

### **III GUIDELINES FOR DEVELOPMENT OF WIND FARMS IN PRIVATE LANDS**

(Revised as per G.O (MS) No.7/2007/PD dt 11-5-2007)

#### **3.1 Objective**

This part of the guidelines addresses development of wind farms in private land. These guidelines are being issued in supersession of earlier Government orders in this regard. In case of any inconsistency with any of the provisions of existing orders, clauses in this document shall prevail.

#### **3.2 Developer**

**3.2.1** Any individual, company, body corporate, partnership firm, joint venture-whether incorporated or not, artificial judicial person intending to set up wind farm in private land (hereafter referred to as developer) shall obtain technical approval from ANERT.

**3.2.2** Wind power and wind power potential sites being gifts of nature are natural resources of the State. Government intends to ensure utilization of their natural resources to suit the overall development strategy of the State in public interest. Thus permission for development of wind farms as CPPs will be given only after ascertaining the end user of electrical energy generated from the wind farms. As a policy, Government will not allow development of wind farm as CPPs by power intensive units which do not strictly adhere to the pollution control standards laid out from time to time.

#### **3.3 Procedure for Technical Approval**

The developer shall submit technical proposal in the prescribed format after conducting micro-sitting and other surveys/investigation and finalization of Wind Electric Generators (WEG) to ANERT. A Demand Draft in favour of Director, ANERT payable at Thiruvananthapuram towards nonrefundable processing fee at the rate fixed by the Executive Committee of ANERT shall be sent along with the technical proposal. Technical proposals without Demand Draft for the prescribed fee will be summarily rejected. Certified copy of title deeds and copy of sale agreement/lease agreement/consent letter from owner of the land shall also be submitted along with the technical proposal. The documents relating to the proposed land are for their identification by ANERT. According technical approval to the proposal no way indicates confirmation of any right of the developer on the proposed land.

ANERT shall scrutinize and take a decision on the technical proposal within a period of 120 days from the date of receipt. ANERT may inform the developer in case of any defect in his proposal within 60 days from the date of receipt of proposal after initial scrutiny and give the developer one month time to resubmit the proposal after rectifying all the defects. The developer shall be entitled to proceed with the implementation of the project if the Technical Proposal is not rejected within 120 days after receipt of modified proposal by ANERT. The technical approval shall be valid for 2 years from the date of issue. On getting technical clearance, a detailed project report will have to be submitted by the developer to ANERT before starting the installation work.

### **3.4 Technical Proposal**

**3.4.1** The technical proposal shall cover all aspects connected with the development of the Wind Farm including technical specifications of WEGs, details of the proposed land, latitude, longitude and altitude information of the location of WEGs, spacing between WEGs, boundary clearances, evacuation plan etc.

**3.4.2** The developer shall ascertain the feasibility of the site and expected energy output from the Wind Farm prior to submission of technical proposal.

### **3.5 Infrastructure Development**

**3.5.1** The Developer at their own cost and responsibility shall carry out necessary infrastructure development such as construction of approach roads, improvement to existing roads etc. In addition to that developer shall pay development charge to KSEB/STU.

**3.5.2** Government in consultation with KSEB/STU will fix the development charge from time to time on a per Mega watt (MW) basis and the developers shall remit the charges to KSEB/STU. KSEB/STU shall issue permission for interconnection to the grid on a first come first served basis based on payment of the development charge. For small developers proposing to install single WEG, KSEB/STU may permit payment of the development charges in 2 equal installments (one before interconnection permission and the other before interconnection) considering the merit of the application. In the case of small developers (Proposing to install WEGs of capacity upto 1MW), KSEB/STU may permit interconnection to the grid on payment of 50% of the development charges and the balance shall be paid before interconnection, considering the merit of the application.

**3.5.3** For technical proposals already under consideration as on 31-12-2006, the infrastructure development charge is tentatively fixed as Rs.20 lakhs per MW which will be finalized in consultation with KSEB and the difference, if any, will be settled between the developer and KSEB/STU.

### **3.6 Interconnection permission**

An application for interconnection for power evacuation shall be submitted to KSEB/STU in the prescribed format with a copy to ANERT.

The application shall contain.

- (1) Technical details of WEGs and their locations.
  - (2) Proposed evacuation plan including specifications of transformer tie-line, transmission line/sub-transmission line, metering and protective equipment etc. and drawings.
  - (3) Estimate of implementing the above evacuation plan.
- Non-refundable application fee of Rs. 20,000/MW shall be paid as Demand Draft in favour of KSEB/STU.

The developer shall enter into bulk power supply/wheeling agreement with KSEB/STU/Successor entities of KSEB or other buyers for sale of power. But, power can be sold to other buyers only if KSEB/ Successor entities of KSEB refuses to purchase power.

### **3.7 Evacuation facility**

**3.7.1** KSEB/STU shall develop the evacuation facility according to a master plan prepared in consultation with ANERT to evacuate the total power from each of the potential areas. The plan shall include construction of pooling station, transmission/sub transmission line from pooling station to KSEB/STU substation and augmentation/up-gradation required for existing substations and grid for further evacuation. KSEB/STU shall also prepare an estimate for such evacuation facility beyond and including pooling station. The estimate shall also include supervision charges payable to KSEB/STU. Construction and maintenance of evacuation lines from WEGs to the pooling station shall be at developers' cost and responsibility.

**3.7.2** In case of developers willing to undertake development of evacuation facility, KSEB/STU may permit such requests upon satisfaction of developer's technical and financial qualifications. The developer shall develop the evacuation facility as per the master plan in full or part as per KSEB/STU design. However in case where the evacuation facility is permitted to be developed by the developer in part, that has to be carried out according to KSEB/STU's proposal and not according to the capacity requirement of the developer. KSEB/STU will reimburse the cost as per the sanctioned estimate for the work after deducting the supervision charges. Developer shall be eligible for adjustment of infrastructure development charges in the estimated cost..

### **3.8 Metering**

Necessary main and check ABT compatible Special Energy Meters (SEM) of 0.2 accuracy class having import-export registering facility as per applicable IEC/BIS standards shall be installed at the cost of the developer, as per applicable CEA (Installation & Operation of Meters) regulations 2006 with its amendment there upon.

### **3.9 Type Certification**

C-WET/MNRE approved machines shall only be given Technical Approval by ANERT. Technical Proposals with machines under type certification can be submitted and in such cases, a conditional Technical Approval may be given. However, installation can be started only after obtaining permission from ANERT producing the type approval/certification from CWET.

### **3.10 Distance between WEGs and Boundary Clearances**

The micrositing of WEGs shall be done so that

(1) The minimum distance between any two WEGs (existing and having technical approval) is 5 times the diameter of the rotor (1) in the predominant wind direction and 3 times the diameter of the rotor in a direction perpendicular to the predominant win direction.

(2) The distance from the WEG to the boundary of the plot proposed by the developer shall be at least half the rotor diameter plus 5 meters.

(3) The site will be inspected by a technical committee constituted by ANERT and its recommendations regarding boundary clearance inter machine spacing etc. accepted by ANERT shall be binding on the developer.

### **3.11 Technical Requirements**

**3.11.1.** The developer shall install adequate compensating equipment to maintain power factor more than 0.95 lag.

**3.11.2.** The developer shall pay for the reactive power drawn by the WEGs at the rate decided by KSERC.

**3.11.3.** The developer shall comply with grid code including load dispatch and system operating schedule, metering protection code, safety code etc. and all accepted codes and prudent utility practices as applicable from time to time.

### **3.12 Transferability of Technical Approval**

The technical approval is transferable to investors upon satisfying the conditions in Clause 3.2.2., if the transferee is ready to abide by the terms and conditions on which technical approval had been issued for the project. For transferring the technical approval, the developer shall submit a transfer application along with the transferee's undertaking and remit a non-refundable transfer fee of Rs.100,000/- per MW capacity to ANERT. If the transferring unit is below the capacity of 1MW the same would be counted as 1MW for this purpose.

### **3.13 Carbon Credit**

The benefits of carbon credit if any available shall be shared equally between STU/buyer and investor.

### **3.14 Other Conditions**

**3.14.1** The Developer shall pay taxes, duties and other levies to the Central/State Government as per statutes and rules in force.

**3.14.2** The Developer shall develop the Wind Farm in accordance with the Technical Approval given by ANERT.

**3.14.3** Any remedial/ compensatory measures directed by competent agencies to protect environment or any other activity found necessary by concerned Government Departments/Local Bodies will have to be carried out by the Developer at his own cost.

**3.14.4** The Developer shall abide by the rules and regulations framed by the Government from time to time in matters of Electricity and related activities by private agencies.

**3.14.5** All directions/approvals/rules laid down in the relevant acts/controls/ rectifications issued by CEA/CERS/SREB/KSERC or other Government Departments/ Agencies from time to time as adopted by the Government shall be binding on the developer.

**3.14.6** In case of dispute, the interpretation of the guidelines by the Government shall be final. In all matters to the extent possible an opportunity will be given to the affected stakeholders.