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WIND POWER PROJECT POLICY 2011

Deptt of New and Renewable Energy
Govt of Madhya Pradesh
BHOPAL

1. INTRODUCTION

The Government of Madhya Pradesh has taken note of the growing recognition of impacts of climate change and recognizes the need to tackle challenges that arise on account of these impacts through integrated policy prescriptions and programmes aimed at mitigation of impacts and adaptation to reduce vulnerability of systems. Based on this green initiative, by endorsing the essential need to prevent avoidable erosion of natural carbon – energy resources the state is endowed with, the state has committed to promote promotion of generation of electricity from Renewable Energy sources.

Wind Energy is an indirect form of Solar Energy. About 1% of the total solar radiation that reaches earth is converted into energy of wind. Wind Energy is one of the most economical and exploitable renewable source of energy which can be harnessed for generation of power. The application of wind energy has several advantages like low gestation period, no raw-material cost, non-polluting etc. Wind energy based power generators dominate the Indian RE market with wind energy accounting for around 70% of the RE generation capacity in India. The 11th plan proposal envisages a total installed wind energy capacity of 40,000 MW by 2022 harnessing around 88% of the wind energy potential in India. Madhya Pradesh has a wind energy potential of around 1019 MW whereas the total installed capacity in the state is **213 MW** The State Government proposes to encourage wind power as an additional and alternate source of energy.

In view of above, Government of Madhya Pradesh is pleased to resolve to introduce following Programme & Policy as under:

A. Wind Monitoring Programme :

It covers the detailed terms, conditions & procedural requirements to participate under the Programme for conducting wind monitoring studies. As per the programme, the concerned private parties will be responsible to carry out the entire work of wind survey and monitoring, finding out wind power potential and carry out feasibility studies at their cost. The parties will be allowed to carry out wind monitoring and other survey and investigation only in the area allotted to them. In case of wind monitoring by private institutions at self identified locations, permission shall be given by MPUVN on first-come-first-serve basis.

B. Wind Power Project Policy of Madhya Pradesh -2011 :

The policy outlines the norms and criteria for registration of the project under the policy. It further includes the detailed provisions for registration, post registration, administrative approval & post approval activities respectively. The policy also provides for monthly progress report of the projects to be submitted from the date of registration till commercial operation date. The policy mandates the developer to create necessary infrastructure at his own cost including power evacuation, approach road (if necessary) etc.

A. WIND MONITORING PROGRAMME

Deptt of New and Renewable Energy
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WIND MONITORING PROGRAMME

A. GOVERNMENT WIND MONITORING SCHEME

1. MPUVN undertakes the task of wind monitoring at any place in the state of Madhya Pradesh with the technical and financial support of CWET/MNRE.
2. Projects may be registered within 25 Kms radial distance of a proven site. However after 10 Km radial distance from anemometry mast, either the wind monitoring has to be done again or wind potential in terms of WPD shall be duly certified by C-WET, Chennai.
3. No new private wind monitoring will be allowed within 25 Kms radial distance of anemometry mast at proven or ongoing government sites

B. PRIVATE WIND MONITORING SCHEME

1. Permission for carrying out wind monitoring at self identified locations by the private institutions will be given by MPUVN on a first come first serve basis.
2. For identification of sites, Survey of wind potential, carrying out feasibility studies, the prospective entrepreneurs can select any site anywhere in Madhya Pradesh except the areas under previous monitoring as given in this programme.
3. No new masts will be allowed to be set up within a 20 kms radius of ongoing or proven private masts.
4. The concerned parties will be responsible to carry out the entire work of wind survey and monitoring, finding out wind power potential and carry out feasibility studies at their cost. The parties will be allowed to carry out wind monitoring and other survey and investigation only in the area allotted to them.
5. The permission is only for carrying out the aforesaid studies and registration to establish wind farm project will be considered only after receiving the results of aforesaid **studies subject to verification and confirmation by C-WET CHENNAI feasibility report and techno economic viability of the project. Permission to carry out the studies should in no way, be taken as a permission to register and establish the wind farm project.**
6. The party should be financially and technically sound.
7. The proposal will be governed under the Policy notification issued by MP Government and MNRE as and when applicable.
8. After completing wind monitoring, survey and submitting the feasibility report, (details also to be submitted), it is found viable to establish the wind farm project, then the party will be required to submit separate application in prescribed format to MP Urja Vikas Nigam Ltd.,

along with detailed feasibility report Registration and Processing fee for project, which may be considered for according 'in principal' approval to set up the wind farm project.

9. In the case that the site is found feasible as per norms for the establishment of wind energy projects, then the following conditions apply :
 - a. **Up to a radial distance of 5 km from mast:** The private party which has monitored the wind data on the site has the first right of refusal to establish a wind energy project. The project has to be registered with MPUVN within 18 months of date of grant of permission for installation of mast.
 - b. **Between radial distance of 5-10 km from the mast:** MPUVN shall have the sole right to allow and register other developers to set up wind power projects in the area falling between 5 -10 km radial distance from the proven anemometry mast on the basis of the first come first serve principle.
 - c. **Greater than radial distance of 10 km from mast:** No registration of wind power projects shall be done by MPUVN without a new wind survey or certification by C-WET, Chennai.
10. Separate application should be made for each site. There is no restriction on the number of wind monitoring stations for a given applicant.
11. MP Urja Vikas Nigam Ltd. reserves the rights to accept or reject any or all applications without assigning any reasons.

Procedure to Apply

1. Initially, the applicant is required to submit the geographical details of the proposed mast location along with an introductory letter from the applicant firm.
2. The geographical details required are latitude, longitude, MSL, Type of Land – (Private/Forest/Revenue) with Khasra/Compartment number, Village, Tehsil and District and other details.
3. **The application and submitted details will be scrutinized by MPUVN. If found suitable, a demand note of Rs.100,000 shall be issued towards** deposit of the fee for private monitoring and approval for private wind monitoring shall be given by MPUVN on receiving the above fee. This shall be a non-refundable fee.
4. The permission shall be valid for a period of 18 months from the date of issue by MPUVN. It shall include :
 - a. A maximum time of 3 months to set up and commission the wind monitoring mast
 - b. A stipulated 12 calendar months time period for actual wind monitoring
 - c. Analysis and required certification/validation of wind monitoring data collected.
 - d. Applying for registration with MPUVN exercising the right within 5 km radial distance of the mast if the site is successful and proven.

5. The permission granted for private wind monitoring can be cancelled by MPUVN if:
 - a. Wind monitoring masts have not been set up at the allotted sites within 3 months of grant of permission;
 - b. No application for registration is received within 18 months from the date of issue of permission to set up survey mast.
6. The time limit could be extended for two blocks of 3 months each provided the cause of delay is beyond the control of the party such as loss of data etc. and up to the satisfaction of the MPUVN. Any further extension shall be decided by Govt. of Madhya Pradesh.
7. The scheme will be governed by MNRE circular no. 51/9/2007-WE dated 20.06.2008 for wind measurement & subsequent development by private sector.

ANNEXURE - I

APPLICATION FORM

(To be filled by applicant for conducting Wind Monitoring in M. P.)

ABOUT THE ORGANISATION :

A. General Information of Organization

1. Name of applicant organization with :
Address (Name of contact person, address,
Telephone No., Fax No. Email ID also be mentioned)

2. Present activities/business of the organization:

3. Date of establishment :

4. Type of organization :

- (I) -Sole Proprietor :
-Partnership Firm :
-Private Company :
-Public Limited Company :
-Consortium :

(II) **Please state if you have submitted the following documents.**

- Photocopy of the Corporate deed : YES/NO
- Photocopy of the Power of Attorney : YES/NO
- Photocopy of the Certificate of the : YES/NO
Shareholders records

5. Does organization have any plan : YES/NO
for development/diversification
If yes, please attach details on a separate sheet

(B) TECHNICAL CAPABILITY OF THE ORGANISATION

1. - Number & Size of existing generating unit :.....MW
- Installed capacity of the existing :.....
-Type of fuel being used
-Location of the plant

2. Nature of business handled and years of experience:

- Generation of power :
- Captive Generation of Power :
- Other than power generation :

3. - **Availability of computer facilities** :

CAD/CAM : YES/NO

Analysis Software

4. State the name of any sister Engineering Organization :
existing for carrying out similar jobs.

5. Details of the testing/calibration of wind monitoring :
Equipments available with the party.

(c) FINANCIAL CAPABILITY OF THE ORGANISATION

- i) **Annual turnover (Rs. In lakhs)**
- ii) Net worth (Rs. In lakhs) :
- iii) Average profit after taxes of last 3 years (Rs.in lakhs)
- iv) In case the proposal is from a consortium, please :
Mention the details of each member of consortium:
And their financial participation
- v) Capability of raising resources for wind monitoring :

A. Indian **Equity**
 Loan

B. Foreign **Equity**
 Loan

- vi) Have you enclosed the balance sheets and profit and : YES/NO
Loss A/c for the last five years.
- vii) Extract from balance sheets for assessing financial :
strength (See Annexure – II)
- viii) Existing Manpower of organization
 - i. Technical
 - ii. Financial
 - iii. Others

ix) General Organizational Chart of the Company :

ABOUT THE PROPOSAL

1. Are you registered with MPUVN for setting up a Wind farm in Madhya Pradesh. : YES/NO
2. Name and address of the Unit :
If the offer is on consortium basis Name and Address of other partners.
3. Is any foreign investor/NRI involved in the bid. : YES/NO
If 'Yes' please provide the information about the Investor/NRI such as Name, Address, Telephone/ Fax Nos. etc. (on separate statements)
4. Whether general information of party is submitted:
5. Indicate location of proposed site
a. Village :
b. Tehsil :
c. District :
d. Patwari Halka No./Khasra No. of the proposed site (Please enclose the majmuli and Khasra Map indicating the proposed site) :
6. What will be approximate area available for setting up Windfarm within 5 kms. radius: :
7. Indicate the type and specification at wind-data-logger with the standard followed, if any. :
8. Does the Company have any ISO certificate like ISO 9000 :
:
9. Weather calibration of instrument certified (Please attach Photocopy of the certificate) if imported, whether certifying agency has been approved by their government. :
10. Indicate height of wind mast :
:
11. Indicate type of wind data to the collected from instrument. :
12. Wind Survey and monitoring schedule :
Indicating the period required for-
i. Installation of equipment. :

- ii. Concluding the wind data recording. :
 - iii. Analysis. :
 - iv. Submitting the pre-feasibility report :
- (All times starting from the date of acceptance of offer)

13. Indicate proposed location of installation of wind mast. (Also indicate in Patwari Map) :

OWNERSHIP

- A. Government (Revenue/Forest) :**
- B. Private :**

14. The details of nearest MPEB substations With its distance from proposed site. :

The undersigned guarantees that all the information furnished and documents submitted with the bid proposal are true and accurate.

The undersigned further undertake to furnish any supplementary information and/or documentation if required.

Place : Bhopal
Date.....

Signature
(Authorized Signatory)

Note:

- a. The legal representative's signature must be certified by a Public Notary
- b. All the documentation/Information be in English.

ANNEXURE- II

**EXTRACT FROM BALANCE SHEET ASSESSING FINANCIAL STRENGTH FOR
THE LAST THREE YEARS:**

- 1.Name of the company :
2. Nature of business :
3. Paid up capital :
- 4.Reserve :
- 5.Total funds employed :
- 6.Gross block :
- 7.Net block :
- 8.Term borrowing (Incl.deb.) :
- 9.Inter-corporate investments :
10. Investment (Trading) :
11. Ratio of gross block to Turnover :
12. CURRENT ASSETS
Less:
Current Liabilities :
Net working capital :
13. Current ratio :
14. Investible internal resources by
Adjusting current ratio 1:1.25 :
15. Project on hand and proposed
investment committed :
16. Turnover :
17. Gross Profit :

18. Net profit (after depn. & Int.) :
19. Dividend (For the last financial year) :
20. Retained profit (incl.depn.) :
21. Percentage of profit to equity
and reserve (Return on investment) :
22. Percentage of G/P to sales :
23. Percentage of N/P to sales :
24. Earning per share :
25. Contingent liability on projects :

ANNEXURE-III

**INFORMATION TOO BE FURNISHED FOR CONFIRMATION OF SUITABILITY
OF SITES IDENTIFIED BY PRIVATE DEVELOPERS/PROMOTERS**

1.Site Plan.

- a. Photographs of the monitoring station from eight azimuth directions.
- b. Survey of India Map on which the aerial location of the station is clearly marked (mention latitude & longitude)
- c. Scaled site plan with immediate obstacles (>100m) clearly marked.
- d. Give the location of nearest Indian institute of Tropical Meteorology (IITM) or CWET monitoring station vis-à-vis the station under consideration.

2.STATION INSTALLATION REPORT

- a. The report shall contain detailed description of the site.
- b. Height of the mast, height of the sensors.
- c. Anemometer & Direction sensors mounting arrangements.
- d. Model and serial number of sensors and data-loggers.
- e. Method ensured to set up direction sensor. A statement of verification.
- f. Date of installation and dismantling.

3.Details of instrumentation

- a. Manual reading are not acceptable.
- b. Fully automatic data loggers shall be used. The data loggers must collect time correlated time series data for wind speed and direction, extreme wind etc.
- c. All sensors used shall possess valid calibration certificates.
- d. The calibration certificates shall be produce for verification.

4.Data collection, storage and processing

- a. Data retrieval periodicity.
- b. Methods used for data management and security.
- c. Sample raw data files for verification.
- d. Details of software used for storage and management of data.
- e. Sample monthly report and yearly report.

5.**An analytical report** as to how the given site merits inclusion in the list of approved list of wind farm areas.

B. WIND POWER PROJECT POLICY OF MADHYA PRADESH – 2011

Deptt of New and Renwable Energy
Govt of Madhya Pradesh
BHOPAL

WIND POWER PROJECT POLICY OF MADHYA PRADESH – 2011

1. BACKGROUND

- 1.1 The Government of Madhya Pradesh has been promoting the setting up of Renewable Energy based power plants through various policy initiatives and incentives for the investors/developers.
- 1.2 The Government of Madhya Pradesh has issued the Incentive Policy for encouraging generation of power in Madhya Pradesh through Non-conventional Energy Sources (2006). The Policy currently provides incentives for installation of wind power projects in Madhya Pradesh.
- 1.3 **With the new tariff declared by the Madhya Pradesh Electricity Regulatory Commission (MPERC) and considering the huge untapped potential of wind energy in Madhya Pradesh, need for a revised investor/developer friendly policy was being felt. The present policy proposes to fill the need and address policy issues and procedural details.**
- 1.4 **The new policy for wind shall be called as “Wind Power Project Policy of Madhya Pradesh -2011”.**
- 1.5 This policy shall become operative from the date of notification in the MP State Gazette, and shall continue to be effective till it is revised /cancelled.

2. NORMS FOR PROJECT REGISTRATION

- 2.1 Wind data of proposed site has been recorded for minimum one year period.
- 2.2 The Wind Power Density (WPD) is equal or above 200 W/m² at 50 mtr above ground level or as amended from time to time by the Ministry of New & Renewable Energy (MNRE)/C-WET will be applicable.
- 2.3 If the wind data has been recorded by any individual Agency other than C-WET, the data must be validated by C-WET, Chennai.
- 2.4 **Category A : Government identified wind sites**
 - a) The proposed wind power project site should be within 10 km radial distance of an anemometry mast.
 - b) The project may be registered within 20-25 Kms radial distance of anemometry mast. However, after 10 Km radial distance from anemometry mast, the wind monitoring has to be done again and the results should be duly certified by C-WET Chennai or Wind data has to be determined by Wind Atlas Analysis & Application Programme (WAsP) or other relevant software duly certify from C-WET Chennai.
- 2.5 **Category B : Sites identified through private wind monitoring**
 - a. If the wind monitoring site is found feasible, the party undertaking the wind monitoring will have the first right of refusal for installation of wind power project within 5 kms of

the surrounding area of the wind monitoring station. The MPUVN shall have the right to allot the remaining capacity.

- b. The MPUVN shall have the right to allot wind projects in the area falling within 5 to 10 kms surrounding the wind monitoring station on first come first serve basis

3. REGISTRATION CRITERIA

- 3.1 The applications for development of any wind power project will be considered on first come – first serve basis.
- 3.2 The Wind Electricity Generators (WEGs) proposed to be installed must have C-WET certification.
- 3.3 The WEGs proposed to be installed must be brand-new and installation of second-hand machine shall not be permissible.
- 3.4 The developer should keep safe distance between adjacent wind farms in the same vicinity as per the C-WET guidelines.
- 3.5 The project approval can be obtained by Developer/Investor for Captive Use/third party sale/sale to Utility.
- 3.6 Registration of the projects, receipt of registration fees and maintenance of list of registered projects shall be done by MPUVN. All registrations shall be posted on MPUVN Website and updated from time to time.

4. REGISTRATION PROCEDURE

- 4.1 An Investor/Developer shall submit an application to MPUVN in the prescribed format (Annexure –I) for the project site, along with a non-refundable registration fee of Rs 50,000 per MW in the form of DD/Banker's cheque.
- 4.2 Land requirement should not be more than 6 to 8 Ha/MW, depending upon site condition. The Developer/Investor should submit the actual land requirement for WEG installation, construction of road, transmission lines, control room, yard etc.
- 4.3 The Revenue **land use permission shall be given for the actual requirement** for the project only. The remaining land, in case of Revenue land, remains under the control of New & Renewable Energy Department/ MPUVN. The land use permission will be given on the basis of Revenue Deptt circular no. F&16&3@93@7@2A dated 06-09-2010. The terms & condition of the circular will be strictly applicable.
- 4.4 The provisions of MOEF Guidelines (i) F No. 8-84/2002-FC dtd 10.11.03 & (ii) F No. 8-84/2002-FC dtd 14.05.04 under Forest conservation act 1980 will be strictly applicable.

If the Government revenue land in the revenue record has been shown as forest land with small and minor trees or as per revenue department notification dated 13-1-1997 it is

defined as forest land than the applicant will take the permission as per forest conservation act 1980 from concerning divisional forest officer

- 4.5 The name and location of the reference wind mast should be clearly indicated in the map. The map should clearly indicate the boundary line of the project area.
- 4.6 The applicant shall enclose the site map in maximum scale of 1:50000 of Survey of India clearly showing the site with project capacity.
- 4.7 In case Revenue land/Forest land/Private land is considered for the project, the area shall be clearly marked in different colours for different type of land.
 - c. If any Revenue land is proposed, the name of District, Tehsil, Village and Khasra nos should be clearly mentioned.
 - d. If any Forest land is proposed, besides Khasra no of revenue map, compartment no. of Forest map also should be clearly indicated.
 - e. If private land has been already acquired by Investor/Developer, this should be clearly marked in the map and Khasra-wise area should be provided in a tabulated form.
- 4.8 The project will be registered subject if all the relevant details/documents are found in order and the Developer/Investor will be informed accordingly.
- 4.9 Registration of the project shall be subject to the project meeting the development timelines and criteria. The registration shall be cancelled if the development timelines and criteria are not met.
- 4.10 After registration, the land details shall be sent to the concerned District Administration for further examination (if any revenue land is considered) and or to the Divisional Forest Officer (if any Forest land has been considered) and also to concerned DISCOM.
- 4.11 **The exemption from VAT/Entry Tax for Aero generators will be available as per MP Govt. Extraordinary Gazette Notification no. 380 dated 01-08-09.**

5. POST REGISTRATION ACTIVITIES

- 5.1 Within 6 months after the registration of project, the Investor/Developer shall prepare and submit a Detailed Project Report (DPR) as per the format given in Annexure-II.
- 5.2 The DPR shall contain :
 - a. Techno-economic feasibility of the project
 - b. Electricity generation data estimated after consideration of relevant correction factors - e.g. Air Density, Array Efficiency, Grid Availability, WEG Availability etc.
 - c. Proof of private land acquired with indemnity bond as per Annex III
 - d. Availability of Revenue land (if any) as certified by concerned authorities

- e. Availability of Forest land (if any) as approved by concerned authorities
- f. Availability of Grid evacuation facility as approved by concerned authorities
- g. A detailed lay-out map with location of WEGs marked clearly (along with GPS coordinates) should be provided in maximum scale of 1:2000 as per micro-siting guidelines issued by C-WET.

(Power Developer should also submit an affidavit to the effect that they have followed all the directives of C-WET as mentioned in Annexure II for preparation of micro-siting plan)

- h. Micro-siting plan of WEG as per C-WET guideline (For optimum use of land wasp, wind farmer etc should be used and report should also be enclosed)
 - i. PERT Chart
- 5.3 Extension – The time limit could be extended for 2 blocks of 3 months each (On case to case basis) provided the cause of delay is beyond the control of the promoter and up to the satisfaction of the MPUVN. Any further extension shall be decided by Govt. of Madhya Pradesh.

6. PROCEDURE FOR ADMINISTRATIVE APPROVAL

6.1 MPUVN shall recommend the project to the New & Renewable Energy (NRE) Department, Govt. of Madhya Pradesh (GOMP) within maximum 30 days after receipt of all the required documents/details and examination of techno-economic grounds, eligibility criteria and overall project is found feasible.

6.2 Provisional consent has been availed from :

- i. Revenue Deptt – for Revenue Land
- ii. MOEF GoI/Forest Deptt – for Forest Land
- iii. Utility Authorities – for Grid Evacuation

7. ADMINISTRATIVE APPROVAL OF PROJECT

7.1 The New & Renewable Energy (NRE) Department, Govt. of Madhya Pradesh (GOMP) shall examine the proposal and accord its approval as per rules.

8. POST APPROVAL ACTIVITIES

8.1 After receipt of formal sanction, the following landmarks, milestones and time limits shall be strictly followed by the investor/developer and monitored by MPUVN

S. No.	Land Mark	Time Limit
1	Issue of administrative approval & land use permission of revenue land	Zero date
2	Appointment of civil contractor & placing order for WEG	Zero date + 3 months
3	<ul style="list-style-type: none"> Approval of Transco for Open Access for captive consumption/3rd party sale (if needed) 	Within 15 days of receipt of application
	<ul style="list-style-type: none"> Permission of Transco/Discom regarding creation of evacuation facilities on payment of fees & charges. 	Within 15 days of receipt of application
	<ul style="list-style-type: none"> Approval of MPERC for captive consumption/3rd party. 	Within 30 days of receipt of petition
	<ul style="list-style-type: none"> Power Purchase Agreement 	With in 15 days of receipt of PPA
	<ul style="list-style-type: none"> Any other permission from land if needed. 	Within 15 days of receipt of application
4	Financial closure	Zero date + 9 months
5	Completion of civil and electrical work	Zero date + 12 months
6	Approval of Chief Electrical Inspector to Government (CEIG) Commissioning of project & Commercial Operation Date (COD)	Zero date + 15 months

For all activities listed in item 3 above the maximum time limit for initiating action will be Zero date + 6 months

8.2 In case the wind power project is proposed on forest land, the proposal will be forwarded to M.P. Govt. for approval after clearance of the Forest Department for forest land (Stage 2 permission).

8.3 All statutory approvals from MPERC will have to be obtained by the developer before applying for PPA

9. MONTHLY PROGRESS REPORT & CANCELLATION

9.1 All projects, from the date of registration until commercial operation date, shall submit monthly progress report to MPUVN in prescribed format (Annexure IV) with related documents. MPUVN may cross check and verify the progress report submitted either by itself or any means it prescribes.

9.2 The progress will be compared against the time lines and landmarks given in this policy. Any delays and slippage will need to be explained to the satisfaction of MPUVN and may result in a notice being issued to the developer and ultimately lead to cancellation of the project at any stage after registration or after approval. No cancellation shall be, however,

done without giving sufficient chance to the developer to explain his position and without giving him a personal hearing.

10. EXTENSION

10.1 No extension shall be ordinarily given. In exceptional situation and special circumstances, the power to give extension in the overall time limit of 15 months shall lie with the New & Renewable Energy Department, Government of Madhya Pradesh.

11. TARIFF

11.1 **The developer can sell the energy produced to third party/ captive use or to the M.P. Power Trading Company/Distribution utility. The tariff rate as provided in the Tariff Order declared by MPERC from time to time shall be applicable for sale to M.P. Power Trading Company/Distribution utility.**

12. CREATION OF INFRASTRUCTURE

12.1 The developer shall have to create necessary infrastructure at his own cost including power evacuation, approach road (if necessary) etc.

13. INCENTIVES

13.1 **For captive consumption and 3rd party sale, the project shall be entitled to receive exemption from payment of electricity duty for a period of 5 years from the date of consumption**

13.2 **Facility of wheeling will be available to the wind power project through M.P. Power Transmission Company, as per wheeling charges decided by the MPERC. For above wheeling charges, Govt. of Madhya Pradesh will provide grant of 4% of the wheeled units and the balance, if any, shall be borne by the project developer.**

13.3 The CDM benefit should be shared on a gross basis starting from 100 % to developers in the first year after commissioning and thereafter reducing by 10 % every year till the sharing become 50:50 as per MPERC order.

13.4 **Regarding other facilities/incentives such as Open Access, Third party sale, Banking, Demand Cut and Renewable Purchase Obligation, the provisions declared by MPERC from time to time shall be applicable.**

14. Other facilities

14.1 In the event of any dispute/disagreement, the Investor/Developer shall be at the liberty to approach empowered committee specially created by GoMP for Renewable Energy Projects.

14.2 **Owners of WEGs shall be liable to furnish monthly generation data to MPUVN duly certified by concerning DISCOM.**

Notwithstanding anything contained in this resolution, the provisions of the Electricity Act – 2003, and the MPERC order, as issued from time to time, shall prevail, for the purpose of the implementation of this policy.

ANNEXURE - I

APPLICATION FOR WIND POWER GENERATION

I. COMPANY DETAILS

1. Name of the applicant Organisation :

2. Regd. office address with telephone, fax, e-mail etc. :

3. Type of Organisation (Private/ Public Ltd., Partnership firm etc.) :

4. Present Activity/business :

5. Turn-over of the Company in the last three years :

6. Net Profit of the Company in the last three years :

II. ELECTRICAL DETAILS OF PRESENT CONSUMPTION:

(For Captive Consumption)

1. Present consumption of electricity from :
Discom.
- (a) Whether HT or LT :
- (b) **Connected electrical load or contract :**
demand of the Company
- (c) Average consumption (units) :

III. PROPOSED WIND FARM DETAILS

1. Whether proposed to set up for captive :
use/on commercial basis (sale of power)

Please indicated details of present captive
generator if any)
2. Capacity of windfarm proposed to be :
installed
3. No. of wind turbine generators and their :
sizes proposed (Tech. details of machinery
proposed may be enclosed)
4. Sites proposed for setting up windfarm in :
order of preference
5. Nearest sub-station of MPEB and the :
distance from the proposed location
6. Voltage ratio of the sub-station :
7. Estimated project cost (please give details :
with cost break-up)
8. Sources of Finance of the project (please :
give details of the equity loan etc.)
9. Planned duration for completion of the :
project in one phase (please give bar chart

of activities)

IV. APPLICATION FEE (in the form of D.D.)

Rs. 50,000 /MW

V. DECLARATION

We certify that all information furnished is true to the best of my/our knowledge. We also agree that MPUVN is the final authority to allot us the site required. We shall not have any dispute with MPUVN for non-allotment of site at any particular location where we may have preference. We also agree to sign necessary MoU and lease agreement with MPUVN and Grid tie-up and power purchase agreement with MPEB.

Place :

Signature with seal

of the Company

Date :

LIST OF DOCUMENT ENCLOSED

1. Certified copy of Memorandum of Articles of the Public/Private Ltd., Company and also copy of registration certificate.
2. A certified copy of the registration certificate of the Registration, if the partnership is registered.
3. A certified copy of the by law of the co operative society and also certified copy of Registration if applicable.
4. Certified copy of the Authority conferring powers on the person(s) who are competent to execute the MoU/the agreement.

ANNEXURE - II

DETAILED PROJECT REPORT (DPR) MUST CONTAIN:

- a) Details of the applicants/promoters :
- b) Details of the project
 - i) Location
 - ii) Wind Resource Data
 - iii) Capacity
 - iv) Wind Turbine equipment including type approval/third party certification
 - v) Configuration/array efficiency
 - vi) Land requirement and procurement
 - vii) Grid interface arrangements / Internal power line arrangement
- c) Cost of the project
- d) Means of Financing
- e) Annual energy output
 - i) Capacity factor
 - ii) Availability factor
- f) Cost of generation
- g) Utilization of energy generated
- h) Details of Central and State promotional/fiscal incentives sought to be availed.

Micrositing plant shall fulfil following requirements:

1. Details of wind statistics (joint frequency distribution) at hub height or height of measurement. The furnished details shall include starting and ending dates of data used. It should also be noted that full year statistics alone be used. The source of data shall also be scrutinized for authenticity and integrity.
2. Estimates of meteorological parameters (site temperature and atmospheric pressure etc.)
3. Detailed description of the windfarm site. If other wind farms or other machines belonging to different clients are in the vicinity, complete details shall be furnished. If very large numbers of machines are in the vicinity, the micrositing report shall show how the overall effect of presence of these machines is taken into account.
4. Orographic and roughness models used in the analysis shall be furnished. The report shall contain validation of the models employed for arriving at the final generation figures.
5. Complete details of the power curve along with the thrust coefficient shall be given. If a site specific power curve has been given, the method of transformation from standard power curve shall be specified. If standard power curve has been used, the method of correcting the estimated energy output shall be clearly stated. The class of wind turbine under consideration should be taken into account while deciding the suitability of the specific model. In complex terrain, it becomes very important to cross check each machine location more carefully.
6. In general, the developer shall leave a distance of $2 \times D$ perpendicular to the predominant wind direction and $3 \times D$ distance in the pre-dominant wind direction. This should be applied for flat and complex terrain.
7. The inter machine spacing within the wind farm shall be decided based on a optimized micro siting plan agreed to between the developer and end user. However, the inter machine spacing may be kept at a minimum of $3D$ (perpendicular to wind direction-row) by $5D$ (in the direction of wind-column).
8. In complex terrain, the inter machine spacing may have to be decided on a case to case basis. But in any case the spacing shall not be less than $3D$ in a row perpendicular to pre dominant wind direction (row).
9. Estimates of individual machines gross and park output shall be given. In no case shall the overall array loss for any individual machine be greater than 15%. The overall wind farm array losses shall not be greater than 10%.
10. Uncertainty calculation on the generation estimates also shall be given. The calculation should include an assessment of measurement site and wind farm site the uncertainty associated with inter annual variations of average wind environment.¹

¹ Power Developer should also submit an affidavit to the effect that they have followed all the directives of C-WET as mentioned above for preparation of micrositing plan

11.