

# **M.P. Electricity Regulatory Commission Bhopal**



## **Tariff Order for procurement of power from Wind Electric Generators**

**March 2016**

## 1. LEGISLATIVE PROVISIONS

Section 86(1) (e) of the Electricity Act 2003 mandates the State Electricity Regulatory Commissions to promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person. The Regulatory Commissions are also required to specify, for the purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution Licensee. Under Section 62, the Act empowers the Commissions to determine the tariff for the supply of electricity by a generating company to a distribution Licensee. Sub-section (h) and (i) of Section 61 are relevant in so far as determination of tariff of renewable sources of energy is concerned and are reproduced below :

“61(h) the promotion of co-generation and generation of electricity from renewable sources of energy;”

“61(i) the National Electricity Policy and tariff policy:”

- 1.1 Section 6.4 of the Tariff Policy recognized that it will take some time for the non-conventional energy sources to compete with conventional sources of energy, hence its procurement shall be done at preferential tariffs to be determined by the Commissions and states as under:

*(2)Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under Section 63 of the Act within suppliers offering energy from same type of non-conventional sources. In the long-term, these technologies would need to compete with other sources in terms of full costs.*

*(3)The Central Commission should lay down guidelines within three months for pricing non-firm power, especially from non-conventional sources, to be followed in cases where such procurement is not through competitive bidding.*

- 1.2 The Central Electricity Regulatory Commission has issued revised guidelines vide notification dated 06.02.2012 specifying the norms for various non-conventional sources of energy including power from wind electric generators.
- 1.3 In exercise of the powers vested in it under Section 86(1)(a), (b) ,(c) and (e); and Section 62(1) of the Act and all other powers enabling it in this behalf, the Madhya Pradesh Electricity Regulatory Commission ( Commission), through this order, determines the tariff, procurement process and related dispensation for purchase of power by Distribution Licensees in the State from wind electric generators including terms and conditions for captive use or third party sale.

## **2. PROCEDURAL HISTORY**

- 2.1 The Commission had issued a tariff order for procurement of power from wind electric generators on 11.6.2004. The control period was for three years which ended on 31.3.2007. Thereafter, the Commission vide order dated 23.4.2007 issued a direction that the same provisions of tariff order dated 11.6.2004 shall continue till the issue of tariff order for the next control period. The Commission then issued the second tariff order for procurement of power from wind electric generators on 21.11.2007. The control period was due to expire on 31.3.2012.
- 2.2 Meanwhile, it was brought to the notice of the Commission that after issuance of the tariff order dated 21.11.2007, there had been significant increase in the project input costs thus making the tariff determined therein un-economical. The Commission revised the existing norms before expiry of the control period and also determined a third tariff on 14.05.2010. The control period of this revised tariff was expired on 31.03.2013.
- 2.3 The Commission then issued the fourth tariff order on 26.03.2013 with control period up to 31.03.2016.

## **3. REGULATORY PROCESS FOR NEXT CONTROL PERIOD**

- 3.1 The Commission had issued a public notice on 23.10.2015 inviting comments/suggestions/objections from various stakeholders by 28.11.2015. The list of stakeholders who have submitted their comments in writing is given in Annexure-I. A public hearing was held on 15.12.2015. The list of participants who participated in the hearing and expressed their views is given in Annexure-II.
- 3.2 While arriving at the new terms and conditions and consequently the tariff for generation of power from wind energy sources, the Commission has analyzed the comments/suggestions received from various stakeholders, new technological developments and improvements in Capacity Utilization Factor and reduction in capital cost per MW along with the Guidelines issued by the CERC for determination of tariff for procurement of power from renewable energy sources. Accordingly, the Commission issues the following order to meet the requirements of the Electricity Act, 2003.

## **4. APPLICABILITY OF THE ORDER**

- 4.1 This tariff Order will be applicable to all new wind electric generation projects in the State of Madhya Pradesh commissioned at 00.00 hrs. on 01.04.2016 or thereafter for sale of electricity to the distribution licensees within the State of Madhya Pradesh. This order also specifies the terms & conditions (other than tariff) for captive user or for sale to third party.

4.2 It will be mandatory for the distribution licensees to submit to the Commission, quarterly progress reports on the capacity addition, purchase of energy and other relevant details in respect of wind electric generation projects commissioned in their licensed area, and also post them on their websites on a regular basis. The SLDC is also required to submit through e-mail/fax immediately, a list of WEGs commissioned during the month of March 2016 i.e. from 00.00 hrs. of 01.03.2016 to 24.00 hrs. of 31.03.2016.

## **5. TARIFF REVIEW PERIOD/CONTROL PERIOD**

5.1 The control period to which this order shall apply shall start from 01.04.2016 and will end on 31.03.2019 (i.e. end of FY 2018-19). The tariff decided in this order shall apply to all projects which come up during the above mentioned control period and the tariff determined shall remain valid for the project life of 25 years.

## **6. MECHANISM FOR TARIFF DETERMINATION**

6.1 In its earlier tariff orders, the Commission had adopted a levelized tariff approach. The CERC has also recommended levelized tariff approach. Most of the project developers are also in favour of levelized tariff. The Commission has, therefore, adopted levelized tariff approach in this order also.

### **Benchmarking**

6.2 The Benchmarking generally requires evaluation, detailed scrutiny and determination of each cost parameter for each Project separately. There is a considerable diversity in the value of various parameters across the Projects, such as in respect of plant capacity, location, project cost, financing plan etc.

6.3 In absence of availability of such extensive data in Madhya Pradesh , the benchmarking has been done considering the following :

- a) Analysis of responses from stakeholders on procurement of electricity from wind electric generators.
- b) Guidelines issued by the CERC.

6.4 A 'Benchmark Tariff Determination' approach has been used by the Commission and the cost of generation on benchmark performance norms has been arrived at by the Commission.

### **Single Part vs. Two Part Tariff**

6.5 Normally, two part tariff is applied in order to recover fixed and variable costs through the fixed and variable components of tariff separately.

- 6.6 Since almost all the costs of wind electric generators are fixed in nature, a **single part tariff appears best suited** for energy generated from wind electric generators. The CERC has also worked out single part tariff. The Commission has also adopted single part tariff approach.

### **Project Specific or Generalized Tariff**

- 6.7 A Generalized tariff mechanism would provide an incentive to the investors for use of most efficient equipment to maximize returns and for selecting the most efficient site. The process of project specific tariff fixation will be cumbersome and time consuming. It has, therefore, been decided to use common tariff for all the wind electric power projects using common benchmark technique.

### **Front/Back Loaded or levelized tariff**

- 6.8 In case tariff is front loaded the developer may lose interest in the project after enjoying the benefits of front loading. In a back loaded tariff, the developer may not be able to meet his loan servicing liability due to inadequacy of cash flow. The Commission has, therefore, decided to adopt a levelized approach towards tariff determination so as to balance the interests and requirement of various stakeholders.

## **7. TARIFF DESIGN**

- 7.1 The Working Group constituted by the Forum of Regulators (FOR) for Policies on Renewables have, in their recommendations, suggested that a cost-plus tariff based on reasonable norms should be adopted for Renewable Energy. Keeping in view the above recommendations, the Commission has adopted an approach of preferential treatment on a cost-plus basis for determining tariff for the wind electric energy. In a cost plus approach, the key elements that influence the determination of tariffs for a project are mentioned below :

- Capital Cost
- Capacity Utilization Factor
- Operation & Maintenance Cost
- Plant life
- Depreciation
- Return on Equity
- Interest on debts
- Debt-Equity Ratio
- Interest on working capital

## **Capital Cost (including cost of infrastructure etc.)**

- 7.2 The Capital Cost is the most critical element in tariff determination. This comprises cost of land, plant and machinery, civil works, erection, commissioning, cost of power evacuation and other related expenses. It also includes investments to be made towards scheduling, forecasting, communication and real time monitoring facilities etc.
- 7.3 In its approach paper, the Commission had proposed capital cost of Rs. 5.00 Crs./MW inclusive of power evacuation cost etc. , without indexation . Various stakeholders have indicated the capital cost ranging from Rs. 5.75 Crores/MW in terms of CERC Regulations, 2012 to Rs. 7.75 Crores per MW.
- 7.4 In its Regulations dated 06.02.2012, the CERC have considered capital cost of Rs. 5.75 Crores/MW for 2012-13 with a provision of indexation for future years.

### ***Commission's views***

- 7.5 As brought out earlier, the project cost varies on account of various factors including location of the project, rating of the units, total capacity, technology etc. and therefore, a reasonable project cost shall have to be considered on a uniform basis for all wind projects for tariff determination.
- 7.6 The Commission received inputs from various stakeholders during the public hearing. However, item-wise audited cost data have not been submitted by any of the project developers to substantiate their proposed capital cost per MW. The Commission is also of the view that with the increase in MW capacity of a WEG due to technological advancement (using higher hub heights, larger rotor diameters and more efficient generators), the overall capital cost in terms of rupees may increase, but the capital cost per MW would definitely be lower as compared to the value considered in earlier years. The Commission noted that none of the stakeholders has submitted a comparison of item wise cost of 600 kW/800 kW capacity WEG with that of a WEG of 1.5 MW/2 MW capacity. In future, mostly higher capacity WEGs viz 1.5/2 MW or more shall be installed in Madhya Pradesh. The Commission, therefore, is of the view that it would be reasonable to consider Capital cost at Rs. 5.75 Crores/MW including cost of power evacuation system etc. for the control period without indexation.

## **8. OPERATING PARAMETERS**

### **Capacity Utilization Factor**

- 8.1 The capacity utilization factor (CUF) depends on several factors such as wind regime of the site, quality, capacity and age of machines installed, height of the hub, length of blade (swift area) etc.

- 8.2 In its Regulations 06.02.2012, the CERC suggested minimum CUF as 20%. In its earlier orders also, the Commission had considered CUF as 20%. In its approach paper also, the Commission had proposed capacity utilization factor of 20%.
- 8.3 Various stakeholders have suggested capacity utilization factor for the full life of the plant ranging from 18.5% to 25%.

***Commission's views***

- 8.4 As the capacity utilization factor depends on various variable factors, it would be difficult to compute it specifically for each machine and for each site. The Commission noted that none of the stakeholders has submitted data of generation for at least last one year while submitting comments on the draft approach paper. The Commission obtained data for the last one year in respect of some of the 1.5/2 MW capacity WEGs for different locations in Madhya Pradesh. It is noted that the capacity utilization factor reaches up to 26%. Also, some of the better sites shall be repowered in future i.e. the existing WEGs of lower hub height and capacity shall be replaced by newer WEGs with higher hub heights and higher capacities. As such, there is a scope of further increase in capacity utilization factor. In view of the above, the Commission has decided to adopt capacity utilization factor of 23% as reasonable for determination of tariff in this control period for new projects only.

**O & M expenses**

- 8.5 The operation and maintenance expenses comprise manpower expenses, insurance expenses, spares and repairs, consumables and other expenses (statutory fees etc.). Normally, the maintenance of wind farms is carried out through a centralized maintenance system which results in a lower amount of manpower expenses as well as administrative and general expenses. In its earlier tariff order, the Commission had considered O&M expenses as 1% of Capital Cost for the first year and thereafter with an annual escalation at 5.72%.
- 8.6 In the approach paper, the Commission had proposed operation and maintenance expenses as 1% of Capital Cost for the first year and thereafter an escalation of 5.72 % per year.
- 8.7 In its Regulations dated 06.02.2012, the CERC has considered O&M expenses as 9.51 lacs per MW per annum with escalation @ 5.72% per annum.
- 8.8 Various stakeholders have suggested operation and maintenance expenses as per CERC norms.

***Commission's views***

- 8.9 Considering views of the stakeholders, recommendations of CERC and the fact that the maintenance of such plants require lower expenses due to improvement in efficiency of the WEGs, the Commission has decided that it would be appropriate to allow 1 % of the capital cost of the project as O&M expenses in the first year with an escalation of 5.72% for each year thereafter.

### **Plant Life**

- 8.10 In its approach paper, the Commission had proposed plant life as 25 years. Various stakeholders have also suggested plant life of 25 years. In its Regulations dated 06.02.2012, the CERC have taken plant life as 25 years.

#### *Commission's views*

- 8.11 After considering the suggestions from various stakeholders and CERC norms, the Commission has considered the plant life as 25 years for wind power generation units for tariff determination purposes.

## **9. FINANCIAL PARAMETERS**

### **Depreciation**

- 9.1 In its approach paper, the Commission had proposed depreciation @ 7% per annum for the first 10 years and remaining 20% to be spread over the useful life of the plant from 11<sup>th</sup> year onwards. In its Regulations dated 06.02.2012, the CERC considered the depreciation @ 5.83 % for first 12 years and balance in 13 years. Most of the stakeholders have also suggested depreciation @ 7% per annum for the first 10 years and balance 20% in next 15 years. One of the stakeholders has suggested to adopt CERC norms.

#### *Commission's views*

- 9.2 The Commission has decided that for the purpose of tariff determination, it would be prudent to assume depreciation @ 7% per annum for the first 10 years so that the debt is repaid in a loan tenure of 10 years and balance 20 % to be depreciated in the next 15 years so that the asset is depreciated to a residual value of 10 % of its initial value over life span of 25 years.



## **Return on equity**

9.3 In its approach paper, the Commission had proposed return on equity as 20% pre-tax. In its Regulations dated 06.02.2012, the CERC considered the return on equity @ 20 % for the first 10 years and @ 24 % from 11<sup>th</sup> year onwards. Various stakeholders have suggested return on equity as recommended by CERC. In its earlier orders, the Commission had allowed return on equity (RoE) @ 16% pre-tax.

### *Commission's views*

9.4 Keeping in view the requirements of the tariff policy for preferential tariff for renewable sources of energy and also after considering the views expressed by various stakeholders, the Commission has decided to allow RoE @ 20% pre-tax.

## **Interest on Debt**

9.5 In its approach paper, the Commission had proposed interest on debt @ 12.00% per annum. In its Regulations dated 06.02.2012, the CERC have recommended interest on debt for computation purposes as average State Bank of India Base rate prevalent during the first six months of the previous year plus 300 basis points, which works out to 13 %. Various stakeholders have suggested annual rate of interest on debt ranging from 13% to 14% or as per CERC recommendations.

### *Commission's views*

9.6 The Commission considers that the interest rates for loans are changing from time to time frequently and in future the rates shall be lower than in earlier years. The Commission therefore, considers the annual interest rate on debt at 12.00% for tariff determination purposes. The investor is allowed to retain benefits, if any, by taking a cheaper loan.

## **Debt - Equity Ratio**

9.7 In its approach paper, the Commission had proposed debt-equity ratio of 70:30. Various stakeholders have also suggested 70:30 ratio. The Clause 5.3(b) of the Tariff Policy also stipulates a debt-equity ratio of 70:30 for financing power projects. In its earlier tariff orders, the Commission had considered debt-equity ratio of 70:30. In its Regulations dated 06.02.2012, the CERC also considered debt-equity ratio of 70:30.

### *Commission's views*

9.8 Considering the above, the Commission has decided a debt-equity ratio of 70: 30 for the determination of tariff.

## **Interest on Working Capital**

9.9 In its approach paper, the Commission had proposed an interest on working capital @ 12.50%. In its Regulations dated 06.02.2012, the CERC has recommended interest on working capital for computation purposes as average State Bank of India Base rate prevalent during the first six months of the previous year plus 350 basis points, which works out to 13.5 % and the amount of working capital to be calculated using the following norms:

- a) O&M expenses for 1 month
- b) Receivables equivalent to 2 months of energy charges
- c) Maintenance spares @ 15% of O&M expenses.

9.10 Various stakeholders have suggested interest on working capital either as considered by CERC or up to 13.5%.

#### ***Commission's views***

9.11 After considering suggestions of various stakeholders and the norms specified in the CERC's Regulations dated 06.02.2012 and likely reduction in interest rates in future, the Commission has decided that the amount of working capital shall be calculated adopting the following norms and interest thereon shall be calculated by using a simple rate of 12.50 % per annum:

- a) O&M expenses for one month
- b) Receivables equivalent to two months of energy charges based on normative CUF.
- c) Maintenance spares @ 15% of O&M expenses

## **10. DISCOUNTING RATE**

In its approach paper, the Commission proposed a discounting factor @ 10.20 % for the purpose of working out the levelized tariff. In its order dated 25.10.2012, the CERC has considered a discounting factor @ 10.95 % based on the Post Tax weighted average cost of capital on the basis of normative debt: equity ratio (70:30) specified in its Regulations. The Commission has decided that it would be appropriate to use discounting rate of 10.20% for the purpose of determination of levelized tariff.

## **11. DETERMINATION OF TARIFF**

11.1 In view of the foregoing discussions, the various parameters considered by the Commission for determination of tariff are given in the table below:

| S. No. | Parameters   | As decided by the Commission  |
|--------|--|---|
| 1      | Capital Cost (Rs. Lakhs per MW) including cost of power evacuation   | 575   |
| 2      | Capacity Utilisation Factor (%)  | 23  |
| 3      | Operation & Maintenance Expenses(Rs. Lakhs per annum))   | 1% of the capital cost in first year with an escalation of 5.72 % for each year thereafter. |
| 4      | Plant life (years)   | 25  |
| 5      | Depreciation (%)   | 7% per annum for the first 10 years and balance 20% in the next 15 years                    |
| 6      | Return on Equity (%)   | 20% pre-tax   |
| 7      | Interest on Debt (%) per annum   | 12.00   |
| 8      | Debt-equity ratio  | 70:30   |
| 9      | Interest on working capital on (%)<br><br>(i) O&M expenses for 1 month<br><br>(ii) Receivables equivalent to 2 months of energy charges based on normative CUF<br><br>(iii) Maintenance spares @ 15% of O&M expenses | 12.50   |
| 10     | Discounting rate (%)   | 10.20   |

11.2 Considering the above parameters, the Commission sets the levelized tariff @ **Rs. 4.78 per unit** for generation from new wind energy projects to be commissioned after issue of this order for its project life of 25 years.

## **12. OTHER TERMS AND CONDITIONS**

- 12.1 The Tariff determined for the licensee shall be exclusive of taxes and duties as may be levied by the State Government.
- 12.2 A review of the Tariff Rate before the expiry of the control period may be undertaken by the Commission under exceptional circumstances, if the need for such review is clearly demonstrated with adequate supporting material.
- 12.3 The Tariff Rates shall be firm for the project life and will not vary with fluctuations in exchange rate or on account of changes in taxes, or for any other reason, whatsoever.

### **Power Purchase Agreement and Tenure**

- 12.4 The energy generated by the wind generating units will be procured centrally by the M.P. Power Management Co. Ltd. at the rates specified in this order. The energy so procured will be allocated by M.P. Power Management Co. Ltd. to the three distribution licensees on the basis of actual energy input in the previous financial year. Accordingly, the Power Purchase Agreements will be signed between the developer and the M.P. Power Management Co. Ltd. The M.P. Power Management Company Limited, Jabalpur, in turn, will have back to back power supply agreement with the Distribution Licensees. The agreements will be for exclusive sale of electricity for a period of 25 years from the date of commissioning of plant or for a shorter period in case the developer opts to supply to the licensees after consuming the electricity for self use/ third party sale for some years. The developer may execute agreement with M.P. Power Management Co. Ltd. before commissioning of plants and the Commissioning Certificate may form a part of the agreement. The M.P. Power Management Company Limited, Jabalpur is directed to develop the model agreement accordingly.
- 12.5 The developers are required to get all the required statutory clearances/approvals/consents before entering into agreement with the licensees.

### **Scheduling**

- 12.6 The new wind electric generation projects with collective capacity of 10 MW and above shall be subject to 'scheduling' as specified by the CERC under Renewable Regulatory Fund (RRF) mechanism in CERC (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time.

### **Reactive Power Supply**

- 12.7 The Wind Electric Generators would deemed to be the generating station of a generating company and all functions, obligations and duties assigned to such stations under the Electricity Act 2003 would apply to these power stations. These stations would be required to abide by all applicable codes.

- 12.8 The Commission determines the charges for KVARh consumption from the grid as 27 paise/unit i.e. the rate which is already prevalent in the State and which may be revised as and when necessary.
- 12.9 Reactive energy charges would be paid by the developer to the Distribution Licensees in whose territorial area the Wind Electric Generator Unit is located.

### **Wheeling charges for third party sale/captive consumption**

- 12.10 The Distribution Company in whose area the energy is consumed (irrespective of the point of injection) shall deduct 2% of the energy injected towards wheeling charges in terms of units. The M.P. Power Management Company Limited shall also claim subsidy from the State Government towards wheeling charges @ 4% of the energy injected at the rate of prevailing energy charges for the user in terms of provisions made in Government of M.P. “ Wind Power Project Policy-2012” notified on 30.01.2012 as amended from time to time. This amount of subsidy shall then be passed on to the Distribution Licensees in whose area the energy is consumed on the basis of allocation indicated in the agreement. Wheeling charges are not applicable where generation and consumption of energy are at the same premises without involving the licensees system network.

### **Metering & Billing**

- 12.11 The metering arrangement is to be done at site as per the provisions of the Government of M.P. “Wind Energy Project Policy-2012” notified on 30.01.2012 as amended from time to time.
- 12.12 Billing of the metered energy will be carried out on a monthly basis.
- 12.13 The meter reading will be carried out by the respective Distribution Licensees where the energy is injected into the system.

### **Payment Mechanism**

- 12.14 The Commission prescribes a settlement period of 30 days from the date of submission of the bill to the concerned Distribution Licensees where the power is injected in order to ensure that the developer has an assurance of cash inflow for the energy, which he delivers to the grid.

- 12.15 The bills favouring M.P. Power Management Company Limited, Jabalpur shall be submitted to the concerned distribution licensee in whose area the power is injected. The distribution licensee shall then verify the bills and send the same within 7 days of receipt of bills to the M.P. Power Management Company Limited, Jabalpur for making payment to the developer. The M.P. Power Management Company Limited in turn, would raise the bills on the distribution licensees on the basis of allocation. In case any dispute arises on the bills for payment then the M.P. Power Management Co. Ltd. is required to make the payment of such bill in full within the stipulated time and then refer the dispute to the Commission.
- 12.16 In case of delay beyond the 30 days payment period, the M.P. Power Management Co. Ltd. will pay **delayed payment surcharge on outstanding amount at the rate of 2% p.a. over and above the short term lending rate of the State Bank of India** (known as Prime Lending Rate) prevailing on the first day of the month when payment became due.
- 12.17 In case the M.P. Power Management Co. Ltd. makes the payment within 15 days from the date of submission of bill by developer, an **incentive of 1% of billed amount** shall be allowed by the developer towards prompt payment. Alternatively, if the payment is made by the M.P. Power Management Co. Ltd. to the developer through the irrevocable letter of credit on presentation of bill, **an incentive of 2% of billed amount** shall be allowed by the developer.
- 12.18 The delayed payment surcharge/incentive will also be passed on to the Distribution Licensees by the M.P. Power Management Co. Limited.

### **Default Provisions for Third Party Sale or sale to utility**

- 12.19 In case payment is not made within 60 days of presentation of bill (i.e. thirty days more than the prescribed limit of thirty days for normal payment), the developer may issue fifteen clear day's notice to the M.P. Power Management Company Limited to make the payment. This, however, will not absolve M.P. Power Management Company Limited from payment of delayed payment surcharge as provided in clause 12.16 of this order. In case, M.P. Power Management Company Limited still does not make the payment, the developer shall have the liberty to approach the Commission for allowing sale of power to third party.
- 12.20 Where the developer has an arrangement for third party supply or for captive consumption and in case the developer desires to terminate the agreement with third party and to supply to the utility, the utility with the prior permission of the Commission, will purchase the power at the rate as applicable to inadvertent flow of energy mentioned in para 12.21 below. In such cases, the developers are required to execute the Power Purchase Agreement with the licensee for the remaining period of project life.
- 12.21 In case of inadvertent flow of energy into the system by the generator, the licensee shall pay to the developer for the energy received at **Rs. 2.50 per unit**.

12.22 The project developer is required to obtain Short/ Long Term Open Access permission in case of captive use/ third party sale. The open access charges, as applicable, shall be levied. In case of sale of power to the Distribution Licensee, such permission is not applicable and is not required to be obtained.

### **Drawing of Power during Shutdown**

12.23 The plant would be entitled to draw power from the Distribution Licensee's network during shutdown period of its plant or during other emergencies. The supply availed would be billed at the temporary rate applicable to HT Industrial category. The drawl by the Plant would not normally be expected to exceed 10% of the MW capacity it delivers to the Distribution licensee.

### **Other applicable conditions**

12.24 All statutory clearances and necessary approvals, if any, are to be obtained by the developer for setting up of project through Department of Non-conventional Energy Sources. The developer is also responsible for their compliance and their renewals as may be required from time to time.

12.25 The developer would ensure that the proposed location of the plant is in accordance with the policy guidelines of the Union/the State Government.

12.26 Other conditions in respect of minimum purchase requirement, banking and reduction in contract demand shall be applicable as per MPERC (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2008 as amended from time to time.

12.27 In its Regulations dated 06.02.2012, the CERC has specified the sharing of Clean Development Mechanism benefits which is as under.

“ The CDM benefits 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 becomes equal (50:50) between the developers and the consumers, in the sixth year. Thereafter, the sharing of CDM benefits should remain equal till the time that benefit accrues.”

During the public hearing, M/s Regen Power Tech Pvt. Ltd. submitted that since all risks, costs and efforts associated with the availing of carbon credits are borne by the generating company, it is justifiable to retain 100% benefits with the generator only.

After considering the above, the Commission is of the view that there are uncertainties associated with wind generation such as intermittent generation, difficulty in scheduling, fixed tariff for entire life of the plant, fixed CUF, withdrawal of advance against depreciation etc. The Commission is also guided by the fact that it would be in the larger interest of the State that available potential for generation of power from renewable energy sources is exploited to the maximum extent so that all Obligated Entities are able to fulfill their Renewable Purchase Obligations. This would also avoid or minimize the need for purchase of RECs (Renewable Energy Certificates).

In view of the above, the Commission has decided that the generator may retain 100 % benefits without sharing these with the consumers during the currency of the present control period namely 01.04.2016 to 31.03.2019.

12.28 In case the point of injection and drawl fall within the jurisdiction of any of the Distribution Licensees involving transmission network, permission for bulk power transmission shall be obtained from M.P. Power Transmission Co. by the developer before executing the agreement with M.P. Power Management Co. and the developer shall not be required to execute a separate agreement with M.P. Power Transmission Company Limited.

12.29 All existing projects i.e. projects commissioned before 00.00 hrs. of 01.04.2016 shall continue to be governed by the terms and conditions applicable at the time of their commissioning.

**Ordered accordingly.**

**(Alok Gupta )  
Member**

**(A.B.Bajpai )  
Member**

**(Dr. Dev Raj Birdi)  
Chairman**

**Place : Bhopal**

**Date : 17.03.2016**



**Annexure - I****LIST OF STAKEHOLDERS WHO HAVE SUBMITTED THEIR COMMENTS IN WRITING**

| <b>S.No.</b> | <b>Name &amp; address of stakeholders</b>                      |
|--------------|--|
| 1.           | M.P. Poorv Kshetra Vidyut Vitaran Co. Ltd., Jabalpur           |
| 2.           | M/s Kshema Power and Infrastructure Co. Pvt. Ltd., Dewas       |
| 3.           | M/s Ganeshganj Renewable Energy Pvt. Ltd., Dewas               |
| 4.           | M/s Raj Multitrade Pvt. Ltd., Ratlam                           |
| 5.           | M/s CLP Wind Farms (India) Pvt. Ltd., Mumbai                   |
| 6.           | Shri J.K.Jethani, Scientist-D, Govt. of India, MNRE, New Delhi |
| 7.           | M/s Welspun Renewables Energy Pvt. Ltd., Mumbai                |
| 8.           | Indian Wind Energy Association, New Delhi                      |
| 9.           | M/s Ostro Energy Pvt. Ltd., New Delhi                          |
| 10.          | Indian Wind Turbine Manufacturers Association, New Delhi       |
| 11.          | Shri D.S. Kawatra, Consultant, Nagpur                          |
| 12.          | M/s Sravanthi Ratlam Energy Pvt. Ltd., Gurgaon                 |
| 13.          | M/s MOIL Ltd., A Govt. of India Enterprise, Nagpur             |
| 14.          | M/s Orange Mamatkhedha Wind Pvt. Ltd., New Delhi               |
| 15.          | New & Renewable Energy Department, Bhopal                      |
| 16.          | M.P. Power Management Co. Ltd., Rampur, Jabalpur               |
| 17.          | M/s Continuum Wind Energy (India) Pvt. Ltd., Chennai           |
| 18.          | M/s ReGen Powertech Pvt. Ltd., Chennai                         |
| 19.          | M/s Marut-Shakti Energy India Ltd., Vadodara                   |
| 20.          | M/s Inox Renewables Ltd., Noida (U.P.)                         |
| 21.          | M/s Inox Wind Ltd., Noida (U.P.)                               |
| 22.          | M/s Gamesa Renewable Pvt. Ltd., Chennai                        |

| <b>S.No.</b> | <b>Name &amp; address of stakeholders</b>            |
|--------------|--|
| 23.          | M/s Panama Wind Energy Krishna Pvt. Ltd., Pune       |
| 24.          | M/s Mytrah Energy (India) Ltd., Hyderabad            |
| 25.          | M/s Consolidated Energy Consultant Ltd., Bhopal      |
| 26.          | M/s Power & Energy Consultants, Delhi                |
| 27.          | M/s NSL Renewable Power Private Limited, Hyderabad   |
| 28.          | M/s SunEdison Energy India Pvt. Ltd.                 |
| 29.          | M/s WinDForce Management Services Pvt. Ltd., Gurgaon |
| 30.          | M/s Mahindra Susten Pvt. Ltd., Mumbai                |
| 31.          | M/s Adani Green Energy Ltd., Ahmedabad               |

**Annexure - II****LIST OF STAKEHOLDERS WHO PARTICIPATED IN THE PUBLIC HEARING  
ON 15.12.2015**

| <b>S.No.</b> | <b>Name &amp; address of stakeholders</b>                |
|--------------|--|
| 1.           | M/s Mytrah Energy (India) Ltd., Hyderabad                |
| 2.           | M/s Kshema Power and Infrastructure Co. Pvt. Ltd., Dewas |
| 3.           | Indian Wind Power Association, Chennai                   |
| 4.           | M/s BLP Energy Pvt. Ltd.                                 |
| 5.           | M/s Panama Wind Energy Krishna Pvt. Ltd., Pune           |
| 6.           | M/s Continuum Wind Energy (India) Pvt. Ltd., Chennai     |
| 7.           | M/s Consolidated Energy Consultants Ltd., Bhopal         |
| 8.           | M/s Orange Mamatkhedha Wind Pvt. Ltd., Dewas             |
| 9.           | Indian Wind Turbine Manufacturers Association, New Delhi |
| 10.          | Indian Wind Energy Association, New Delhi                |
| 11.          | M.P.Power Management Co. Ltd., Jabalpur.                 |
| 12.          | Wind Independent Power Producers Association, New Delhi. |
| 13.          | M/s Ostro Energy Pvt. Ltd., New Delhi                    |
| 14.          | New and Renewable Energy Department, Bhopal              |