regulation 2 (p) of the Central Electricity Authority (Installation and operation of meters) Regulations 2006.
- (4)** The State Transmission Utility / Distribution Licensee may provide Check Meters of the same specification as Main Meters;
- (5)** The Wind Energy Generator can have a standby meter of the same specification tested and sealed by the State Transmission Utility / Distribution Licensee.
- (6)** The Main and Check Meters shall be tested for accuracy as per the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006. The meters may be tested using NABL accredited mobile laboratory or at any accredited laboratory in the presence of parties involved. Both parties shall seal Main and Check meters. Defective meter shall be replaced immediately.
- (7)** Reading of Main and Check meters shall be taken periodically at appointed day and hour by authorized officer of Distribution Licensee / State Transmission Utility and generator or his representative.
- (8)** Check meter readings shall be considered when Main Meters are found to be defective or stopped. Provided that, if difference between the readings of main and check meter vis-à-vis main meter reading exceeds twice the percentage error applicable to relevant class, both meters shall be tested and the one found defective shall be immediately replaced and reading of other will be considered.
- (9)** If during test or calibration, both the main meter and the check meter are found to have errors beyond permissible limits, the bill shall be revised for the previous 3 (Three) months or for the exact period if known and agreed upon by both the parties, by applying correction as determined by the

meter testing Wing of the State Transmission Utility / Distribution Licensee to the consumption registered by the meter with lesser error.

- (10) The Wind Energy Generator shall check the healthiness of meters (due to blowing of the P.T. fuses or due to any other causes) by superficially checking indicator lamps or by taking readings as frequently as possible. If both the main meter and the check meter fail to record energy either due to the blowing of the P.T. fuses or due to any other causes, the energy imported /exported may be arrived at based on the standby meter, if available, or by mutual agreement of the parties involved.
- (11) The interface meters may be Time of Day (TOD) meters with appropriate communication facilities to be connected with SLDC / Control Centre.

5. Rate of Energy and other Charges:

- (1) Energy Charges: The Distribution Licensee agrees to pay energy charges at the rate of Rs.
- (2) Reactive Power Charges:
 - (a) for drawing reactive power up to 10% of the net energy generated – 25 paise per kvarh
 - (b) for drawing reactive power more than 10% of the net energy generated – 50 paise per kvarh for the entire reactive power drawl.

6. Billing and Payment:

- (1) The Wind Energy Generator shall raise a bill every month for the net energy sold after deducting the charges for start up power and reactive power.
- (2) The Distribution Licensee shall make payment to the generator within 30 days of receipt of the bill. Any delayed payment beyond 30 days is liable for interest at the rate of 1% per month.

(3) The Wind Energy Generator agrees that if the consumption of the wind mill is more than the generation during a particular month, such excess consumption shall not be allowed to be carried forward to next month and the billing shall be done on the same month at the per unit realization rate of HT Industrial service as per tariff order in force.

7. Applicability of the Acts and Regulations:

(1) Both the parties shall be bound by the provisions contained in the Electricity Act., 2003, Regulations, notifications, orders and subsequent amendments, if any, made from time to time by the Commission.

8. Terms and Conditions and agreement period:

(1) This agreement shall be valid for a minimum period of 20 years from the date of execution.

(2) The parties to the agreement shall have the option of exiting in case of violation with three months notice to the other party.

(3) The parties to the agreement are at liberty at any time to renegotiate the existing agreement mutually in accordance with the Commission's order in force.

9. Settlement of Disputes - Arbitration:

(1) If any dispute or difference of any kind whatsoever arises between the parties relating to this agreement, it shall, in the first instance, be settled amicably, by the parties, failing which either party may approach the Commission for the adjudication of such disputes under section 86 (1) (f) of the Electricity Act, 2003.

10. Force Majeure:

- (1) Both the parties shall ensure compliance of the terms of this agreement. However, no party shall be liable for any claim for any loss or damage whatsoever arising out of failure to carry out the terms of this agreement to the extent that such failure is due to force majeure events as defined in this agreement. But any party claiming the benefit of this clause shall satisfy the other party of the existence of such an event(s).

In witness whereof Thiru. _____ acting for and on behalf of _____ (Wind Energy Generator name) _____ Authorized Officer of the Distribution Licensee acting for and on behalf of the Distribution Licensee have hereunto set their hands on the day, month and year herein above first mentioned.

In the presence of witnesses:

1)

Signature
Wind Energy Generator
Common seal

2)

In the presence of witnesses:

1)

Signature
Authorized Officer of the Distribution Licensee

2)

(By the order of the Commission)

**Secretary,
Tamil Nadu Electricity Regulatory Commission.**