SMP-20/2010

M.P. Electricity Regulatory Commission
Bhopal

Tariff Order
for
procurement of power
from
Wind Electric Generators

May 2010

1. LEGISLATIVE PROVISIONS

1.1 Section 86(1) (e) of the Electricity Act 2003 (EA,2003 or the Act), 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. Further the Act, under Section 62, empowers the Commissions to determine the tariff for the supply of electricity by a generating company to a distribution Licensee in accordance with the provisions of the Act. Also, Section 61 provides that the Commission shall specify the terms and conditions for the determination of tariff, and in doing so, be guided by the principles listed in Clauses (a) to (i) of that Section. Section 61(h) and 61(i) are re-produced 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:"

1.2 Section 6.4 of the Tariff Policy dealing with Non-conventional sources of energy generation including co-generation provides as under:-

(1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage for purchase of energy from such sources taking into account availability of such resources in the region and its impact on retail tariffs. Such percentage for purchase of energy should be made applicable for the tariffs to be determined by the SERCs latest by April 1, 2006.

It will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore, procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.

(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.

1.3 The Central Electricity Regulatory Commission has issued guidelines vide notification dated 16.9.2009 specifying the norms for various non-conventional sources of energy including power from wind electric generators.

1.4 Hence, 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 user or third party sale.

2. PROCEDURAL HISTORY AND NEED FOR RE-SETTING THE TARIFF

2.1 Earlier, the Commission had issued a tariff order for procurement of power from wind electric generators on 11.6.2004. The control period was for about 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 of which is due to expire on 31.3.2012.

2.2 It has been brought to the notice of the Commission that after issuance of the tariff order dated 21.11.2007, there had been significant increases in the project input costs thus making the tariff prescribed therein un-economical. This has resulted into drying-up of new capacity addition of Wind Energy Generation in the State. Many Wind Power Generators had been expressing their difficulties to the Commission in this regard from time to time. In the meanwhile, Central Electricity Regulatory Commission (CERC) have issued regulations on terms and condition for determination of tariff from new and renewal sources of energy. A comparison of CERC terms and condition vis-a-vis the Commission’s terms and conditions in respect of wind power shows that the CERC regulations result into better tariff. Government of Madhya Pradesh, Energy Department has also requested the Commission to look into the issue and pass appropriate orders early so that generation of power through alternative sources of energy in Madhya Pradesh could be enhanced.

2.3 The clause 12.29 of the Tariff Order dated 21.11.2007 provides as under :

“The Commission reserves the right to alter, modify or amend any provisions of this order at any time. The Commission feels that this provision is necessary so that any fact which has been overlooked can be incorporated subsequently or any **new situation emerges due to experience gained during the operation of the order** can be suitably addressed in the interest of the stakeholders.”

Accordingly, the Commission is of the view that substantial increase in project capital cost as well as considering the guidelines issued by the CERC on 16.9.2009 providing for better tariff vis-à-vis the Commission's existing norms is the new situation that has emerged during the control period which was to end on 31.3.2012. Hence it has been decided to re-visit the existing norms for determination of tariff for procurement of power from wind electric generators before expiry of the present control period and also to provide for a revised tariff based on the new terms and conditions.

The Commission is also guided by the fact that it would be in the larger interest of the consumers of the State that available potential for generation of power from renewable energy sources is exploited to the maximum extent so that the Distribution licensees are able to fulfill their RPO (Renewable Purchase Obligation) on obligation to purchase power from renewable sources is met by procuring energy from such sources. This would avoid or minimize the need for purchase of REC (Renewable Energy Certificates), likely to be introduced in the near future.

3. REGULATORY PROCESS FOR NEXT CONTROL PERIOD

3.1 The Commission had issued a public notice on 21.01.2010 inviting comments/suggestions/objections from all stakeholders by 10.02.2010, which was subsequently extended to 19.2.2010. The list of those stakeholders who have submitted their comments in writing is given in Annexure-I. A public hearing was held on 22.2.2010. 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 tariff orders issued by other State Electricity Regulatory Commissions, comments/objections received from various stakeholders, facts on wind electric generation from various sources, Guidelines issued by CERC and Policy issued by the Government of Madhya Pradesh 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 on or after the date of issue of this order 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.

5. TARIFF REVIEW PERIOD/CONTROL PERIOD

5.1 The control period will start from the date of issue of this order and will end on 31.03.2013 (i.e. end of FY 2012-13). 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 The Commission, in its earlier tariff orders, adopted a hybrid approach whereas CERC has recommended levelized approach. Most of the project developers were also in favour of levelized tariff. The Commission has therefore adopted levelized tariff approach in this order.

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 approach for benchmarking was done adopting the following process:

a) Analysis of tariff orders issued by various State Electricity Regulatory Commissions.

b) Analysis of responses from stakeholders on procurement of electricity from wind electric generators..

c) Policies and guidelines issued by Indian Renewable Energy Development Agency, Ministry of New and Renewable Energy Sources.

6.4 Regulatory clarity and certainty in Tariff setting is necessary from the perspective of project developers, investors and lenders; in order to support investments in renewable sources of energy projects which are still at the nascent stage of growth in Madhya Pradesh. Thus, while there is merit in setting a uniform tariff level for the wind electric power Projects, it is also necessary to set out clearly its premises and rationale. A ‘Benchmark Tariff Determination’ approach has been made 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. This is especially useful in a scenario of merit order dispatch.

6.6 Since wind power has not been brought under the regime of scheduled dispatch in view of its infirm nature and 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. Thus the Commission has 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)

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 charges .

7.3 The Commission had proposed capital cost of Rs. 5 Crs./MW(inclusive of power evacuation cost) in its draft approach paper floated in January, 2010. Various stakeholders have indicated the capital cost ranging from 5.00 Crores to 7.00 Crores per MW. M/s Enercon (India) Ltd. have submitted the details of capital cost of WEG at various sites across India which varies from Rs. 524 lacs/MW to Rs. 550 lacs/MW. M/s Indian Wind Power Association have submitted project cost as per the project design document which varies from Rs. 508 lacs/MW to Rs. 663.33 lacs/MW.

7.4 The CERC in their Regulations dated 16.09.2009 have adopted Capital Cost of Rs. 5.15 Crores/MW for 2009-10 with provision of indexation for future years.

7.5 As per incentive policy for encouraging generation of power in Madhya Pradesh through Non-conventional Energy sources (solar, wind, bio-energy etc.) issued vide notification dated 17.10.06 by the Government of Madhya Pradesh, the power evacuation has to be an integral part of the project and all expenses for power evacuation facility shall be borne by the unit.

Commission's views

7.6 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, designed capacity utilization factor etc. and therefore, a reasonable project cost shall have to be considered on a uniform basis for all wind projects for tariff determination.

7.7 The Commission had, in its order dated 21.11.2007 considered the capital cost (including cost of infrastructure) of Rs. 4.60 Crores per MW.

7.8 The Commission had received the estimates and inputs from various stakeholders during the public hearing. The Commission observed that diverse views were expressed by various stakeholders including Licensees. However, itemwise cost data had not been submitted by most of the project developers to substantiate their proposed capital cost. The Commission further noted that as per the information published by MNRE, there was significant progress in development of technology in respect of wind energy resulting in higher capacity machines with large rotor diameter and higher hub height. MNRE has stated that the cost could fall as a result of economies of scale due to expansion of market. The Commission, therefore, is of the view that it would be reasonable to adopt a capital cost of Rs. 5.00 Crores per MW including cost of power evacuation system from the project site to nearest sub-station of distribution/transmission licensee.

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 The CERC in its Regulations dated 16.0.2009 suggested minimum CUF as 20%. Earlier, the Commission in its Orders dated 11.06.2004 and 21.11.2007 had considered CUF as 22.5% without derating. However, based on the data submitted to the Commission, it is observed that in most of the cases, CUF of 22.5% could not be achieved consistently.

8.3 The Commission had proposed capacity utilization factor of 20% in its draft approach paper floated in January, 2010. Various stakeholders have suggested capacity utilization factor for the full life of the plant ranging from 15% to 22.5%.

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 each site. In view of this and after duly considering the stakeholders’ views during the public hearing as well as the CERC recommendations, the Commission has considered to adopt capacity utilization factor of 20% without derating as reasonable for new projects.

O & M expenses

8.5 The operation and maintenance expenses comprise of 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. The Commission in its earlier orders dated 11.06.2004 and 21.11.2007 had considered O&M expenses as 1% of Capital Cost for the first five years and thereafter increases @ 5% per year.

8.6 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 in its draft approach paper floated in January, 2010. Various stakeholders have suggested operation and maintenance expenses within the range of 1 % to 2 % with an escalation ranging from 5% to 6% per year.

8.7 The CERC in its Regulations dated 16.09.2009 has suggested O&M expenses as 6.5 lacs per MW per annum with escalation @ 5.72% per annum.

Commission's views

8.8 Considering views of the stakeholders and recommendations of CERC, 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

8.9 The Commission had proposed plant life as 25 years in its draft approach paper floated in January; 2010.Various stakeholders have suggested plant life ranging from 20 years to 25 years. The CERC in its Regulations dated 16.09.2009 have taken plant life as 25 years. The Commission in its earlier Orders dated 11.06.2004 and 21.11.2007 had considered plant life of 20 years.

Commission's views

8.10 It may be mentioned that useful plant life of a thermal generating station is considered as 25 years whereas the same for a hydel generating station is 35 years. Considering the fact that wind electric generators are not being subjected to as onerous operating conditions as thermal power plants, there seems to be no justification in adopting a lower plant life vis-à-vis thermal plants. The Commission has, therefore, considered the plant life as 25 years for wind power generation units for tariff determination purposes.

9. FINANCIAL PARAMETERS

Depreciation

9.1 The Commission in its draft approach paper floated in January, 2010 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 11th year onwards. Various stakeholders have also suggested depreciation @ 7% per annum for the first 10 years and balance 20% in next 15 years. The CERC recommendations are also the same.

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 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 its 25 years life span.

Return on equity

9.3 The Commission had proposed return on equity as 19% pre-tax for the first 10 years and 24% pre-tax from 11th years onwards in its draft approach paper floated in January, 2010. During the public hearing, various stakeholders have suggested return on equity ranging from 16 % pre-tax to 19% for first 10 years and 24% for next 15 years as recommended by CERC in its Regulations dated 16.09.2009. The Commission in its earlier orders dated 16.04.2004 and 21.11.2007 had allowed return on equity (RoE) @ 16% pre-tax.

Commission's views

9.4 The Commission has allowed RoE of 15.5% pre-tax for thermal and hydro generating plants for the tariff period 2009-10 to 2011-12. This could undergo change at the time of determination of tariff for subsequent tariff periods. 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 @ 16% pre-tax.

Interest on Debt

9.5 The Commission had proposed interest on debt @ 12.25% p.a. in its draft approach paper floated in January, 2010. Various stakeholders have suggested annual rate of interest on debt ranging from 12.25% to 14.29% or as per CERC recommendations. The CERC in its Regulations dated 16.09.2009 have recommended interest on debt at Long Term Prime Lending Rate of SBI plus 150 basis points. The Commission in its earlier orders dated 11.06.2004 and 21.11.2007 had considered interest @ 11% per annum.

Commission's views

9.6 The Commission considers that the interest rates for both deposit and loans are changing from time to time frequently. The Commission therefore, considers the annual interest rate on debt at 12% for tariff determination purposes. The investor is allowed to retain benefits, if any, by taking a cheaper loan.

Debt - Equity Ratio

9.7 The Commission had proposed debt-equity ratio of 70:30 in its draft approach paper floated in January, 2010. 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. The Commission in its earlier orders dated 11.06.2004 and 21.11.2007 had considered debt-equity ratio of 70:30.

Commission's views

9.8 The Commission has, therefore, considered a debt-equity ratio of 70: 30.

Interest on Working Capital

9.9 The Commission in its earlier orders dated 11.06.2004 and 21.11.2007 did not provide for interest on working capital. The CERC in its Regulations dated 16.09.2009 has recommended interest on working capital at the rate of Short Term Prime Lending Rate of SBI plus 100 points 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 The Commission in its approach paper for "Fixation of norms for determination of tariff for procurement of power from Wind Electric Generators" has considered amount of working capital as mentioned above.

9.11 Various stakeholders have suggested interest on working capital as proposed by CERC.

Commission's views

9.12 The Commission, after considering suggestions of various stakeholders including Licensees, 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 12.75% 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

10.1 In pursuance of clause 5.6 (vi) of Ministry of Power Notification dated 19.01.2005 (as amended from time to time) on Guidelines for determination of tariff by bidding process, the CERC notifies every half yearly the discounting rate to be used for the purpose of bid evaluation. This discounting rate is, however, not used for payment purpose. The Commission has looked into the discounting rate notified by the CERC for three years and finds that the discounting rate was 10.49% for 2008-09, 10.19% for 2009-10 and 9.35% for 2010-11. The Commission has, therefore, used discounting rate of 10.01% being the average of three years for the purpose of calculation of levelised 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	500
2	Capacity Utilisation Factor (%)	20
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 (%)	16% pre-tax
7	Interest on Debt (%) per annum	12
8	Debt-equity ratio	70:30
9	Interest on working capital on (%) (i) O&M expenses for 1 month	12.75

	(ii) Receivables equivalent to 2 months of energy charges based on normative CUF (iii) Maintenance spares @ 15% of O&M expenses	
10	Discounting rate (%)	10.01

11.2 Considering the above parameters, the Commission sets the levelized tariff @ **Rs. 4.35 per unit** for generation from new wind energy project to be commissioned after issue of this order for its project life of 25 years.

12. OTHER TERMS AND CONDITIONS

12.1 The Tariff Rate for the licensee is inclusive of all charges (inclusive of project owner/developer's tax liabilities).

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 As majority of the wind energy generating units are located in West Distribution Licensees area, the licensee had been repeatedly requesting the Commission to allocate the energy generated to the other Distribution Licensees as well and the Commission finds merit in the submissions of the West Distribution Licensees. Hence to obviate the difficulties experienced by the Distribution Licensees having to procure bulk of the energy generated by the wind units and other Distribution Licensees not finding enough units in their areas for procurement, the Commission directs that the energy generated by the wind generating units will be procured centrally by the M.P. Power Trading Co. Ltd. at the rates specified in this order. The energy so procured will be allocated by M.P. Power Trading Co. Ltd. to the three distribution licensees on the basis of actual energy input in previous financial year. Accordingly, the Power Purchase Agreements will be signed between the developer and the M.P.Power Trading Co. Ltd. The M.P. Power Trading 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 Trading Co. Ltd. before commissioning of plants and the Commissioning Certificate may form a part of the agreement. The M.P. Power Trading Company Limited, Jabalpur is directed to revise the model agreement accordingly and file a copy of such revised model agreement within 30 days of this order.

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 wind electric generation projects are presently out of the purview of 'scheduling' and 'merit order dispatch principles. However, they may be subjected to scheduling , as and when a decision is taken by the Commission in this regard.

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 Trading 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 clause 11 of the Government of M.P. Policy for encouraging generation of power in M.P. through Non-conventional Energy Sources notified on 17.10.06. 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. incentive policy for encouraging generation of power in M.P. through Non-conventional Energy Sources notified on 17.10.06.

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 Trading 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 Trading Company Limited, Jabalpur for making payment to the developer. The M.P. Power Trading 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 Trading 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. Trading 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. Trading 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 Trading 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 Trading Co. Limited.

12.19 The M.P. Power Trading Co. Ltd., Jabalpur shall submit by 15th of the following month of quarter to the Commission quarterly (ending June, September, December and March) the details of bills pending for payment at the end of quarter alongwith reasons thereof.

Default Provisions for Third Party Sale or sale to utility

12.20 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 Trading Company Limited to make the payment. This, however, will not absolve M.P. Power Trading Company Limited from payment of delayed payment surcharge as provided in clause 12.16 of this order. In case, M.P. Power Trading Company Limited still does not make the payment, the developer shall have the liberty to approach the Commission for allowing selling of power to the third party.

12.21 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 12.22 below. In such cases, the developers are required to execute the Power Purchase Agreement with the licensee for the remaining period of project life.

12.22 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. 2.95 per unit being tariff rate arrived at on levelised basis after omitting return on equity.

12.23 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

12.24 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

12.25 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.

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

12.27 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.

The sharing of Clean Development Mechanism benefits shall be as per the provisions in CERC (Tariff for Renewable Energy Sources) Regulations, 2009 which is as under. The distribution licensee is required to pass the same amount on to the consumers through the Annual Revenue Requirement. The developer is also required to inform to the distribution licensee by 15th April of each financial year regarding benefit received through Clean Development Mechanism during the previous financial year.

" 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."

12.28 In case the point of injection and drawl fall within the jurisdiction of any of the Distribution Licensees involving the 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 Trading Co. and the developer shall not be required to execute a separate agreement with M.P. Power Transmission Company Limited.

12.29 The existing projects are those, which have their date of commissioning before the date on which this current order comes into effect. The tariff payable to the existing projects for sale to the licensees shall be governed under the same terms and conditions applicable at the time of execution of agreement for those projects.

Ordered accordingly.

Sd/-	**Sd/-**
(C.S.Sharma) **Member (Eco.)**	**(K.K.Garg)** **Member (Engg.)**

Place : Bhopal

Date : 14th May, 2010