

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.org.in
Website: www.mercindia.org.in

Case No. 63 of 2006

In the matter of
Petition filed by Maharashtra Non-Conventional Energy Producers Association
seeking review of Order dated August 16, 2006 passed in Case No. 6 of 2006 and
Order dated August 8, 2005 passed in Case No. 37 of 2003.

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

ORDER

Dated: September 28, 2007

Maharashtra Non-Conventional Energy Producers Association (MNCEPA) filed a Petition on November 13, 2006 and additional written submissions on March 14, 2007, seeking review of the Commission's Order dated August 16, 2006 passed in Case No. 6 of 2006, in the matter of long-term development of renewable energy sources and associated regulatory (RPS) framework.

2. MNCEPA, vide its Petition, represented the interests of biomass-based renewable/non-conventional energy producers in the State of Maharashtra ("biomass-based RE developers"), and contended that the Order dated August 16, 2006 has not provided sufficient cushion to the biomass-based RE developers. MNCEPA submitted that while the Commission recognizes the extent to which the development of non-conventional energy is dependent on natural sources, the enforcement of RPS framework has been provided for under paragraph 2.10.8 of the Order dated August 16, 2006, as follows:

"...if it is established that Eligible Person had adequately contracted for procurement of RE power with generator and if generator fails to add RE capacity or fails to supply RE power, then, Eligible Person shall be entitled to recover such costs of enforcement from such RE generator, and the contractual arrangement between Eligible Person and generator may be designed appropriately."

The enforcement of RPS framework would be at the rate of Rs. 5.00/- per unit of shortfall in FY 2007-08, Rs. 6.00/- per unit of shortfall in FY 2008-09, and Rs. 7.00/- per unit of shortfall in FY 2009-10. MNCEPA submitted that the risks associated with biomass availability had not been adequately considered in the said impugned Order and contended that the aforesaid paragraph 2.10.8 does not recognize the fact that plant operation to maximum PLF and supply of pre-estimated RE are mainly linked with fuel availability and varying agro-climatic conditions.

3. MNCEPA submitted that the steep rise in the price of raw materials, especially steel, which has caused a rise in the Project Cost for biomass-based RE projects over and above the cap of Rs. 4 Crore per MW requires a review of the Commission's Order dated August 8, 2005 passed in Case No. 37 of 2003, in the matter of tariff and related dispensation for procurement of power from biomass based generation projects, and proposed that the cap on Project Cost should be increased to Rs. 5 Crore per MW. MNCEPA further submitted that the rise in the interest rates of bank loans is required to be considered for review of the said Order dated August 8, 2005 (Case No. 37 of 2003).

4. MNCEPA submitted that the philosophy in the said Order dated August 16, 2006 (Case No. 6 of 2006) is not in line with the National Tariff Policy (NTP) and the National Electricity Policy (NEP) and contended that the said policies seek to ensure capacity addition from non-conventional sources by promoting differential tariffs in the first phase of implementation, followed by the Competitive Bidding Guidelines (CBG) process which is to be introduced amongst suppliers offering energy from the same type of non-conventional sources. NTP clarifies the need to lay down guidelines for pricing non-firm power from non-conventional sources, which are not being procured through CBG. MNCEPA stated that the stage of development in the production of biomass-based renewable energy in the State of Maharashtra is nascent and is mainly subject to uncertainties in the nature of fuel supplies and shortages of water. MNCEPA submitted that biomass-based RE sources should not be treated at par with sources having developed technologies, well-established fuel supply lines and other infrastructure, and hence, the RPS framework and obligations there under should not be imposed on biomass-based RE developers before initial steps towards project implementation have been taken.

5. MNCEPA submitted that the Commission's Order dated August 16, 2006 (Case No. 6 of 2006) shifts the obligation of compliance of the RPS framework from the distribution licensee, in this case MSEDCL, to RE producers, ensuring a "zero risk" factor in favor of the power procurer, i.e., MSEDCL. Further, it is inappropriate for MSEDCL to impose penalty for shortfall of RE (which is infirm power) as per penalty livable for shortfall of firm contracted energy, in various Power Purchase Agreements (PPAs). MNCEPA submitted that the measures adopted by MSEDCL are contrary to the spirit of the Order dated August 16, 2006. MNCEPA pointed out that MSEDCL has revised the concept of deemed generation benefits in such PPAs to the detriment of the interests of biomass-based RE developers. These PPAs have been entered into by

MSEDCL with biomass-based renewable energy developers after the passage of the Order dated August 8, 2005 passed in Case No. 37 of 2003, vide which order the tariff and related dispensation for procurement of power from biomass-based generation projects were determined by the Commission.

6. MNCEPA submitted that in various PPAs, MSEDCL has maintained a mandatory charge of RPS e.g. @ Rs. 6 per unit on every 5% decrease in generation or PLF, on RE generators and opined that MSEDCL is not entitled to incorporate such terms in the PPAs as per the Order dated August 16, 2006 (Case 6 of 2006). This imposition of penalty solely on biomass-based RE developers is disadvantageous and discriminatory. MNCEPA further submitted that reduction in the PLF by 5% substantially minimizes the profits earned in generating the balance 95%, as an effect of such impositions and stated that such impositions would further render it difficult for biomass-based RE developers to obtain/ acquire loans or project finances from banks.

7. MNCEPA further submitted that as per the Order dated August 8, 2005 passed in Case No. 37 of 2003, RE project holder is required to bear costs towards project switchyard and interconnection facilities at the site up to the point of energy metering and costs towards transmission lines and associated facilities beyond the point of energy metering should be borne by the State Transmission Utility. Further, the RE project holders should bear costs towards evacuation facilities up to 50% as an interest-free advance to the State Transmission Utility. However, pursuant to the Order dated August 16, 2006, MSEDCL have required RE project developers to bear 100% of costs for associated facilities beyond the point of energy metering from the project switchyard for SCADA / PLCC and metering, as a non-refundable amount. MNCEPA submitted that as per the Order dated August 8, 2005 passed in Case No. 37 of 2003, non-conventional energy producers are entitled to the benefits of deemed generation, when generation failure is on account of transmission/system constraints or on account of *force majeure* events, however, MSEDCL has nullified the said benefits in various PPAs. MNCEPA prayed that the Order dated August 8, 2005 should be modified to accommodate the interests of the biomass-based RE developers.

8. The Commission held a hearing in the matter on March 22, 2007. Shri. A.D. Palamwar, Director (Operations), MSEDCL, admitted that variations in deemed generation benefits have occasioned due to misunderstanding on the part of MSEDCL, which would be rectified in all PPAs, however, Shri. Palamwar also clarified that revision in the deemed generation benefits has been done as per the guidelines issued by the Central Electricity Authority (CEA), which specify that transmission availability should always be maintained up to 98%. The Commission observed that MSEDCL should strictly adhere to the principles enshrined under its Order dated August 8, 2005 (Case No. 37 of 2003).

9. Shri. Sanjay Chawla from Spark Green Energy, a biomass-based RE developer, submitted that the Commission should consider imposing penalty on generation capacity instead on shortfall. Shri. Vijay Patil, President, MNCEPA, submitted that since biomass power plants are mainly dependant on natural resources, such impositions of penalty would amount to heavy losses to the developers.

10. Shri. Chawla submitted that as per the Order dated August 16, 2006 (Case No. 6 of 2006), expenses towards evacuation facility and metering equipment needs to be shared by the procurer and the renewable energy developer. However, MSEDCL are not contributing towards SCADA and PLCC, which are new expenditures towards evacuation facility, and amounting to Rs. 1 Crore. Shri. Palamwar submitted that MSEDCL is subject to the recommendations/specifications issued by the STU, which recommends the payment of SCADA and PLCC in agreements relating to cogeneration.

11. The Commission observed that SCADA and PLCC are part of evacuation facility, which is the concern of the STU. Accordingly, the Commission further observed that the STU should be impleaded as a necessary party in the said proceedings for them to apprise the Commission on the incidence of payment of SCADA and PLCC. The Commission directed MNCEPA to take appropriate steps in impleading STU in the said proceedings as a necessary party.

12. Subsequently, MNCEPA, forwarded a letter dated April 12, 2007, to Director (Operations), MSEDCL, referring to the proceedings in the hearing held on March 22, 2007, and submitted that the PPA's (between MSEDCL and biomass RE developer) article 14.1 sub-clause (e) apportioning 100% of the expenses on the Project holder for SCADA/PLCC, being a part of the Evacuation's associated facility beyond the point of energy metering, is contrary to the provisions contained in the Commission's Order dated August 8, 2005. MNCEPA requested MSEDCL to approach MSETCL to resolve the matter.

13. MNCEPA, vide its letter dated May 23, 2007, submitted that they have sent a letter to Technical Director, MSETCL, on May 3, 2007 as per the directions of the Commission during the hearing held on March 22, 2007. Further, MSEDCL sent a letter on June 1, 2007 to the Chief Engineer, MSETCL requesting MSETCL to submit comments before the Commission on the issues of payment of expenses towards SCADA and PLCC.

14. The Commission scheduled a further hearing in the matter on June 27, 2007 and notified of the same to MNCEPA, MSEDCL, MSETCL and four consumer representatives authorized on a standing basis under the EA 2003. At the hearing held in the matter on June 27, 2007, Shri. V.T. Phirke, Executive Engineer, MSETCL, submitted that the issue of sharing of expenses towards SCADA and PLCC (as part and parcel of evacuation costs) would be taken up at appropriate level for decision within MSETCL and MSETCL should be allowed some time for the same. The Commission observed

with dismay that even after notice of the said proceedings being served upon MSETCL, well in advance, MSETCL failed to apprise the Commission on the issue of payment of SCADA and PLCC and directed MSETCL to file written submissions within two weeks from June 27, 2007 *inter alia* explaining their stand on the issue of sharing of costs of SCADA and PLCC between MSETCL and project developer.

15. Subsequently, MSETCL submitted its comments on metering, PLCC and SCADA to the Commission on August 6, 2007, as under:

- a) The procedure for evacuation of power from the biomass/bagasse based co-generation project is being implemented from the period of erstwhile MSEB as per the Commission's guidelines for evacuation arrangement, specified in the Order dated August 16, 2002 and Summary Order dated July 15, 2002, specified as under:

“The developer shall bear the cost of project switchyard and interconnection facilities at the project site upto the point of energy metering. The MSEB will bear the cost of transmission lines and associated facilities beyond the point of energy metering for the evacuation of power. The developer shall provide an interest free advance to the MSEB equivalent to an amount of 50% of the cost of works to be carried out by the MSEB for power evacuation purposes.”

- b) Accordingly, MSEB passed a resolution MBR no. 540 dated August 16, 2002 in the matter of Energy Purchase Agreements (EPA) with co-generation projects based on bagasse and biomass. However, the transmission planning department of MSEB pointed out ambiguity in the resolution regarding the exact scope of work required to be executed by MSEB. The T.D.(CP), vide office note dated October 7, 2002, issued guidelines for evacuation arrangement from bagasse based co-generation projects, as under:

- 1) The metering equipment, metering CT, PT and SCADA are to be provided by developer
- 2) Metering arrangement to be provided immediately after generation (on HV side of generator transformer)
- 3) PLCC equipment at the cost of developer shall be provided as per requirement of developer.

- c) The same conditions are incorporated in EPA for evacuation of power from bagasse/biomass based co-generation projects, except evacuation of wind generation for which developer procure all the material required for infrastructure and construct it at their cost. 50% amount is refunded to the developer in five equal installments in five years after completion of one year of commissioning of

substations and equipments. Balance 50% amount is refunded through ‘Green cess’ by MEDA.

16. Having therefore heard the parties and after considering the material placed on record, the Commission is of the view that the matter regarding evacuation expenses (sharing of costs for associated facilities beyond the point of energy metering from the project switchyard for SCADA/PLCC and metering) requires to be tested against the requirements laid down under Regulation 17 of MERC (State Grid Code) Regulations, 2006, which provides as under:

“17 Communication Facilities

17.1 Reliable and efficient speech and data communication systems shall be provided to facilitate necessary communication and data exchange, and supervision/control of the State Grid by the State Load Despatch Centre, under normal and abnormal conditions.

17.2 All Users and Transmission Licensees shall provide the required facilities at their respective ends as specified in the Connection Agreement: Provided that the equipments/devices for communication and data exchange shall be provided considering the guidelines of State Load Despatch Centre, the interface requirements and other such guidelines/specifications as applicable.”

The Commission understands that as SCADA/PLCC forms part of evacuation arrangement beyond the point of energy metering, the question of RE developer bearing the cost of the same does not arise. Further, it is evident from MSETCL’s submission that it has devised specific dispensation only in case of RE projects requiring such RE projects to bear costs for SCADA/PLCC and the same is not applicable for communication facilities forming part of evacuation arrangement in case of conventional generators. MSETCL continues to bear cost of SCADA/PLCC system in case of conventional generators and is entitled to recover the same through its Annual Revenue Requirement.

The Commission opines that ideally, provisions dealing with Communication facilities under Connection Agreement as envisaged under Regulation 14 of MERC (State Grid Code) Regulations, 2006 should address this aspect. While MSETCL is yet to submit Model Connection Agreement for approval, there is no reason why the provisions related to Communication Facilities under Model Connection Agreement should be distinct in case of conventional generation projects and RE generation projects. Accordingly, the Commission rules that capital costs related to SCADA /PLCC should be borne by MSETCL/concerned transmission licensee and it shall be entitled to recover the same through its ARR over the period. The Commission further directs MSETCL to suitably incorporate the clauses under draft Model Connection Agreement.

17. As regards the issue of biomass fuel availability and compliance of RPS targets under RPS Order (Case 6 of 2006) is concerned, the Commission opines that it is the responsibility of RE generators to ensure availability of fuel for power generation purposes. The Commission had always held that the RE Generators should undertake development of renewable energy projects upon undertaking necessary studies. The Commission had also directed MEDA, being nodal agency for renewable energy projects within State, to grant permission for setting up of RE projects upon ascertaining surplus availability in the region so that the concerns regarding availability of biomass fuels are adequately addressed before hand. Further, in case of biomass power projects as well as non-fossil fuel based co-generation projects, the Commission has cautiously permitted use of fossil fuels to limited extent upon taking into consideration possibility of variations in availability of these fuel sources due to vagaries of nature. Under the circumstances, the Commission is of the view that it should be possible for RE generators to ensure electricity generation from renewable energy sources provided the development of RE projects is undertaken in scientific manner. The relevant extract of the Commission's Orders in respect of non-fossil fuel based co-generation projects and biomass power projects is as under:

“Ref: Clause 4.2 and Clause 4.3 of Commission’s Order dated August 16, 2002 in case of non-fossil fuels based Cogeneration Projects

Clause 4.3 : Co-generation facility design and Capacity

The Co-generation projects should be sized in co-relation to locally available non-fossil fuel. The developer should establish availability of fuel for the project period.

Claus 4.2: Fuel

“The Co-generation projects should be designed to use and should use non-fossil fuels such as bagasse, biomass, bio-gas, agriculture waste such as rice husk, groundnut shells etc. The use of conventional fossil fuels in these co-generation projects may be necessary during the period of off-season to augment the non-fossil fuel, and therefore, the same is being allowed.”

Ref: Clause 2.21 of Commission’s Order (Case 37 of 2003) dated August 8, 2005 in case of Biomass Based Power Projects

Clause 2.21 : Capacity Limit and harnessing of biomass resource

The Commission notes, for such Projects to be successful, assured and reliable supply of biomass of desired quality has to be ensured. Further, Project capacity and site location should be so chosen that availability and collection of fuel poses least hurdles, thereby minimizing fuel related risks.

Accordingly, the Project holders should establish the availability of fuel for the Project period, and establish a fuel management chain with appropriate commercial arrangements to ensure continuous availability of biomass for the Project.

.....

While co-ordinating the development of Projects, MEDA as the State Nodal Agency shall ensure that Project planning is done in a manner such assured and reliable quantity of biomass fuel source of desired quality is available for the Project on long term basis. For this purpose, MEDA shall vet the assessment of the adequacy of the catchment area and fuel procurement plan proposed by each Project, and also ensure that there is no overlap. The concerned Licensee should seek the opinion and confirmation of MEDA in this respect in each case before entering into EPA. MEDA should furnish its comments within a reasonable time, and will be entitled to fees (which should not be exorbitant or prohibitive, but have a relation with the service rendered) for the purpose from the Project holders".

18. Thus, the Commission believes that the concerns of RE developers as regards biomass availability have been adequately addressed through various Orders, if RE development is undertaken in scientific manner. Accordingly, distribution licensees and 'eligible persons' should adequately tie-up for RE procurement with RE generators through proper contracting arrangements in order to comply with their RPS targets. This aspect has already been deliberated through Discussion Paper (Ref. cl. 4.11.5, 4.11.6 and 4.11.7 of the Discussion Paper) on RPS and upon adopting due consultation process through public hearing, the Commission has ruled under RPS Order (Case 6 of 2006) as under:

"2.10.8 At the same time, if it is established that Eligible Person had adequately contracted for procurement of RE power with generator and if generator fails to add RE capacity or fails to supply RE power, then, Eligible Person shall be entitled to recover such costs of enforcement from such RE generator, and the contractual arrangement between Eligible Person and generator may be designed appropriately."

19. It may further be noted that, the Commission, vide its Order dated August 16, 2006, has stipulated the **minimum** percentage targets (3%, 4%, 5% and 6% for FY 2006-07, FY 2007-08, FY 2008-09 and FY 2009-10 respectively) for the eligible persons to procure electricity generated from eligible renewable energy sources, and the distribution licensees can certainly procure RE generation more than the minimum specified target. This would enable the distribution licensees to cover up any shortfall in generation from RE sources in case of variability in RE resource availability. Similar protection may also be provided to RE generator by setting the guaranteed capacity utilization factor (CUF) at levels lower than the CUF considered by the Commission at the time of tariff determination, in the EPA between distribution licensee and RE generator, to cover the eventuality of shortfall in RE generation. Thus, the distribution licensee and RE generator both can safeguard their interest and add to the total RE generation in the State.

20. In view of above, the Commission rules that the prayer of the Petition for review of this clause is not maintainable as no sufficient grounds for review has been made as neither any error apparent on the face of the record has been pointed out by the Petitioner nor any new or important aspect has been brought to the notice of the Commission necessitating review at this stage.

21. It is also the contention of MNCEPA that MSEDCL while executing PPAs have incorporated certain terms, which are contrary to the Order dated August 8, 2005. These issues cannot be taken up under a Review Petition and would either be subject to the dispute resolution procedures provided in the PPAs executed between MSEDCL and the RE developers or can be a subject matter for adjudication and arbitration under Section 86(1)(f) of EA 2003, as the case may be. Issues concerning adjudication of disputes under Section 86(1)(f) cannot be addressed under a Review Petition.

22. The Commission observes that Shri. A.D. Palamwar, Director (Operations), MSEDCL, had conceded during the hearing on March 22, 2007 that variation in clauses related to deemed generation benefits have occurred due to misunderstanding on the part of MSEDCL, which would be rectified in all PPAs. MSEDCL shall strictly adhere to the principles enshrined under the said Order dated August 8, 2005.

23. MNCEPA has also sought a review of the Order dated August 8, 2005 on the ground that (i) the project cost has considerably increased with the increase in the cost of steel and other materials as against the amount of Rs. 4 Crore per MW as considered by the Commission in the said Order and therefore the project cost should be increased to Rs. 5 Crore per MW; and (ii) the tariff fixed by the Commission under the aforesaid Order should be reviewed as the Reserve Bank of India has indicated substantial hike in interest rates which consequently will effect about 10% - 15% increase in the per MW project cost. These matters cannot be considered for granting review. Change in market conditions cannot be a ground for seeking review. An appeal cannot be disguised as a review. The Commission therefore rejects the prayer to review the Order dated August 8, 2005 since the grounds sought for by the Petitioners are not within the purview of review under Regulation 85(a) of the Maharashtra Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 and consequently the Review Petition *qua* Order dated August 8, 2005 is not maintainable since no grounds for review are made out.

With the above observations, the present Petition is disposed of.

Sd/-
(S.B. Kulkarni)
Member

Sd/-
(A. Velayutham)
Member

Sd/-
(Dr. Pramod Deo)
Chairman

(P.B.Patil)
Secretary, MERC