



Wind Power Policy (Draft)

of

UT of J&K

2023



**Department of Science and Technology
Union Territory of Jammu and Kashmir**

PREAMBLE

Jammu and Kashmir is one of the energy starved regions of India, despite having tremendous potential for utilization of green energy. The natural energy sources like sunshine, wind, water flow, biomass and other biological wastes are abundantly available in the region yet are not being fully harnessed resulting in very low per capita energy availability, compelling people to use conventional sources of energy resulting into deforestation and pollution.

Wind energy is one the most important renewable resource of energy. It is distinguished for being pollution free source. The UT of Jammu and Kashmir experiences a reasonable, if not good, wind energy potential. The main setback in the use of wind energy in J&K is the extreme climatic conditions especially during winters. To cater to these phenomena, several techniques are now being invented, making wind turbines possible even in cold regions.

The developing economies are heavily dependent on imports for all of their chemical fertilizer, petroleum and coal requirements. So, is the case with India and Jammu and Kashmir is no exception. The ever increasing population is pushing to more and more use of conventional sources of energy beyond the sustainable generation capacity of the existing forest and farm lands. Fossil fuels account for 78% of India's commercial energy consumption. India has a very great potential for harnessing renewable energy sources and ranks third in the world in terms of installed renewable energy capacity and the best among the G20 countries, based on its Climate Change performance. India aims to have 500 GW of renewable energy capacity by 2030. However, there is a wide gap between the estimated potential and aggregate realizations achieved so far.

The UT of Jammu and Kashmir is located between 33°-37° North latitude and 72° -80° East longitude. The UT covers around 2.22 lakh km²,

of which about 27% is under cultivation. Despite the limited geographical area the region is bestowed with diverse agro-climatic conditions, topography and natural resources. The mean ambient temperature throughout the year ranges from 13° to 32° C in Jammu region to 1° to 25° C in Kashmir region. Low ambient temperature gives rise to the huge energy demands which is usually met by coal/electricity firewood or in combination. Wind energy is certainly a favorable source of energy. Jammu and Kashmir has an installable wind energy potential of 5311 MW at 50m height and 5685 MW at 80m height.

Most of the areas of Jammu and Kashmir comprise of hilly terrain. The region is located in the northern part of India and is housed by a package of scenic beauty. Being a hilly terrain and also housed by variety of flora and fauna it would be better if sources like wind energy are used to meet the energy deficiency.

Wind Energy Potential in Jammu and Kashmir:

The wind energy industry is one of the fastest growing sectors. Denmark has been generating around 40% of its electricity from wind. More than 100 countries are actively pursuing wind energy continuously. Though considered as a moderate wind regime, India has excellent wind speed suitable for micro wind turbines across several parts of the country and stands at the 4th spot in terms of installed wind energy capacity. Tamil Nadu, Gujarat, Maharashtra, Goa, Rajasthan, Madhya Pradesh, Jammu and Kashmir, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Karnataka, are considered to be some of the best zones for micro wind turbines. Jammu and Kashmir UT is fairly untapped in the field of wind energy however there is a significant scope of harnessing wind energy in different districts.

The environmental benefits of Wind Energy as an alternative for conventional energy sources are clear and compelling. With an aim to entail a more conducive Policy & Investment framework to spur more competition and Private Sector participation for development of Wind Projects, while keeping balance in interest of all Stakeholders, the UT of

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J&K proposes a Wind Power Policy – 2023 as under:

1. TITLE

This policy shall be known as the “Jammu and Kashmir Wind Power Policy — 2023”.

2. OPERATIVE PERIOD

This policy will come into effect from the date of notification of the policy and shall remain in operation for a period of fifteen years or till the new Wind Policy is notified by the Government. The Wind Turbine Generators (WTGs) installed and commissioned during the Operative Period shall become eligible for the benefits and incentives declared under this Policy, for a period of 25 years from their date of commissioning or for the lifespan of the WTGs, whichever is earlier.

3. ELIGIBLE UNIT

Any Individual, Company or Body Corporate or Association or Body of Individuals, whether incorporated or not, or Artificial Juridical Person, will be eligible for setting up of WTGs, either for the purpose of captive use or for selling of electricity to obligated entity(ies) i.e. Distribution Licensee or to any other third party.

Explanation: The use of electricity for own consumption at end use location/s by the owner of WTGs shall be considered as Captive use. In case of Group Captive, 100% of equity amount is to be invested / held by Captive Users and they are required to consume entire generation in the ratio of their equity amount invested with a variation not exceeding 10% in consumption on annual basis.

4. ELIGIBLE SITE & LAND

The WTGs may be set up at sites notified by Jammu and Kashmir Energy Development Agency (JAKEDA) and/or any other sites identified as potential site, within the UT by the Nodal Agency or Developer(s).

5. WTG INSTALLATION CAPACITY FOR CAPTIVE USE

WTG installed capacity in KW/MW for captive use shall be allowed up to 100% of Contracted Demand/Sanctioned Load (in KW/Kva/Mva) of Consumer in KW/Kva/Mva or as per the applicable Electricity Regulations, as amended from time to time.

In computing 100% of the Sanctioned Load/Contracted Demand, earlier installed Wind power capacity will also be considered, however if already commissioned Wind power capacity before introduction of this Policy is more than 100% of the Sanctioned load/ Contracted Demand, then earlier installed plants will be allowed to continue. However above limit shall not be applicable to the Captive Consumer who establishes single Wind Turbine up to 2.0 MW.

6. UT GOVERNMENT FACILITATION & NODAL AGENCY

Jammu and Kashmir Energy Development Agency (JAKEDA) shall be the UT Government Nodal Agency for facilitation and implementation of the Jammu and Kashmir Wind Power Policy- 2023. The nodal agency will facilitate and assist the project developers to undertake the following activities in achieving the objectives of the Policy.

- (1) Registration of projects;
- (2) Respond to queries and problems of Developers of Wind Power Projects; and
- (3) Accreditation and recommending Wind Power Projects for registering with Central Agency under REC mechanism.

7. LAND

In case the WTGs are to be set up on Government land, the allotment of the land on lease shall be as per the revenue laws of the UT of J&K governing the issue. For setting up of Wind Power Project, the maximum land to be allotted to the developer shall be three (3) Hectares per MW.

8. PLANT AND MACHINERY

Second hand WTGs shall not be eligible for installation under this Policy. Only such WTGs, which are approved by MNRE, Government of India shall be eligible.

9. GRID INTEGRATION & SUPPORT FROM J&K UTILITIES

Grid stability and security is of prime importance. Since the penetration of infirm nature of Renewable Energy may endanger grid security, adequate protection measures are necessary.

The Central Electricity Authority (CEA), Gol has published a Gazette Notification No.12/X/STD(CONN)/GM/CEA/2018 dated February, 2019, known as the Central Electricity Authority (Technical Standards for connectivity to the Grid) Amendment Regulations, 2019, specifying various technical requirements for grid connection of Renewable Energy Sources. These regulations and provisions of Grid Code, as amended from time to time, shall be binding to the WTGs commissioned under the Jammu and Kashmir Wind Power Policy - 2023.

10. GRID CONNECTIVITY AND EVACUATION FACILITIES

The evacuation facility from the Wind Farm sub-station to Jammu and Kashmir Power Distribution Corporation Ltd. sub-station shall be erected by developer at their own cost.

The voltage level for evacuation of wind power in the grid shall be at 33 kV and above in accordance with the CERC/JERC for JKL Supply Code and amendment(s) thereof. The WTGs should be integrated by installing Remote Terminal Units (RTUs) by Wind Farm Developers at their own cost so that the

injection can be monitored at the connectivity sub-station by the SLDC on real time basis, and in accordance with the CERC/JERC orders from time to time.

11. METERING & ENERGY RECORDING / ELECTRICITY ARRANGEMENTS

The metering point shall be at the 33/66/132/220 kV pooling sub-station located at the Wind farm site and Interconnection point shall be the point of connection at the nearest J&K DISCOM sub-station.

For the purpose of energy accounting, the ABT compliant meter shall be installed at the metering point, as per CERC/JERC order. Interface metering shall conform to the Central Electricity Authority (Installation and Operation of Meters) Regulations 2022 and amendment thereto. DISCOM shall stipulate specifications in this regard. The electricity generated from the WTGs, shall be metered and readings taken jointly by Wind Power Project Developer and DISCOM personal at the metering point, on a monthly basis.

Further, for the purpose of accounting, each WTG shall have to provide ABT Compliant meters.

12. SALE OF ELECTRICITY TO OBLIGATED ENTITIES

Obligated Entities may purchase power from Wind Power Projects to fulfill their RPO at a tariff determined by JERC of JKL or rate discovered through competitive bidding. The terms and conditions for supply of power shall be as per the Power Purchase Agreement signed between Wind Project Developer and the obligated entity.

13. WHEELING OF ELECTRICITY

For Captive Consumption:

- (1) Wheeling of power to consumption site at 33 kV voltage level and above:

Wheeling of electricity generated from Wind Power Project to the desired location(s) within the UT shall be allowed on payment of transmission charges and transmission losses applicable to normal Open Access Consumers.

- (2) Wheeling of power to consumption site below 33 kV voltage level:

In case injection is at 33 kV voltage level or above and drawl is at 11 kV voltage level, wheeling of electricity generated from Power Project to the desired location(s) within the UT, shall be allowed on payment of transmission charges and transmission losses applicable to normal Open Access Consumer and 50% of wheeling Charges and 50% of Distribution losses of the energy fed to the grid as applicable to normal open access consumers.

- (3) Wheeling for more than one location:

Wind Power Project owners, who desire to wheel electricity to more than one location, shall pay 5 paisa per unit on energy fed in the grid to the Distribution Company concerned in whose area power is consumed in addition to above mentioned transmission / wheeling charges and losses, as applicable.

For third party sale:

- (i) Wheeling of power for third party from Wind Power Project shall be allowed on payment of transmission charges, wheeling charges & losses of energy fed to the Grid as applicable to normal open access consumers. Set off of wheeled energy at recipient unit(s) shall be carried out in the same 15 minute time block.

- (ii) Further, Wind Power Project owners who desire to wheel electricity to more than one location, shall pay 5 paisa per unit on energy fed in the grid to the Distribution Company concerned in whose area power is consumed in addition to above mentioned transmission/wheeling charges and losses, as applicable.
- iii. Concession of 50% of Cross Subsidy Surcharge and Additional Surcharge, as applicable to normal open access consumers, shall be given.

14. ENERGY ACCOUNTING

Energy accounting shall be as follows:

- (i) Case 1: If the Consumer does not take renewable attribute of wind energy for meeting its RPO, energy generated by wind power project shall be set off against the consumption during the Consumer's billing cycle.
 - a) For net import of power, Distribution Company will charge applicable tariff of respective category to the consumer including fixed/demand charge, energy charges, peak charge, other charges/penalty etc., as applicable to other consumers.
 - b) Surplus power, after giving set off, shall be purchased by DISCOM at Average Pooled Power Purchase Cost (APPC) of the year of commissioning of project. Fixed/demand charges, peak charges, other charges/penalty etc., shall be as applicable to other consumers.
 - c) The entire generation shall be considered for fulfilling RPO of Distribution Company.
- (ii) Case 2 (a): If the Consumer takes renewable attributes of wind energy consumed for meeting its RPO, then energy accounting shall be based on 15 minute time block-basis.

- a) For net import of power, Distribution Company will charge applicable tariff of respective category to the consumer including fixed/demand charge, energy charges, peak charge, other charges/penalty etc., as applicable to other consumers.
 - b) Surplus power, after giving set off, shall be purchased by the Distribution Company at Average Pooled Power Purchase Cost (APPC) of the year of commissioning of the project. Fixed/demand charge, peak charge, other charges/penalty etc., shall be applicable, as applicable to other consumers.
 - c) The surplus wind energy purchased shall be considered for fulfilling RPO of Distribution Company.
- (iii) Case 2 (b): If registered under REC mechanism and supply power within the UT: Energy accounting shall be based on 15 minute time block-basis.
- a) For net import of power, Distribution Company will charge applicable tariff of respective category to the consumer including fixed/demand charge, energy charges, peak charges, other charges/penalty etc., as applicable to other consumers.
 - b) Surplus power, after giving set off, shall be purchased by Distribution Company at the rate equivalent to 85% of Average Pooled Power Purchase Cost (APPC) of the year of commissioning of the project. Fixed/demand charges, peak charges, other charges/penalty etc., shall be applicable to, as applicable to other consumers.

15. CONCESSIONAL BENEFITS & EXEMPTIONS

- Electricity generated and consumed for self consumption/sale to third party within the UT shall be exempted from payment of electricity duty in accordance with the provisions of the Jammu and Kashmir Electricity Duty Act, 1963 and its amendments from time to time.
- Exemption from demand cut to the extent of 50% of installed capacity of Wind Power Project in case of captive consumption and third party sale within the UT.

16. PROJECTS UNDER REC MECHANISM

Wind Power Projects availing open access for captive use/third-party sale under REC mechanism shall be governed as per CERC REC Regulations. Such projects shall be allowed to wheel the electricity on payment of applicable transmission charges/losses, wheeling charges/losses and other charges as applicable to other normal open access consumers. Further, Cross-Subsidy Surcharge and Additional Surcharge shall be applicable as applicable to normal open access consumers.

17. RENEWABLE POWER PURCHASE OBLIGATION (RPO)

Obligated Entities have to abide by the CERC/JERC Regulations and Orders from time to time and MoP has been deciding the overall RPO and sub-category-wise procurement of Renewable Energy Power from each Renewable energy Source. Obligated Entities may fulfill their RPO by purchasing wind power at the Tariff determined by JERC or Tariff discovered through competitive bidding process keeping in view the interest of consumers.

18. FORECASTING AND SCHEDULING

These power projects shall give their forecast and energy shall be scheduled for day-to-day operations.

19. REACTIVE POWER

The drawl of reactive power by wind generator shall be charged as per the JERC Order, as amended from time to time.

20. OPERATION & MAINTENANCE

The Operation and Maintenance of dedicated evacuation line shall be carried out at the cost of the Developers of Wind Power Projects as per applicable technical standards and best practices.

21. SHARING OF CLEAN DEVELOPMENT MECHANISM (CDM) BENEFIT

(1) In case, DISCOM purchases power on Feed-in-Tariff, Clean Development Mechanism (CDM) benefits shall be shared on net proceeds, starting from 100% to power producer in the first year after commissioning, and thereafter reducing by 10% every year till the sharing becomes equal (50:50) between the power producer and the power procurer, in the sixth year. Thereafter, the sharing of CDM benefits shall remain equal till the time that benefit accrues.

(2) In case of purchase of power by DISCOM through competitive bidding, the same shall be as per terms and conditions of bid documents.

22. SECURITY DEPOSIT

The WTGs Developer shall be required to provide Bank Guarantee @ Rs. 5 lacs per MW to JAKEDA/DISCOM based on allotment of

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transmission capacity and in case the Developer fails to commission the Wind farm s/s and transmission line within the time period mentioned hereunder, JAKEDA/DISCOM shall encash the Bank Guarantee.

Wind Farm Capacity	Period of Commissioning of the entire allotted Pooling Sub-Station capacity
1 MW to 100 MW	1.5 yrs. from date of allotment of transmission capacity.
101 MW to 200 MW	2 yrs. from date of allotment of transmission capacity.
201 MW to 400 MW	2.5 yrs. from date of allotment of transmission capacity.
401 MW to 600 MW	3.5 yrs. from date of allotment of transmission capacity.

Provided further that the Developer shall commission Wind Farms of at least 10% of the allotted capacity within one month of charging of evacuation line, failing which, the Developer shall be liable to pay long term transmission charges for 10% of allotted capacity till such 10% of allotted capacity is commissioned.

23. REGULATION

The Hon'ble Joint Electricity Regulatory Commission for JKL shall be guided by this Policy while framing its rules, regulations and orders. All the condition, in the Regulations/Rules/Orders of the Hon'ble JERC of JKL regarding Wind Power Generation and Transmission, shall overrule the conditions of the Wind Policy of J&K 2023 mutatis mutandis.

24. POWER TO REMOVE DIFFICULTIES

If any difficulty arises in giving effect to this policy, the J&K UT Government may, at any time, issue clarification/interpretation to

remove such difficulties either on its own motion or based on representations from stakeholders.

25. POWER TO INTERPRET

If there is any confusion or dispute about the meaning, intent or purpose of any provision of this Policy, the interpretations given by JAKEDA, Department of Science and Technology, Government of Jammu and Kashmir, shall be final and binding to all concerned.