

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th floor, Cuffe Parade, Mumbai 400 005.
Tel. No. 022 22163964/65/69 – Fax 022 22163976
E-mail mercindia@mercindia.com
Website: www.Mercindia.com

CASE Nos. 7, 15 and 16 of 2004, read with Case Nos. 17(3), 3, 4 and 5 of 2002.

In the matter of
Clarification of various provisions of Order dated 24.11.2003,
regarding procurement of Wind Energy sought by (i) Mahratta Chamber of Commerce,
Industries & Agriculture, Pune;
(ii) Indian Wind Energy Association.

Dr Pramod Deo, Member
Shri A. Velayutham, Member

CLARIFICATORY ORDER

Dated: 30th September, 2004

The Mahratta Chamber of Commerce, Industries & Agriculture (MCCIA), Pune in their Application dated 6th May, 2004 and supplementary submission dated 14th September, 2004 (Case No. 7 of 2004), and the Indian Wind Energy Association (InWEA) in their Applications dated 26th June, 2004 (Case No. 15 of 2004) and 1st September, 2004 (Case No. 16 of 2004) have essentially sought clarifications on certain aspects of the Commission's Order dated 24th November, 2003 regarding procurement of Wind Energy, citing difficulties faced with the Maharashtra State Electricity Board (MSEB) on this account. The matters on which clarifications are sought and the gist of the written submissions and points made at the hearing held on 22nd September, 2004 are set out below, along with the clarifications and observations of the Commission.

2. At the hearing held on 22nd September, 2004, Dr. Anil Kane, Dr. Ajay Mathur and Shri Chintan Shah spoke on behalf of InWEA, whereas Shri S.P. Ranade and Shri S.P. Shinde represented MCCIA. Shri G.N. Kamath on behalf of Renewable Energy and Developers Association of Maharashtra (REDAM) and Shri A.S. Karanth on behalf of REDAM and BF Utilities (whose separate Applications for clarification have yet to be taken on board) were also permitted to intervene. MSEB were represented by Shri Palamwar and Shri G.P. Sunnapwar, both Technical Directors, and other officials.



Issue No. 1 - Tariff applicable to Group III Projects, and competitive bidding

3. According to InWEA, M/s. Suzlon Energy had approached MSEB to enter into a Power Purchase Agreement as per the tariff stipulated for Group III Projects in the Commission's Order. However, their application was rejected stating that MSEB intended to fix the purchase price through a tender bidding process. InWEA have, therefore, sought that the Commission clarify the conditions for applicability of the bidding process in the context of the tariff for Group III Projects having been clearly laid down in its Order.

4. Referring to para 3.5 of the Order, InWEA have stated that the Commission had determined the tariff for Group III Projects as follows:

"For wind power projects to be commissioned after 1.4.2004 during the balance period of the 10th Plan ending 31st March, 2007, the tariff prescribed by the Commission is as follows:

For Sale to MSEB and other Utilities / Licensees in the State

Rs 3.50 per unit for the first year from the date of commissioning of the project.

The purchase rate shall be increased at 15 paise per unit every year for a period of thirteen years from the date of commissioning of the project."

In spite of this unambiguous determination, in order to justify deviation from the approved tariff by resorting to competitive bidding, MSEB seem to be misinterpreting para 3.6, which states as follows:

"Special Condition

New wind power capacity to be permitted for sale to Utilities shall not be more than 750 MW during the balance period of 4 years of the 10th Plan Period ending 31st March, 2007. This ceiling is based on the target for wind power for the State of Maharashtra indicated by Director General, MEDA, and the urgent need for capacity addition through short gestation power projects. The Commission is of the view that Maharashtra should reach more than 1000 MW of installed capacity during this Plan period so that economies of scale and cost reduction would bring wind power on par with conventional power in terms of cost. To achieve this objective utilities may source their wind power requirements at the determined tariff, based on competitive bidding with the bench mark of guaranteed CUF."

InWEA have interpreted this to mean that the Commission has determined a fixed tariff for upto 750 MW within the remaining period of the current 5 Year Plan, and that competitive bidding could be considered thereafter. MSEB cannot deviate from the tariff fixed by the Commission upto that time, and any such deviation would create regulatory uncertainty and affect the development of wind energy.

5. MSEB officials submitted that they have interpreted the tariff determined by the Commission as being in the nature of a ceiling tariff in view of para 3.6, and referred to the reference in the Order to competitive bidding with the benchmark of guaranteed CUF. They have submitted that the matter had been discussed at meetings with the Energy Minister, MEDA and the developers. Studies that had been conducted also showed that MSEB could get a lower tariff,



and competitive bidding had been mandated in para 3.6. MSEB also raised the matter of the burden of evacuation arrangement. Subsequent to the Order, these arrangements are now to be made by MEDA through the Green Cess Fund as per the new Govt. of Maharashtra (GoM) policy. Thus, only when such evacuation arrangements are made would the question of a EPA arise, but the amounts from the Fund are yet to become available.

6. The Commission notes that its Order dated 24th November, 2003 is very clear and unambiguous about the tariff determined for Group III Projects, as would be seen from para 3.5 cited above and elsewhere in the Order. At para 3.7, the Commission is also committed to review the tariff rate and tariff structure after 31st March, 2007 or on addition of 750 MW of additional wind capacity after 1st April, 2003, whichever is earlier, but would not revisit old projects at that time. Nowhere in the Order is it mentioned that the tariff fixed is in the nature of a ceiling tariff. The Order sets out at length and in detail the computations and considerations taken into account while fixing the tariff, and its rationale. The Commission also notes its mandate under Section 86(1)(e) for promotion of generation from renewable sources, under which it had recently passed an Order laying down a 'Renewable Purchase Obligation' for all distribution licensees and not just MSEB. Thus, MSEB would have to enter into a EPA at the tariff rates fixed under its Order dated 24th November, 2003 with any wind energy project holder who may wish to do so. However, in case any project holder is willing to enter into or offers a EPA at lower rate, MSEB are free to accept it, but an application to enter into a EPA at the determined tariff cannot be refused. As is evident from a plain reading of para 3.6 of the Order (cited earlier), the Commission is confident that its dispensation would result in the ceiling of 750 MW additional capacity being achieved within the current 5 Year Plan period itself, and gives an indication of the road map that it might follow thereafter while revisiting the tariff structure by referring to a process of competitive bidding.

7. The Order also clearly lays down the modalities and the onus for making evacuation arrangements, and the Commission is not concerned with subsequent GoM policy with regard to the Green Cess fund, etc. In fact, the Commission has also given certain clarifications regarding the prospective application and the stipulations set out in the Order with regard to funding and sharing of the evacuation facilities from 18th September, 2003 in its Order dated 12th March, 2004 in Case No. 59 of 2003. The Commission also recalls that, in that case, MSEB had challenged the determination of the tariff, but their plea had been rejected as being outside the ambit of review and a matter to be agitated in appeal before the appropriate forum.

Issue No. 2 - Unit adjustment as per ToD time slots

8. InWEA have submitted that, at para 2.3.2 of its Order, the Commission had directed MSEB to adjust the energy credits for self-use/ third party sale on ToD slot basis. However, the credits would be given in the energy bill for a particular ToD slot only to the extent that energy is being consumed in that particular slot, or else they would lapse. Thus, the units which are produced should be consumed in the same ToD slots. InWEA have argued that pro-rata payment should be made/ adjusted against the ToD slot in which the units are consumed. Their main objection is to the lapsing of the units.

9. MSEB have pointed out that the Commission's Order states that real time ToD meters need to be installed. As far as banking of energy is concerned, credit is to be given on the basis of ToD time slots, and the Commission has also stipulated how offsetting is to be done considering the peak and off-peak rates. If energy is banked during off-peak and consumed



during peak hours, this would not be correct. The Order also provides that if the surplus at the end of the year exceeds 10%, then the balance is to be purchased at the weighted average cost.

10. The Commission notes that, essentially, InWEA are seeking a substantive modification in the Order, which is outside the ambit of clarification or even review. InWEA are well aware of the provisions in this regard as well as those relating to banking, and these stand.

Issue No. 3 - Interpretation of tariff schedule for Group I and II Projects

11. InWEA have stated that the Tariff Schedule at Table 4 (Page 102) of the Order specifies the financial year-wise purchase rates. However, MSEB have released payments on the basis of their interpretation of GoM policy referred to at para 3.5, which states that the purchase rate should be increased at 5% every year from the date of the commissioning. According to InWEA, for Group I and II purchases, this is to be understood as the financial year in which a particular project is commissioned. Shri Kamath of REDAM intervened to point out that MSEB's interpretation was correct with respect to Group III Projects, but not for Groups I and II. MSEB have submitted, however, that the Order clearly states that the tariff rates are linked to the year of operation and not to the financial year.

12. At para 1.4 and elsewhere in its Order, the Commission has noted that, in terms of legal jurisdiction as well as policy application, three distinct types of wind energy projects exist. Thus the Commission categorized the projects taking the benchmark of commissioning date and various financial parameters into three groups for the purpose of tariff determination, considering the premises under which projects were already commissioned and the financial benefits availed by such projects. There were very few projects which fell in Group I, i.e. commissioned before 27th December, 1999. Group II comprised projects commissioned from then till 31st March, 2003 (i.e. the date up to which the Sales Tax benefits were available to wind energy projects from GoM), and Group III Projects comprised those commissioned from 1st April, 2003 onwards.

13. It may be recalled that developers had claimed that the Group II Projects had been set up based on the guidelines of Ministry of Non Conventional Energy Sources (MNES), Govt. of India, as adopted by GoM. The Commission notes that the MNES guidelines clearly link tariff to the financial year. The base year as per the GoM policy is the same as the MNES guidelines, and thus refers to the financial year. Further, at para 1.5.2.1 of its Order, the Commission had stated that:

"The Purchase rate shall be as notified by the GoM vide its Order No. NCP 1097/CR-75/NRG-7 dated 12th March, 1998, i.e. Rs 2.25 per unit in the base year 1994-95. The purchase rate shall be increased at 5% per year (simple rate). The validity of EPA shall be only 8 years from the date of commissioning."

The Commission notes that Table 4 (page 102) of the Order (referred to by InWEA) also gives year-wise details of tariff for Group II Projects to avoid any ambiguity, and further states that for Group III Projects, the starting rate will be applicable from the year of commissioning of the project. Para 3.7 deals with the tariff after 31st March, 2007 or on addition of 750 MW of additional wind capacity after 1st April, 2003, whichever is earlier. The following sentence under Clause 3.7 refers to Group III Projects only:



"The tariff rates for wind projects, which have already been commissioned or will be commissioned before the next review, are linked to the year of operation of the wind project and not to the fiscal year."

Thus, the Commission clarifies that the tariff determined for Group I and II Projects as per its Order dated 24th November, 2003 is linked to the fiscal year, whereas the Tariff for Group III Projects is linked to the year of commissioning of the project.

Issue No. 4 - Reactive Power

14. InWEA have sought clarification with regard to the provisions of para 1.6.6 and 2.4.4 regarding charges for reactive energy consumption from the grid, and referred to their written submission. Shri Kamath of REDAM submitted that for consumption of reactive energy upto 10% of the active energy delivered to the grid by the developer, there was no ambiguity. However, the Order states that the reactive energy consumption in excess of 10% shall be payable "at the prevailing rate". Presumably, the prevailing rate is the rate per kVARH as above, but MSEB's interpretation is different. MSEB's representative also submitted that the matter of what the Commission meant by "the prevailing rate" required clarification.

15. Referring to their Application, MCCIA have submitted that MSEB are wrongly applying the prevailing rate for 'per KWH' per unit instead of the 'prevailing rate' of the reactive power unit, i.e. 'per RkVAH' unit, for the reactive energy in excess of 10% of active energy. However, the tariff rate for RkVAH units approved by the Commission in para 1.6.6 relates to reactive energy consumption. Hence, the term 'prevailing rate' referred to in that para has to be taken to mean the rate of unit of the reactive energy, i.e. RkVAH, and not the prevailing rate of the active power unit, i.e. kWH. As far as the "prevailing rate" is concerned, there is only one, namely 25 paise per unit. MCCIA have also submitted that the cap on 10% reactive power of the active power means a system power factor of 0.99, which is not practical and is difficult to maintain since it depends on grid voltage, frequency, and wind speed, all of which are outside the developers control. Power capacitors can control this but not to that extent. Moreover, the NOC cites power factor of 0.99%. Thus, a power factor of 0.99% be specified for wind power generators, removing the 10% cap on reactive power withdrawal.

16. The Commission notes that the term 'prevailing rate' applicable to reactive energy consumption in excess of 10% of the active energy delivered to the grid also has to be read in the context of the charges determined by the Commission at paras 1.6.6 and 2.4.4, i.e. 25 paise, with revision allowed from time to time subject to a ceiling on the annual percentage increase.

17. In general, however, and although the charges have been laid down in the Order, the Commission believes that steps should be taken to obviate the need for such charges over time. For the healthy functioning of the system, care is to be taken that the reactive power requirement is estimated and compensation provided locally by the developers correspondingly. The voltage profile is already under stress and this needs to be addressed. Thus, reactive power should not be transmitted down the line. A penalty could remain, but ideally the need for such penalty should not arise.



Issue No. 5 - Nature of Wind Project - Additional charges on captive generation

18. MCCIA have sought clarification with regard to whether the wind energy project is treated as an Independent Power Producer (IPP) which is not synchronized with the grid rather than a Captive Power Plant (CPP). If the former, then additional demand charges are not applicable to the self-user or third party purchaser. However, MSEB are treating the wind projects in this respect as CPP and levying consequent charges at Rs 20 per KVA. MCCIA have also pointed out that there is a difference between being synchronized with the grid, in which case such additional demand charges on the standby component are attracted as per MSEB's tariff Order, and merely being connected to the grid.

19. MSEB have submitted that, irrespective of the type of CPP, if the project holder is MSEB's consumer, then MSEB have to stand by and provide power if wind energy is not supplied at any time, upto the contract demand. Thus, MSEB have to keep their generation available, and the Commission had introduced Rs 20 per KVA additional demand charges, tantamount to a standby charge, with this logic.

20. The Commission notes that the MSEB tariff Order dated 10th March, 2004 is clear with regard to the applicability of additional demand charges, and states that:

"HT industrial consumers having captive generation facilities synchronized with the grid will pay additional demand charges of Rs 20 per kVA per month only for the standby contract demand component."

This has been elaborated upon in the approved MSEB Tariff Schedule booklet as follows:

- "1. High Tension industries and other general High Tension consumers having captive generation facility synchronized with the grid, will pay additional demand charges of Rs 20/ KVA/ Month only on the extent of standby demand component and not on the entire Contract Demand.*
- 2. Standby charges will be levied on such consumers on the standby component, only if the consumer's demand exceeds the Contract Demand.*
- 3. This additional demand charge will not be applicable, if there is no standby demand and captive unit is synchronized with the grid only for the export of power."*

Thus, those project holder entities using their wind energy wholly or partly for self-use and who are also consumers of MSEB for the above purpose would be required to pay additional demand charges accordingly.

Issue No. 6 - Adjustment of Units and applicability of MSEB policies

21. In their written submission and presentation made at the time of hearing, MCCIA have referred to the deviation by MSEB from the Commission's guidelines regarding unit to unit adjustment on ToD basis with reference to the policy of GoM in force as on 27th December, 1999 in respect of self-use and sale to third party for Group II Projects, and sought clarification on the matter. Instead of applying this procedure for adjustment of units, MSEB are following their own policy laid down in Circular No. 640 dated 3rd April, 2000 for wheeling and transmission losses also. Thus, the procedure which is applicable for adjustment of units only has been applied by MSEB across the board.



22. Shri Karanth of BF Utilities also submitted that adjustments in respect of Group I Projects are to be made in accordance with the relevant GoM policy. However, MSEB are applying their own policy, which is often not in keeping with the GoM policy. Shri Karanth also sought clarification as to whether the relevant GoM policy would apply for the life time of the project, or for the period of 5+2 years, after March, 2003.

23. The Commission notes that it has referred in its Order primarily to the applicable GoM policies, which may or may not differ from the policies set out by MSEB. Whatever be the case, it is the GoM policies which would take precedence and prevail over the MSEB dispensation, unless stipulated otherwise. As far as the period of applicability is concerned, there is no room for ambiguity, the Commission having curtailed the period to 8 years in respect of Group II Projects taking into account various factors, as compared to the earlier dispensation.

Issue No. 7 - Computation of credits for energy wheeled

24. MCCIA have submitted that there is no uniformity in the methodology to arrive at "Energy wheeled" across various MSEB field offices and differences of interpretation by different field officials, result in continuous change in the calculation of credits every year. Thus, MCCIA have sought a clarification on what is meant by the term 'energy wheeled' so that the matter is resolved.

25. MSEB representatives conceded that there was lack of uniformity in applying the principles and computation with regard to energy generated and carried upto the destination. MSEB are aware of this position and are taking steps to ensure uniformity and instruct field officials accordingly, and their representatives set out MSEB's view.

26. The Commission clarifies that the generation imported into the grid less the export (i.e. the energy supplied by MSEB / Licensee to the generating facility) is to be taken as the units offered for wheeling. The energy wheeled would be this quantum less 2% and 5% for wheeling and transmission loss. The units for credit would be equivalent to the net quantum arrived at in this manner.

Issue No. 8 - Levy of various administrative and other charges

27. MCCIA have submitted that MSEB are levying various additional administrative and other charges arbitrarily, including fixed annual meter testing charges, occasional charges for testing of ToD meters, replacement of ToD meters, ToD meter data downloading, CT and PT replacement charges, installation checking charges and reconnection charges. These charges are not warranted since wheeling charges have already been determined by the Commission in order to cover both administrative and infrastructure expenses. MSEB have responded that wheeling charges relate to infrastructure and are quite distinct and separate in nature from the kinds of other charges referred to by MCCIA.

28. At para 2.4.1 of its Order, the Commission has stated that "*wheeling charges are meant to include charges for use of the utility's physical infrastructure for wheeling and the administrative expenses involved.*"



Thus, the administrative expenses referred to as a part and parcel of the wheeling charges relate to the maintenance and servicing of MSEB's physical infrastructure, and not to other kinds of expenses. While agreeing, therefore, with MSEB that the kind of charges referred to by MCCIA are separate from the charges for wheeling, the Commission observes that such charges must have a nexus with the cost of providing the service and must be uniform and transparent. However, to the extent that the Supply Code Regulations, which are in the process of finalization, address such charges, this matter would be resolved in due course.

Issue No. 9 - Payment Security and Compensation for delay in respect of self use/ third party sale

29. MCCIA have submitted that, in the case of sale to MSEB, the Commission has provided for payment security, and also a time period, with a penalty for delayed payment. However, no such security or compensation for inordinate delay is provided for giving effect to credit notes of the developer either for self use or third party sale. MCCIA have sought guidelines with regard to monthly joint meter reading, time limit for issuing credit notes after such reading and processing credits in monthly energy bills and payment of excess generation at the end of the year.

30. MSEB responded that real time ToD meters should give readings at receiving substations. However, generation data is available at a central location with each developer. MSEB are considering an online system through SEM meters as the present process of manual collection is time consuming. The project holders should transfer the ToD data at their end. MCCIA clarified that the problem arises after the meter reading is taken.

31. The Commission expects MSEB put in place systems so as to ensure that the transaction of credits is finalized preferably within 3 months, and in any event not later than 4 months.

32. The Commission disposes of the Applications of MCCIA and InWEA with the above clarifications and observations. Some of the issues raised, which relate to the conditions for third party sale in respect of Group III Projects, etc., have already been addressed separately and are, therefore, not dealt with in this Clarificatory Order.

Sd/-
(Shri A. Velayutham)
Member

Sd/-
(Dr. Pramod Deo)
Member



(A.M. Khan)
Secretary, MERC.

