

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 10 of 2006

In the matter of
Petition filed by M/s. Renewable Energy Developers Association of Maharashtra for
implementation of Commission's Order dated 24th November 2003 and
Clarificatory Order dated 30th September 2004 in
Case Nos. 17(3), 3, 4 & 5 of 2002 read with
Case Nos. 7, 15 and 16 of 2004

Dr Pramod Deo, Chairman
Shri A. Velayutham, Member
Shri S. B. Kulkarni, Member

Dated: 12th September, 2006

The Commission had passed an Order dated 24th November 2003, determining the power purchase and procurement process including the price for procurement of power by the erstwhile MSEB, other Utilities and Licensees in the State from Wind Power Projects. In relation to execution of energy purchase agreements (“EPA”) and energy wheeling agreements (“EWA”), the Commission had directed Maharashtra State Electricity Board (“MSEB”) to modify the existing Draft EPA/EWA to reflect the tariff provisions and principles of EPA/EWA as approved in the said Order before executing the EPA/EWA with developers.

2. M/s. Renewable Energy Developers Association of Maharashtra (“REDAM”) submitted a Petition on 2nd May 2006, essentially seeking clarifications on implementation of certain aspects of the Commission's Orders dated 24th November, 2003 and 30th September, 2004 regarding procurement of Wind Energy, citing difficulties faced with the Maharashtra State Electricity Distribution Company Limited (successor entity to MSEB for undertaking distribution function), on this account. The matters on which clarifications have been sought and the gist of the written submissions and points made at the admissibility hearing held on 20th June 2006 are set out below, along with the observations and ruling of the Commission.

Tenure of EPA / EWA

3. The Petitioners submitted that in the Commission's Order dated 24th November 2003, it is expressly held at paragraph 1.6.3 that “*For Group II projects, tenure of EPA/EWA shall be 8 years*” and at paragraph 2.2.14 that “*.....the Energy Purchase Agreement Period has been determined as 8 years for Group II projects ...*”. It is the contention of the Petitioners that, in spite of this unambiguous determination of the tenure of EPA/EWA, MSEDCL has stipulated in the



draft EPA and EWA made available to the wind developers, that the tenure of the EPA and EWA would be the first balance year from the date of commissioning of the project ending with that financial year and for a subsequent period of seven financial years. The Petitioners further submitted that, thus, in effect, Group II Wind Farm Projects, as per the terms of the draft EPA and EWA, would actually be allowed to sell power to MSEDCL for a period less than eight years.

4. The Commission observes that, inspite of its Order dated 24th November, 2003 being clear and unambiguous about the tenure for the EPA/EWA for Group II Projects, as further clarified by its Order dated 30th September 2004, the Petitioners have sought clarification with respect to the correct tenure of energy purchase. It is particularly relevant to point out to paragraph 13 of the Clarificatory Order dated 30th September 2004, wherein it has been clarified as under:

“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.”

5. Therefore, for the purposes of applicability of the tenure of eight years for Group II projects, the first year shall be computed as the balance period available during that financial year from the date of commissioning of the project followed by subsequent seven years as provided in Table 4 on Page 102 of the Order dated 24th November 2004. The following illustration has been provided to further clarify the matter:

Sample Wind Project in Group II

Sl.	Date of Commissioning	Year	Applicable period	Tariff Applicable
1	October 10, 2001	1	October 10, 2001 to March 31, 2002	3.02
		2	FY 2002-03	3.13
		3	FY 2003-04	3.24
		4	FY 2004-05	3.35
		5	FY 2006-07	3.46
		6	FY 2007-08	3.57
		7	FY 2008-09	3.68
		8	FY 2009-10	3.79

Group Metering

6. The Petitioners submitted that the terms of the draft EPA and EWA provided to the wind farm developers by MSEDCL, requires the implementation of group metering to record power fed into the grid. They submitted that it has been stipulated by the Commission that such a requirement ought not to be imposed where there are any apprehensions from the wind farm developers regarding its implementation. Therefore, the Petitioners contended that the mandatory nature of this requirement imposed by MSEDCL through the draft agreements is contrary to the dictum of the Commission.



7. Petitioners further submitted that it is MSEDCL's suggestion that they would designate one of the manufacturers to obtain readings from individual wind generators to work out proportionate power generation by respective wind farm developers in the ratio of aggregate power generation recorded in the meters of the individual WEGs to total power generation fed into the grid at the common metering point. It is the contention of the Petitioners that group metering is not feasible for Group II Wind Power Projects since this will tend to give rise to disputes and difficulties in its implementation while creating problems both for MSEDCL, the manufacturers and the developers. They have submitted that in Group II projects, a feeder has wind farms connected from multiple manufacturers and developers, unlike Group III projects where due to the feeder being dedicated to one manufacturer or developer, group metering is possible. To implement group metering in Group II Wind Farm Projects, the metering which is done at the sub-station has to be first allocated among the different manufacturers and thereafter, each manufacturer has to distribute it to individual wind farms. The Petitioners contended that these arrangements will give rise to disputes and difficulties in its implementation.

8. The Petitioners submitted that the current system of having a meter for each and every wind farm owner does not give rise to any such disputes. Moreover, under normal circumstances, each such meter may be read on any day as per convenience. The implementation of group metering would however require the meter on each and every individual WEG and the sub-station meter to be read accurately and simultaneously on the same date and time, and any contrary position would lead to differences in calculation. Therefore, the Petitioners suggested that MSEDCL should make arrangements to read the meter on each and every WEG.

9. Shri. A.D. Palamwar, Director (Operation) on behalf of MSEDCL submitted that the Order dated 24th November 2003 provides for the implementation of online metering, and based on the said Order, MSEDCL intends to implement the said metering system. Explaining further, Shri. Palamwar submitted that the exigency of an online metering system arises from the difficulty in physically visiting each and every wind farm for the purposes of meter reading. Shri. Palamwar submitted that meter with RS 232 interface may be installed on each wind turbine for implementation of online metering. This would obviate the need to do group metering.

10. Shri G N Kamath, while responding to suggestion of Shri Palamwar clarified that developers would install necessary interface meters as soon as the specification/s of the meter/interface is made available by MSEDCL. In view of this, the Commission notes that there is no dispute and therefore, there is no need for any ruling.

Supervisory Control and Data Acquisition System ("SCADA")

11. On the issue of installation of SCADA as required by MSEDCL, the Petitioner contended that the requirement to install SCADA has not been contemplated by the Commission in its Order dated 24th November 2003. They have submitted that SCADA being the exclusive responsibility of a wind farm owner for its operation and/or maintenance requirements from a remote location, cannot be included under the scope of energy purchase and wheeling agreement.

12. MSEDCL, in its response submitted that Para 3.4.8 of the Commission's Order dated 24th November 2003 states that 'real time ToD meters with on-line reading capability are required to be installed at the entry and exit point of each transaction.' MSEDCL further argued



that if SCADA system is installed by the developer, then it is possible to record and transfer the data using online meter reading.

13. As regards SCADA installation, the Commission directs WEG and MSEDCL to follow the provisions in the State Grid Code and other relevant Regulations issued by the Commission.

Reactive Power / Power Factor

14. The Petitioner contended that the Commission has nowhere stipulated in its Order dated 24th November 2003 that the wind developers should maintain a power factor of 0.9, while stipulating cap on reactive power upto 10% of the active power. However, MSEDCL has misinterpreted the said Order and made provisions on that basis in the draft EPA and EWA.

15. MSEDCL, in its response stated that the Commission vide its Order has stipulated rate for supply of reactive energy upto 10% of active energy. However, the Commission has not provided any penalty if WEG draws reactive power more than 10% of active energy. MSEDCL clarified that provision has been incorporated in EPA/EWA to ensure that WEG does not draw reactive power amounting to more than 10% of active energy. The Commission pointed out that the 0.9 power factor insisted by MSEDCL may not reflect the view expressed by the Commission in the earlier Orders in respect of reactive power consumption. Shri Palamwar of MSEDCL submitted that the said provision could be deleted.

16. The Commission notes that its earlier Order dated 24th November 2003 and the Clarificatory Order dated 30th September 2004 provided rate for purchase of reactive energy by the WEG which includes the Commission's view on penalty. The Commission is of the opinion that more reactive power drawal would not be in the interest of the grid security. However, it would be difficult to predict likelihood of such an event in the absence of any specific data on voltage profile. Therefore, the Commission hereby directs MSEDCL to remove the said clause. At the same time, the MSEDCL should keep strict vigil on the operation of WEGs and should bring to the notice of the Commission any instance when WEG has drawn more reactive power at the cost of voltage profile.

Payment of Interest on delayed payments

17. The Petitioner submitted that, despite sending reminders and making several requests to MSEDCL, the wind farm developers have not been paid interest on delayed payments which they are entitled to claim in light of the Commission's Order dated 24th November 2003 wherein it has been clearly stipulated at paragraph 1.6.7 that "*in case of delay in payment beyond the due date, the Developer shall be entitled for an interest on delayed payment @2% above the State Bank of India, short-term lending rates.*" Also paragraph 2.4.6 of the said Order stipulates that "*...the utility will pay penal interest on any outstanding amount at the rate of 2% above the short term lending rate of the State Bank of India.*"

18. MSEDCL contended that MERC vide its interim Order dated 3rd June 2002 directed MSEB to release 70% payment to wind farm developers having NOCs for sale to MSEB only. MSEDCL further contended that NOCs were issued to wind developers for sale to MSEB in absence of identification of third party. MSEB released payment to such developers as per the interim orders dated 18th October 2002 and 30th June 2003. Therefore, payment of interest to all wind developers from the date of commissioning cannot be considered.



19. The Commission in this regard notes that its Para II (b) of the Interim Order clearly stated that 70% payment was to be released in case of wind developers having NOCs for sale to MSEB in absence of any third party verification. It is incorrect on part of MSEDCL to state that 70% payment was authorized for sale to MSEB only.

20. Further, paragraphs 1.6.7 and 2.4.6 of Order dated 24th November, 2003 are clear and unambiguous and do not distinguish payment of interest on the basis of group or on the basis of nature of NOC.

21. Further, it should be noted that as and when the energy is generated and fed into grid, it is sold and appropriate revenue is realized by the MSEB/MSEDCL. Therefore, it is inappropriate on part of MSEDCL to hold back payment for purchase of power as mandated by the Commission. Therefore, the Commission hereby directs the MSEDCL to make payment of interest within one month of the date of this Order to all wind developers, having any type of valid NOC, for the period since the date of commissioning of the plant.

Benefits available through the “Clean Development Mechanism”

22. The Petitioner submitted that the Commission in its Order dated 24th November 2003 stated that the mechanism for sharing of benefits between the consumers and the project developers would be developed as and when the projects become eligible for CDM benefit. The Petitioner submitted that some of its members have initiated the activities to seek CDM benefit and therefore feels that, it is an appropriate time to seek the determination of suitable formulae for sharing of benefits accrued on account of receipt of CDM benefits. They suggested that owing to multiple technical and procedural modalities that impedes the devising of an appropriate system for the sharing of carbon credits, the facility may be undertaken either for a seven-year eligibility period or a ten-year eligibility period. It has also been suggested that the developers be allowed to claim the CDM benefit for the first five years (in the event the option exercised for CDM benefit by the developer is seven years) or seven years (in the event the option exercised for CDM benefit by the developer is ten years) of the tenure of the sanctioned sale of carbon credits and bequeath the claim for the balance two or three years, as the case may be, to MSEDCL for onward sharing with the consumers.

23. The Commission observed that it has provided for similar provision of sharing of CDM benefit in Orders for other renewable energy technologies such as biomass. Further, several other technologies such as ‘waste to energy’ could be eligible for CDM benefit. It is necessary to devise a scheme which would be uniform for all such technologies that could benefit from CDM. Therefore, development of an appropriate system for the sharing of CDM benefit cannot be addressed through the present petition as it would be specific to wind sector. Therefore, the Commission directs Maharashtra Energy Development Agency (MEDA) to develop a suitable mechanism, and submit the same to the Commission for approval. The Commission would conduct a separate regulatory process to approve the said mechanism.

24. The Petitioner submitted that they were aggrieved by letter Ref. No. Co-ord/Cell/Wind/EPA/EWA/9064 dated 15th April 2006 issued by MSEDCL, which stipulates that MSEDCL will have no obligation of any nature in the event, wind developers do not execute energy purchase agreement and energy wheeling agreement on or before the deadline of 15th May 2006. However, at the hearing held on 20th June 2006, the Commission noted the



submission of the Petitioner that subsequent to issuance of the said letter, MSEDCL has verbally assured the Petitioners that the restrictive terms of the said letter would not be given effect to by MSEDCL.

Commission's Ruling

25. The Commission's ruling on key issues has been summarised below, for ease of reference:

26. For the purposes of applicability of the tenure of eight years, the first year shall be computed as the balance period available during that financial year from the date of commissioning of the project followed by subsequent seven years.

27. As regards SCADA installation, WEG and MSEDCL shall follow the provisions of the State Grid Code and other relevant Regulations issued by the Commission.

28. The Commission directs MSEDCL to remove the clause under which WEG is prohibited to draw reactive power more than 10% of active energy supplied. At the same time, the MSEDCL should keep strict vigil on the operation of WEGs and should bring to the notice of the Commission any instance when WEG has drawn more reactive power at the cost of voltage profile.

29. The Commission directs MSEDCL to pay interest on delayed payments within one month of the date of this Order, to all wind developers having any type of valid NOC, for the period since the date of commissioning of the plant.

30. The Commission directs Maharashtra Energy Development Agency (MEDA) to develop a suitable mechanism for sharing of CDM benefit that would be uniform for all such technologies that could benefit from CDM, and submit the same to the Commission for approval.

The Commission disposes of the Petition with the above clarifications and observations.

Sd/-
(S.B. Kulkarni)
Member

Sd/-
(A. Velayutham)
Member

Sd/-
(Dr Pramod Deo)
Chairman



(Malini Shankar)
Secretary, MERC