

No. 238/75/2017-Wind
भारत सरकार/Government of India
नवीन एवं नवीकरणीय ऊर्जा मंत्रालय/Ministry of New & Renewable Energy
Atal Akshay Urja Bhawan, Lodhi Road, New Delhi – 110003
(Wind Energy Division)

Dated: 04th July, 2024

OFFICE MEMORANDUM

Subject: Amendment to 'Guidelines for Development of Onshore Wind Power Projects' – regarding.

The undersigned is directed to refer 'Guidelines for Development of Onshore Wind Power Projects' issued by this Ministry vide No. 66/183/2016-WE dated 22.10.2016. The para V '**Micrositing**' of the said guidelines may be read as follows;

V. Micrositing

Micrositing is the optimization of energy production through the correct placement of wind turbine generators in the wind farm area, considering all physical constraints of the area. The optimized location of wind turbine generators (WTGs) may be computed by running an appropriate wind flow modelling, optimisation tools (linear and Non-linear) and techniques in any terrain conditions. The criteria for Micrositing shall be based on an optimised output rather than a strict mandated minimum distance between wind turbines. All the following micrositing criteria have to be complied with;

- i. Developer(s) shall optimise the wind turbine locations within their land using appropriate wind flow modelling and optimisation tools (linear and Nonlinear)/techniques subject to site assessment as per IEC 61400-1 standard for turbine safety considering extreme wind, flow inclination, vertical wind shear, and turbulence with added wake effects and corrections for terrain complexity etc.
- ii. Developer(s) shall maintain a distance of 5D (D-Rotor diameter) distance, if turbine is in perpendicular to the predominant wind direction and 7D distance if turbine is in the predominant wind direction from the turbine of other developer (s) (considering centre co-ordinate for distance measurement). In case the adjacent turbines of different owners have dissimilar rotor diameters, the diameter of larger turbine rotor shall be considered for the calculation of 5D X 7D. However, these distances may be reduced through mutual consent of adjacent turbine developer/owner.
- iii. Developer(s) shall maintain a distance of $HH+0.5*RD+ 5m$ (Hub Height+ Half Rotor Diameter + 5 meters) from Public Roads marked/notified by concerned State/Central Government, railway tracks, highways, buildings, public institutions and EHV lines.
- iv. Developer(s) shall not site wind turbines within 500 m of any cluster of dwellings for the mitigation of noise. For this purpose, "cluster of dwelling" shall mean at

least 15 inhabited buildings unless any state specific norm is prescribed by the concerned state.

The above mentioned Micrositing techniques will also assist in repowering & intercropping as the investors/developers will have no constraints with minimum distances within the available land ensuring optimised utilisation of the land with wind resource.

2. This issues with approval of the Competent Authority.



(Rishikesh Vaishnav)
Scientist 'C'

To,
All Concerned.

Copy To:

1. PS to Hon'ble Minister
2. PS to Secretary, MNRE
3. PS to JS(LB)
4. PA to Dir(PKD)