

Appellate Tribunal for Electricity
(Appellate Jurisdiction)

Appeal Nos.197, 198, 200, 201 & 208 of 2012
AND
6 of 2013

Pronounced in Chennai Circuit Bench

Dated: 24th May, 2013

Present: Hon'ble Mr. Justice M. Karpaga Vinayagam,
Chairperson
Hon'ble Mr. Rakesh Nath, Technical Member

Appeal No. 197 of 2012

In the matter of:

Beta Wind Farm (P) Limited,
4th Floor, Sigapi Achi Building,
18/3, Rukmani Lakshmipathi Road,
Egmore, Chennai-600 008

... **Appellant**

Versus

- 1. Tamil Nadu Electricity Regulatory Commission,**
Rep. by its Secretary,
No. 19A, Rukmani Lakshmipathy Road,
Egmore, Chennai-600 008, Tamil Nadu
- 2. Tamil Nadu Generation and Distribution Corporation Limited,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002
- 3. Tamil Nadu Transmission Corporation Ltd.,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002

...Respondent(s)

Counsel for the Appellant(s) : Mr. Rahul Balaji
Mr. Raghuvaran Gopalan

Counsel for the Respondent(s) : Mr. R. Selvakumar for R-1
Mr. S. Vallinayagam for R-2
Mr. M. Yogendher

Appeal No. 198 of 2012

In the matter of:

Indian Wind Power Association

Door No. E, 6th Floor, Shakti Towers-1,
766, Anna Salai, Chennai-600 002,
Tamil Nadu

.....Appellant

Versus

1. **Tamil Nadu Electricity Regulatory Commission,**
Rep. by its Secretary,
No. 19A, Rukmani Lakshmipathy Road,
Egmore, Chennai-600 008, Tamil Nadu
2. **Tamil Nadu Generation and Distribution
Corporation Limited,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002
3. **Tamil Nadu Transmission Corporation Ltd.,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002

...Respondent(s)

Counsel for the Appellant(s) : Mr. Rahul Balaji
Mr. Raghuvaran Gopalan

Counsel for the Respondent(s) : Mr. R. Selvakumar for R-1
Mr. S. Vallinayagam for R-2
Mr. M. Yogendher

Appeal No. 200 of 2012

In the matter of:

Southern India Mills Association

Rep. by its Secretary General,
No. 41, Race Course Road,
Coimbatore-641 018

..... Appellant

Versus

1. **Tamil Nadu Electricity Regulatory Commission,**
TIDCO Office Building,
No. 19A, Rukmani Lakshmipathy Salai,
Marshalls Road, Egmore, Chennai-600 008,
Tamil Nadu
2. **Tamil Nadu Generation and Distribution Corporation Limited,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002
3. **Tamil Nadu Transmission Corporation Ltd.,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002

...Respondent(s)

Counsel for the Appellant(s) : Mr. N.L. Rajah, Sr. Adv.
Mr. Arun Anbumani

Counsel for the Respondent(s) : Mr. R. Selvakumar for R-1
Mr. S. Vallinayagam for R-2
Mr. M. Yogendher

Appeal No. 201 of 2012

In the matter of:

1. **Indian Wind Turbine Manufacturer's Association (IWTMA)**
5th Floor, Meridian House,
121/3, TTK Road, Manickam
Avenue, Alwarpet,
Chennai

2. **Indian Wind Energy Association (INWEA)**
PHD House, 3rd Floor,
Opp-Asian Games Village,
August Kranti Marg,
New Delhi-110 016

3. **Velatal Spinning Mills Private Limited.,**
115, Tiruchengodu Main Road,
Pallipalayam,
Erode-638 006

..... **Appellant (s)**

Versus

1. **Tamil Nadu Electricity Regulatory Commission,**
TIDCO Office Building,
No. 19A, Rukmani Lakshmipathy Salai,
Marshalls Road, Egmore, Chennai-600 008,
Tamil Nadu

2. **Tamil Nadu Generation and Distribution
Corporation Limited,**
Rep. by its Chairman & Managing Director,
NPKRR Maaligai,
No. 144, Anna Salai,
Chennai- 600 002

...**Respondent(s)**

Counsel for the Appellant(s) : Mr. Sanjay Sen, Sr.Adv.
Mr. Hemant Singh

Counsel for the Respondent(s) : Mr. R. Selvakumar for R-1
Mr. S. Vallinayagam for R-2
Mr. M. Yogendher

Appeal No. 208 of 2012

In the matter of:

Tamil Nadu Spinning Mills Association

2, Karur Road, Near Beschi College,
Modern Nagar, Dindigul-624001
Tamil Nadu

... Appellant

Versus

1. **Tamil Nadu Electricity Regulatory Commission,**
TIDCO Office Building,
No. 19A, Rukmani Lakshmipathy Salai,
Marshalls Road, Egmore, Chennai-600 008,
Tamil Nadu
2. **Tamil Nadu Generation and Distribution
Corporation Limited,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002
3. **Tamil Nadu Transmission Corporation Ltd.,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002

...Respondent(s)

Counsel for the Appellant(s) : Mr. R.S. Pandiyaraj
Mr. S.P. Parthasarathy

Counsel for the Respondent(s) : Mr. R. Selvakumar for R-1
Mr. S. Vallinayagam for R-2
Mr. M. Yogendher

Appeal No. 06 of 2013

In the matter of:

M/s. India Spinning Mill Owners Association
50/A1, Trichy Road, Chthamanipudur,
Coimbatore 641 103,
Tamil Nadu

..... Appellant

Versus

1. **Tamil Nadu Electricity Regulatory Commission,**
TIDCO Office Building,
No. 19A, Rukmani Lakshmipathy Salai,
Marshalls Road, Egmore, Chennai-600 008,
Tamil Nadu
2. **Tamil Nadu Generation and Distribution Corporation Limited,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002
3. **Tamil Nadu Transmission Corporation Ltd.,**
Rep. by its Chairman & Managing Director,
No. 144, Anna Salai,
Chennai- 600 002

...Respondent(s)

Counsel for the Appellant(s) : Mr. V. Mahendran
Mr. R. Sreerangan

Counsel for the Respondent(s) : Mr. R. Selvakumar for R-1
Mr. S. Vallinayagam for R-2
Mr. M. Yogendher

J U D G M E N T

**PER HON'BLE MR. JUSTICE M. KARPAGA VINAYAGAM,
CHAIRPERSON**

1. The comprehensive impugned tariff order for Wind Energy dated 31.7.2012 passed by the Tamil Nadu State Commission is challenged in these Appeals by different parties.
2. Beta Wind Farm Private Limited has filed the Appeal No.197 of 2012, Indian Wind Power Association has filed Appeal No.198 of 2012. The various Associations of Spinning Mills have filed the Appeal Nos 200, 208 of 2012 and 6 of 2013. Indian Wind Turbine Manufacturer's Association has filed the Appeal No.201 of 2012.
3. Beta Wind Farm Private Limited, the Appellant in Appeal No.197 of 2012 is a Wind Energy Generator.
4. Indian Wind Power Associations, the Appellant in Appeal No.198 of 2012 is an Association of Wind Energy Generators. Indian Wind Turbine Manufacturer's Association, the Appellant in Appeal No.201 of 2012 is an Association of manufacturers of Wind Turbines.

5. The various Associations of Spinning Mills who are the Appellants in Appeal No.200, 208 of 2012 and 6 of 2013 have set-up captive/group captive wind energy projects for meeting their captive power requirements.
6. Tamil Nadu Electricity Regulatory Commission (State Commission) is the First Respondent, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) and Tamil Nadu Transmission Limited (TANTRANSCO) are the 2nd and 3rd Respondents respectively in all these Appeals.
7. The short facts are as under:
 - (a) The State of Tamil Nadu is blessed with the friendly wind conditions thereby enabling it to become a front runner in the field of wind power generation as a non conventional energy source providing clean and environment friendly power to the State.
 - (b) As a result of the encouraging policy directives of the State of Tamil Nadu and the incentives granted to wind power purchasers as well as the favourable geographical factors in the State of Tamil Nadu, a large wind energy generation projects had been set-up in the State. The wind energy produced by the wind power generators in the State is primarily captively consumed by captive consumers. These projects have been

selling it to TANGEDCO, the Distribution Licensee, the 2nd Respondent also.

(c) Earlier, the State Commission passed the 1st tariff order dated 15.5.2006 in Order No.3 of 2006 for Non Conventional Energy Sources based generating plants and non conventional energy source based co-generation plants.

(d) The State Commission on 8.2.2008, framed Power procurement from New and Renewable source of energy Regulations, 2008.

(e) Thereafter, the State Commission issued the 2nd comprehensive tariff order for Wind Energy generating plants in tariff order No.1 of 2009 dated 20.3.2009. The Control Period under the said tariff order was valid up to 31.3.2011. This had been extended from time to time till 31.7.2012 by the State Commission.

(f) Before passing the earlier tariff orders dated 15.5.2006 and 20.3.2009, on both the occasions in the suo-moto proceedings, the State Commission circulated a consultative paper to the stake holders and invited their comments on the various issues relating to determination of tariff and other issues. On the basis of the comments collected from the stake holders on the issues referred to in the consultative papers, the

State Commission ultimately passed the tariff orders dated 15.5.2006 and 20.3.2009.

(g) However, in the present proceedings for the subsequent period, the State Commission did not circulate the consultative paper. It merely sought the comments of various stake holders on various heads of discussions and components tariff as contained in the earlier tariff order dated 20.3.2009 through the Public Notice.

(h) Even though the consultative paper had not been circulated, the stake holders submitted their comments on the various heads referred to in the Public Notice as sought by the State Commission.

(i) Thereafter, public hearing was held. After considering the materials available on record, the State Commission passed the impugned order dated 31.7.2012 in the tariff order No.6 of 2012 regarding comprehensive tariff order on wind energy which is applicable from 1.8.2012. In this order, the State Commission determined the average tariff of Rs.3.51 per kWh which shall be applicable to wind power generators for the control period ending on 31.7.2014.

(j) Aggrieved by this impugned tariff order dated 31.7.2012, the Appellants have filed these Appeals.

Since the issues as well as the impugned order are common, this common judgment is pronounced.

8. The Appellants have challenged the impugned order on some of the broad aspects which are as follows:

(a) The legality of the impugned order is to be questioned on account of failure of the State Commission to circulate the consultative paper and on the applicability of the order on the wind energy generators which had been established prior to the date of the order and which had existing PPA/Wheeling Agreements with the Distribution Licensees.

(b) The various normative parameters adopted for determination of tariff for supply of wind energy from Wind Energy Generators to the Distribution Licensees.

(c) The Appellants are aggrieved by the abnormal increase in transmission charges, wheeling charges, losses, banking charges and system operation charges on the energy from the wind energy generators wheeled on Intra State Transmission System and Distribution System for the captive use or 3rd party sale.

(d) The wind Energy Generators supplying energy for captive use or to 3rd party and availing Renewable Energy Certificate have been discriminated by the disallowance of banking of energy with TANGEDCO

which is available to the Wind Energy Generators not availing the Renewable Energy Certificates.

9. On these broad aspects, various issues have been raised by the Appellants in these Appeals. Those issues with details are quoted below.

10. The **First Issue** is the **Circulation of Consultative paper**. On this issue, the Appellants have made the following submissions:

“The consultative papers were earlier circulated before passing the tariff orders dated 15.5.2006 and 20.3.2009. However, this time in the present proceedings, the State Commission failed to circulate the consultative paper to the stake holders. In fact, in the impugned order, the State Commission has made drastic changes and introduced new charges like collection of transmission charges, collection of transmission loss compensation charges etc., enhancing the scheduling and system operation charges and withdrawing the deemed demand concept. Due to this introduction, there is substantial increase in charges on transmission and wheeling of wind energy for captive use and 3rd party sale. But, public notice mentioned the sub heads of tariff and allied issues for comments did not mention the

drastic changes which the State Commission proposed to introduce. Due to the non circulation of consultative paper, there is a grave failure to safeguard the consumer's interests. This is against the principles of natural justice, violating the dictum of "audi alteram partem". Due to this, the charges for transmission and wheeling of energy from Wind Energy Generators for captive use or 3rd party sale have actually been enhanced from Rs.79.06 Paise per kWh to Rs.178.32 per kWh. Thus, the impugned order which is passed without giving opportunity to the Appellants by not circulating the consultative paper is bad in law."

11. The Second issue is Applicability of order.

12. The submissions on this issue by the Appellants are as follows:

"The first tariff order was passed by the State Commission on 15.5.2006. This was made applicable prospectively. This order provided with PPA signed for the Non-conventional Energy Projects which were commissioned prior to the tariff order namely 15.5.2006 were allowed to be continued to remain in force. However, the Non-conventional Energy

Projects and the distribution licensees were given option to mutually re-negotiate the existing agreements/contracts in line with the order dated 15.5.2006 even before expiry of the contracts. Accordingly, the consumers willing to switch over to the new scheme cancelled their agreements and entered into new agreements. The second Comprehensive Tariff Order for wind energy was passed on 20.3.2009 which came into effect from 19.9.2008. In this order also, the existing contracts between wind energy generators and the distribution licensees were allowed to be continued to be valid and at the same time the parties were given liberty to re-negotiate the existing contracts in line with the order dated 20.3.2009 as also permitted in the earlier tariff order dated 15.5.2006. But, this liberty has not been given by the State Commission in the impugned order dated 31.7.2012. This order on the other hand, has been made applicable to all wind energy generators which had signed agreements with the distribution licensee prior to the date of this order dated 31.7.2012 for wheeling of energy on the intra-state transmission system and distribution system for

captive use or third party sale. This order, which is contrary to the earlier tariff orders in giving retrospective application of tariff, is in violation of the Renewable Energy Tariff Regulations of the State Commission. Therefore, the impugned order is wrong.”

13. The Third issue is Capital Cost.

14. The submissions made by the Appellant on this issue is as follows:

“The State Commission has failed to include various items like infrastructure development charges, O&M charges etc. for calculating the capital cost. The capital cost determined in the present case is Rs. 5.75 crores/MW. On the other hand the capital cost should be Rs.6.5 Crores to Rs.7 Crores/MW. Therefore, the determination by the State Commission as Rs.5.75 crores/MW is not valid in law.”

15. The Fourth Issue is Return on Equity.

16. The submissions of the Appellants are as follows:

“The State Commission has not taken into consideration the present rate of Minimum Alternate Tax while determining the Pre-tax Return on Equity. In fact, the present rate of Minimum Alternate Tax has been increased from 10% to 20%. Therefore, the State Commission should have allowed the Return on Equity based on the present rate of Minimum Alternate Tax at 20%. But the State Commission has incorrectly allowed 19.85% pre-tax Return on Equity like in the previous order dated 20.3.2009 which was based on 10% Minimum Alternate Tax which was prevailing at the time of previous order. Thus, the State Commission has not taken into consideration the present rate of Minimum Alternate Tax. This is not valid.”

17. The Fifth Issue is Annual Maintenance Contract Charges & Insurance Charges.

18. The submissions of the Appellants on this issue are as under:

“The Annual Maintenance Contract charge with Insurance works out to Rs.2.8% of the capital cost. But the State Commission in the impugned order fixed the Annual Maintenance Contract charges with

insurance at 1.1% of the total capital cost. This is wrong as this is not as per the practice in vogue.”

19. The Sixth Issue is Plant Load Factor/Capacity Utilisation Factor. The submission is as follows:

“The Plant Load Factor/Capacity Utilisation Factor has to be determined on the basis of three components namely (i) wind availability, (ii) machine availability and (iii) grid availability. Out of these three components, ‘the wind availability’ being a natural force is unpredictable. The second component namely ‘machine availability’ falls with the responsibility of the generating company. The Grid availability is solely controlled by the utility. During the period between April, 2012 and Jan, 2013, there has been a loss of generation of about 444.58 MUs at the wind energy generating plants on account of backing down of the generation due to transmission constraints and grid problems. This is purely due to non availability of evacuation of intra-structure and the grid problems which is beyond the control of the wind energy generators. The State Commission failed to consider this aspect while deciding the normative plant load factor.”

20. The 7th Issue is Time value of money. The submission of the Appellants on this issue is as follows:

“The State Commission, while determining the tariff, did not take into account the principles of time value of money. The tariff of wind energy generators has been determined on the basis of average as against the levelised tariff. The Tribunal in its Judgment dated 18.12.2007 in Appeal nos. 205 and 235 of 2006 had in fact, directed the State Commission to re-determine the tariff by taking into consideration the time value of money. This judgment was challenged by the State Electricity Board before the Hon’ble Supreme Court. The same was admitted and stay was granted by the Hon’ble Supreme Court by its order dated 3.3.2008. When the Tribunal passed the judgment dated 18.12.2007, there were no Tariff Regulations. But, the State Commission on 8.2.2008, i.e. subsequent to the judgment of this Tribunal, framed the Regulations for power procurement from

renewable sources and energy. In the said Regulations, a clause was provided to the effect that the State Commission while determining the tariff may accept cost plus single part average tariff. However, after the stay order passed by the Hon'ble Supreme Court, the State Commission amended the said Tariff Regulation to "appropriate tariff methodology" instead of "cost plus single part average tariff methodology". Since Regulation had been amended, the State Commission ought to have considered the time value of money for determining the tariff of Wind Power Generators, as the stay granted by the Hon'ble Supreme Court cannot be an impediment for the same. But, this has not been done by the State Commission.

21. The 8th Issue is Recovery of Transmission charges on the basis of PLF/Unit generation basis. The submission on this issue are as follows:

"In this case, the State Commission has decided the recovery of transmission charges on the basis of

installed capacity of wind energy generators. This is wrong. The transmission charges should not be recovered on the basis of installed capacity. It should be based on the units generated by the Wind Energy Generators as wind energy generators operate only in wind season. Thus, the State Commission went wrong in deciding the recovery of the transmission charges on the basis of the installed capacity.”

22. The 9th Issue is Abnormal rise of banking charges: The submission of the Appellant on this issue is as follows:

“By the impugned order, the banking charges are directed to be collected at 94 paise per unit banked and re-drawn for consumption. Earlier, banking charges were collected @ 5% of the units banked. In terms of money, the banking charges have been increased from 28.46 paise per unit to 94 paise per unit which is highly abnormal and exorbitant. TANGEDCO is solely benefitted out of banking facility. It does not incur losses in any manner. No material

facts were made available to the stakeholders as to how the TANGENDCO is incurring losses due to banking. The State Commission has blindly accepted the views of TANGEDCO without analysing the facts and figures before coming to such conclusion. That apart, the Benchmark for fixing the banking charges is also not correct. The State Commission has taken the average power purchase cost of Rs. 4.45 per kWh found at the National level and subtracted the same with the preferential tariff for wind energy fixed at Rs. 3.51 per kWh to arrive at figure of 94 paise per kWh. Thus, the average power purchase cost was not at all taken into account. The State Commission has taken only the all India average on the basis of power purchases made through bilateral trading based on the Central Commission's figures. This is not relevant to the present situation prevailing in Tamil Nadu. When the TANGEDCO insisted for increasing the banking charges from 5% to

15% in the earlier tariff proceedings in the year 2009, the State Commission had not accepted the views of TANGEDCO. In that tariff order, the banking charges were retained at 5% but in the present proceedings, the banking charges have been increased from 28.46 Paise to 94 Paise by unilaterally accepting the view of the TANGEDCO. This conclusion is wrong.”

23. The 10th Issue is Transmission and Wheeling Charges and Line Losses. The submissions of the Appellant is as follows:

“ By the impugned order, the State Commission has permitted to charge towards wheeling charges separately at 40 paise per Kwh. The transmission charge has so far been a part of the wheeling charges collected on the wheeled energy. Thus, the said component was included in the wheeling charges of 5% which were prevailing prior of the impugned order. But, in this impugned order, the State Commission worked out the total charges at 96.63 paise as against the old rate of 28.45 paise per kWh which is an

increase of 340%. Similarly, the wheeling charges have also been increased exorbitantly. Transmission loss has also been levied by the impugned order though the same had not been charged earlier. This shows that the State Commission did not apply its mind while deciding the transmission and wheeling charges as well as the line losses.”

24. The 11th Issue is charging of Scheduling charges. The submission of the Appellants on this issue is as under:

“The State Commission in the impugned order has allowed the collection of scheduling and system operation charges. This is wrong. The Scheduling of wind energy generation is not possible due to infirm and seasonal nature of wind energy. Therefore, the question of charging of scheduling and system operation charges would not arise.”

25. The 12th Issue is Deemed Demand Charges. The submission of the Appellants is as under:

“The State Commission in the earlier tariff orders passed in 2006 and 2009 introduced deemed demand concept as well as the formula as to how the deemed demand charges should be worked out. However, the State Commission in the impugned order has taken a “U” turn on the whole concept and has wrongly withdrawn the entire deemed demand charges without any reason whatsoever. Every unit of energy from wind energy generators when injected into the Grid and consumed by the consumers would result in meeting of certain quantity of demand. In such circumstances, the formula as already prescribed and followed for several years for the demand charges to be recovered from the consumers utilising the captive wind energy should not have been discontinued in the impugned order.”

26. The 13th issue is Encashment of lapsed units by REC Captive users. The submission of the Appellants on this issue is as follows:

“The State Commission in the impugned order has not provided banking facility to wind energy generators under the Renewable Energy Certificate (REC) Scheme. This is not in consonance with Central Commission’s Regulations. The intent behind the evolution of the REC scheme is only to ensure that wind energy generators do not enjoy dual benefits of availing REC as well as other concessions such as banking etc., However, Regulation 5 of the Central Commission’s Regulations for Renewable Energy Certificate provides that wind energy generators under REC scheme could also avail banking subject to the condition that the banking is done on the basis of slot wise adjustment of energy generated. The slot wise adjustment is followed in the State of Tamil Nadu. This issue has already been decided by this Tribunal in judgment dated 23.11.2012 in Appeal no. 91 of 2012, but contrary to this, the State Commission has not provided the banking facility to captive wind

energy generators availing the Renewable Energy Certificate.”

27. The TANGEDCO and TANTRANSCO and the State Commission, the Respondents filed detailed reply and the written submissions and made oral submissions in justification of the impugned order while refuting the above submissions made by the Appellants.

28. We have carefully considered the contentions urged by the Appellants as well as Respondents and have given our anxious consideration. In the light of the rival contentions of both the parties, the following questions would arise for our reconsideration:

i) Whether the State Commission’s action in deciding the wind energy tariff in a suo-moto proceeding without circulating a consultative paper to the stakeholders as was done earlier before issuing previous tariff orders in the years 2006 and 2009 is legal?

- ii) Whether the State Commission has erred in applying the revised charges determined in the impugned order for wheeling of energy from wind energy generators for captive use or third party sale to the wind energy generators which entered into wheeling agreements with the distribution licensees before the date of the impugned order?
- iii) Whether the State Commission has erred in determining the capital cost of wind energy projects?
- iv) Whether the State Commission has gone wrong in allowing the pre-tax Return on Equity without considering the increase in rate of Minimum Alternate Tax?
- v) Whether the State Commission has failed to provide adequate Annual Maintenance Charge and Insurance charge in the tariff?
- vi) Whether the State Commission was correct in deciding the Capacity Utilisation Factor without considering the loss of generation due to interruption

caused by the Grid or non-availability of adequate power evacuation infrastructure?

vii) Whether the State Commission has gone wrong in deciding the tariff without considering the time value of money?

viii) Whether the State Commission was right in allowing the recovery of transmission charges on the basis of the installed capacity instead of on the basis of Plant Load Factor/units generated by wind energy generators?

ix) Whether the State Commission has gone wrong in deciding the banking charges?

x) Whether the State Commission was right in revising the transmission and wheeling charges and levying in terms of money and allowing recovery of line losses in respect of energy wheeled from wind energy generators for captive use and for sale to third party?

xi) Whether the State Commission was correct in charging the scheduling and system operation charges from wind energy generators when the power of wind energy generators is not scheduled?

xii) Whether the State Commission was correct in not allowing the deemed demand charges which were allowed in the previous tariff orders?

xiii) Whether the State Commission has gone wrong in not providing the banking facility to captive wind energy generators who were availing the Renewable Energy Certificate?

29. Let us now discuss each of the issues which are referred to above.

30. Regarding the 1st issue the learned counsel for the Appellant has submitted that the impugned order is bad in law and violative of the principles of natural justice as well as against the dictum of 'audi alteram partem' since the State Commission failed to give opportunity by circulating a consultative paper to stake holders before deciding the tariff as was done in the previous two tariff orders i.e. 2006 and 2009.

31. On this issue, the learned Counsel for the State Commission as well as the other Respondents have made the following reply:

“The Regulations do not provide for issuance of any consultative paper. The consultative paper was issued before passing the first tariff order in 2006 and the second tariff order in 2009 since the 2006 order was the first order for Non-conventional Energy Sources and 2009 order was the first composite tariff order for wind energy generators. In the present case, the State Commission was only revising the earlier tariff order which was passed in 2009 after issuance of the consultative paper and that therefore, there was no necessity for circulating a fresh consultative paper. The present wind tariff order of 2012 was issued following the same parameters as contained in the earlier tariff orders. The State Commission has followed the procedure contemplated under Section 64 of the Electricity Act as well as the procedure laid down in Regulation 4 (1) (b) of the Power Procurement from New and Renewable Energy Source of Energy, Regulation, 2008. These procedures do not mandate the circulation of consultative paper. In the present case, the Public Notice was issued giving the parameters of the earlier

tariff order dated 20.3.2009 which were proposed to be revised. In response to the said public notice, the comments were received from the stake holders. Opportunity of hearing was also given to them. Only after going through the said comments and considering the objections of the stake holders, the impugned order was passed. Moreover, no prejudice was caused to the stake holders/Appellants due to failure to circulate the consultative papers in the present proceedings.”

- 32.** As indicated above, the procedure for determination of tariff and for passing the tariff order in respect of Wind Energy has been given in the Regulations 2008 as well as in Section 64 of the Electricity Act, 2003.
- 33.** Let us now refer to those Regulations and provisions of the Act,2003.
- 34.** The relevant Regulation is Regulation 4 of the Tariff Regulations for Renewable Energy Sources of 2008. This is reproduced below:

“4. Determination of tariff

(1) The Commission shall follow the process mentioned below for the determination of tariff for the power from new and renewable sources based generators, namely:—

(a) initiating the process of fixing the tariff either suo motu or on an application filed by the distribution licensee or by the generator.

(b) inviting public response on the suo motu proceedings or on the application filed by the distribution licensee or by the generator.”

35. These Regulations provide for inviting public response while initiating the process either suo motu proceedings or on application filed by the Distribution Licensee or by the Generator. In the present case, the State Commission had initiated the suo motu proceedings even without an application filed by the Distribution Licensee or the wind energy generators.

36. Section 64 of the Electricity Act, 2003 stipulates the following procedure for tariff order:

“64. Procedure for tariff order.—*(1) An application for determination of tariff under section 62 shall be made by a generating company or licensee in such manner and accompanied by such fee, as may be determined by regulations.*

(2) Every applicant shall publish the application, in such abridged form and manner, as may be specified by the Appropriate Commission.

(3) The Appropriate Commission shall, within one hundred and twenty days from receipt of an application under sub-section (1) and after considering all suggestions and objections received from the public,—

(a) issue a tariff order accepting the application with such modifications or such conditions as may be specified in that order;

(b) reject the application for reasons to be recorded in writing if such application is not in accordance with the provisions of this Act and the rules and regulations made thereunder or the provisions of any other law for the time being in force:

Provided that an applicant shall be given a reasonable opportunity of being heard before rejecting his application”.

- 37.** According to Section 64 of the Electricity Act, 2003, the application for determination of tariff filed either by the generating company or licensee, has to be published in such abridged form and manner as specified by the appropriate Commission inviting suggestions and objections from public. Thereafter, the State Commission after considering the suggestions and objections received from the public has to decide the tariff.
- 38.** The perusal of these provisions of the Regulations and the Act regarding the procedure for tariff would show that they do not clearly specify the form in which the proposal or the issues have to be placed before the public for obtaining suggestions and objections in case of suo motu proceeding initiated by the State Commission.

39. Let us now refer to the procedure followed by the State Commission in the present case. The State Commission while taking suo-moto proceedings issued public notice on 27.4.2011. The public notice is reproduced below:

“Public Notice

The Commission proposes to revise the Comprehensive Tariff Order on wind energy Order No. 1 of 2009 dated 20-03-2009. The Commission invites the views / suggestions of stakeholders on the following parameters:-

1. *Capital Cost per MW*
2. *Capacity Utilization Factor*
3. *De-rating of wind machine*
4. *Debt-Equity ratio*
5. *Term of Loan*
6. *Interest on Loan*
7. *Return on Equity*
8. *Life of Plant and Machinery*
9. *Depreciation*
10. *O&M expenses per annum*
11. *Insurance expenditure per annum*
12. *Components of working capital*
13. *Interest on working capital*
14. *Infrastructure Development Charges*
15. *Auxiliary Consumption*
16. *Banking mechanism*

17. *Transmission and Wheeling charges*
18. *Cross subsidy surcharge*
19. *CDM benefits*
20. *Reactive power charges*
21. *Grid availability charges*
22. *Adjustment of generated energy for captive use*
23. *Scheduling and system operation charges*
24. *Application and agreement fees*
25. *Billing and payment*
26. *Payment security and security deposit*
27. *Energy Purchase and Wheeling Agreement*
28. *Scheduling of wind energy / UI mechanism*
29. *Special treatments, if any, for wind farms beyond say 100 MW, 200 MW, etc.*
30. *Any other issues*

The stakeholders are requested to furnish their views / suggestions by 31-05-2011.

*S/d -
(R.V.RAJAH)
Secretary”*

- 40.** The perusal of the above public notice would make it clear that the State Commission proposed to revise only the earlier comprehensive tariff order of the Wind Energy dated 20.3.2009 and invited the views/suggestions of the stakeholders on the various parameters mentioned in the said public notice which were required for determination of the

tariff. Thus, the basis for the whole proceedings by issuance of the public notice in the present case, was earlier comprehensive tariff order passed on 20.3.2009. This public notice was issued and published on 27.4.2011.

41. While these proceedings were pending, the State Commission issued yet another public notice on 8.9.2011 on three specific issues which related to the wind energy. These are reproduced below:

“a) Whether competitive bidding to be introduced and tariff determination by the Commission to be dispensed with for wind energy in view of the satisfactory growth of wind energy in this State and in accordance with the tariff policy of Government of India?

b) Whether banking period to be retained, reduced or dispensed with in view of the satisfactory growth in the installed capacity of wind generators?

c) CERC initially introduced scheduling of wind energy in accordance with Indian Electricity Grid Code, 2010 with effect from 1-1-2012. Accordingly the Commission proposes to introduce scheduling of wind energy and installation of ABT meters”

42. After publication of these two public notices, the comments were received from the stake holders. After receipt of those comments, the State Commission conducted the State Advisory Committee Meeting on 29.3.2012. Thereafter, the public hearing was held on 8.6.2012 in which the Appellant

and other stake holders participated and they were heard. In fact, the comments and suggestions were offered by various stake holders including the Appellant to the State Commission with reference to the last tariff order dated 20.3.2009 also.

- 43.** As regards the tariff for procurement of power by Distribution Licensees from Wind Energy Generators, we find that the stake holders in fact have given their comments on various normative parameters required for determination of tariff. Most of the normative parameters which were decided in the last tariff order in 2009 have been retained by the State Commission in the impugned order. Thus, the State Commission has decided the norms and tariff after considering the suggestions and objections of the State Government. As such, in the instant proceedings for determination of tariff of wind energy generators for procurement of power by the Distribution Licensee, the base of the proceedings was the last tariff order. After entertaining the suggestions and objections of the stake holders either for retaining or for modifying norms decided in the earlier tariff order, opportunity of hearing was also given on these issues. Therefore, it cannot be said the failure to circulate the consultative papers had caused any prejudice to the Appellants and other stake holders.

44. However, one of the aspects as pointed out by the Appellants requires consideration. According to the Appellant, in regard to the issues relating to the Transmission wheeling of energy for captive use and 3rd party sale, the State Commission has introduced a new method for determination of charges or new mode for recovery of charges or revised the charges substantially for which no opportunity was given.
45. The learned Counsel for the Appellants have pointed out the specified issues for which no opportunity was given by issuing prior notice or consultative paper on the new method for determination of charges as well as on the new mode for recovery of charges, which did not find place in 2009 Tariff Order. Those issues are as follows:
- (a) Collection of Transmission charge by money;
 - (b) Collection of Wheeling Charge by money;
 - (c) Collection of banking charge by money;
 - (d) Collection of transmission Loss Compensation charge by units as a new charge;
 - (e) Withdrawal of deemed demand concept;
 - (f) Enhancing of Scheduling and System Operation charges almost two times;

- 46.** According to the Appellants, the new transmission charges, transmission loss, compensation charges etc are matters newly found only in impugned tariff order which have not existed in the earlier tariff orders. It is further submitted that the reasons for withdrawing the deemed demand charges are newly invented in the impugned tariff order which are totally against the system already approved in the earlier Tariff Orders.
- 47.** On this basis, it is now strenuously submitted by the Appellants, that unless an opportunity to analyse the mind reading of the State Commission on these issues was made available to stake holders through suitable consultative papers, it might not be possible for the Appellants to offer their comments on their own assumption.
- 48.** Thus the gist of the issue raised by the Appellants is that the State Commission has newly introduced few charges and totally changed the historical practice of collecting certain charges from kind to cash in the present case and admittedly this has been done without giving a proper opportunity to the Appellants and other stake holders through the circulation of the consultative paper as was done in the previous tariff orders.
- 49.** It is thus pointed out by the Appellants that the reply made by the Respondents before this Tribunal that the impugned

order was passed in line with the earlier tariff orders and hence separate consultative paper was not necessary, is totally incorrect and untenable in view of the fact that various new changes have been introduced only in the present impugned order. As a matter of fact, as pointed out by the Appellants, the State Commission itself in the impugned order, has observed as follows:

“Since changes are made in various provisions of the previous order, the Commission considers it appropriate to give effect to all the provisions contained in this tariff order only prospectively. This order, therefore, shall come into effect from 01.08.2012.”

50. Thus, the State Commission has admitted in the impugned order that there are changes made in the provisions of the previous Tariff orders and on that reason, the determination of tariff was made applicable prospectively and therefore, the contention of the Respondents that the impugned order is in line with the earlier tariff orders are not factually correct.

51. We also find that the State Commission has introduced new method for determination of charges, segregated the transmission and wheeling charges as against a single charge in kind as fixed earlier and has actually changed the mode of recovery of charges in terms of money instead of in kind. Moreover, a new method has been introduced for determination of banking charges taking into consideration

market rate of traded power. The deemed demand concept for wind power also has been dispensed with without giving an opportunity of hearing to the Appellants. Hence, we find force in the submissions made by the Appellant with regard to the failure to circulate the consultative paper on these issues.

- 52.** As mentioned above Regulation 4(1) (b) of the Power Procurement from New and Renewable Sources of Energy Regulations 2008 the Commission is obligated to invite the public response on the Suo motu proceedings while the process of determination of tariff is being carried out on each of the issues. However in the instant case, no such public response was called for in respect of each and every new issues referred to above.
- 53.** According to the Appellants, they were totally unaware of the new proposals on the issues (a) to (f) as referred to above until they found the same in the impugned order.
- 54.** In view of the above, we feel that the State Commission ought to have circulated the consultative papers on these issues where it was proposing to introduce new method of determination and mode of recovery and revising the charges substantially, which is not in line with earlier Tariff orders.

- 55.** It is true that the existing Regulations do not provide for specific procedure in suo-moto proceedings. In case of an Application filed by a generator or a licensee before the State Commission, the same is put in public domain and on the basis of those proposals contained in the said application the objections and suggestions are offered by the Stake holders and the public. However, in the case of suo-moto proceedings, such procedure is not available.
- 56.** Therefore, the State Commission in the suo-moto proceedings is duty bound to clearly indicate the issues and the proposals through the consultative papers to the stake holders for obtaining their comments. The circulation of consultative paper in the suo-moto proceedings would in fact, facilitate the Stake holders to provide objections and suggestions, after understanding the issues and the proposals.
- 57.** Even though, this sort of procedure like circulation of consultative papers on its proposal have not been provided in the Regulations, the very fact that the State Commission on earlier occasion had circulated the consultative papers giving the details of all the proposals to the stake holders before passing the tariff order for the year 2006 as well as the tariff order 2009, would clearly indicate that the State Commission earlier had felt that before passing tariff orders it was necessary to provide the opportunity to the stake

holders by indicating the relevant issues and proposals through the consultative papers which would enable the stake holders to submit their objections and suggestions so that the State Commission also would have considered those comments on the said issues and the proposal before finalising the Tariff Order. While such a procedure was followed earlier, then why this time the said procedure has not been followed? There is no valid explanation.

- 58.** Therefore, we cannot accept the reply of the Respondent that the consultative paper was not circulated since the Regulations do not provide for such circulation of consultative paper.
- 59.** As correctly pointed out by the Appellants, even in the absence of the specific Regulations about the circulation of the consultative paper, the State Commission had decided to circulate the consultative paper before passing the earlier tariff orders of 2006 and 2009. When such being the case, we feel that the State Commission ought to have followed the same procedure by circulating the consultative paper on all its proposals on the various issues that too in a suo-moto proceedings for seeking specific suggestions and objections from the stake holders especially when it was contemplating new method for determination of charges or changes in mode of recovery of charges.

- 60.** The contention of the State Commission that the public notice was only for revising the earlier tariff order of 2009 and therefore, the fresh consultative papers would become unnecessary, cannot at all be accepted since the new issues have been decided by the State Commission without giving an opportunity to the stake holders/Appellants to make their suggestions and comments on those issues for introducing a new method for determination of charges and by different mode for recovery of charges by increasing the charges as against the interest of the stake holders.
- 61.** Therefore, we are of the view that the Appellants have not been given opportunity on these issues where new method for determination of charges and mode of recovery of charges have been introduced and which have not been dealt with by the State Commission in the earlier tariff orders of 2006 and 2009.
- 62.** All these issues relating to charges imposed for wheeling of wind energy for captive use or third party sale or for banking for the generators availing REC have been specifically challenged by the Appellants in these Appeals. However, when the State Commission has already given its findings and given its own reasoning for the same issues referred to above, we do not want to set aside entire order and give a direction for de-novo hearing of the entire case, as we feel that it would be unnecessary.

63. But, we will consider to remand the matter to the State Commission on some of the specific issues raised by the Appellants where we feel that the Appellants have to be heard by the State Commission before passing the fresh order on those specified issues by discussing the same in this judgment in the subsequent paragraphs.
64. At this point of time, we deem it appropriate to give a general directions to all the Commissions by invoking Section 121 of the Act,2003 for future guidance regarding procedure to be followed in suo-moto proceedings for seeking specific suggestions and objections from the stake holders and the Public. Accordingly, we direct that all the Commissions, in order to facilitate effective participation of the stake-holders and to obtain specific and relevant comments from them on the issues under consideration of the Commission, shall ensure the circulation of the Consultative Paper clearly indicating the proposal by putting in the public domain for seeking suggestions and objections of the public. The Commissions are advised to frame suitable Regulations regarding the procedure to be followed in the suo-moto proceedings as indicated above.
65. The **Second Issue** is regarding **Applicability of Tariff Order**.
66. According to the Appellants, the impugned tariff order should be applicable prospectively and it cannot be made applicable to the wind energy developers which are already

having existing wheeling agreements with the Distribution Licensees. The reply on this issue made by the learned Counsel for the TANGEDCO, is as follows:

“The various open access charges levied under the tariff order cannot be different for wind energy generators commissioned on different dates. There cannot be an arbitrary or differential treatment of wind generators as well as other users of the transmission and distribution system in respect of open access charges. According to the approved Power Purchase Agreement and Wheeling Agreement executed by the wind energy generators with the Distribution Licensees, both the parties have agreed that they shall be bound by the provisions contained in the Electricity Act, 2003, Regulations, Notifications, orders and subsequent amendments, if any, made from time to time. Thus, the various charges provided under the Tariff Order are also applicable to existing wind energy generators.”

67. The reply on this issue made by the State Commission is as follows:

“Regulations 6 and 8 are operative on two different horizons. Regulation 6 deals with agreement between the licensee and the wind energy generators on power purchase. Regulation 8 deals with issues related to

captive use and third party sale of wind energy where charges like open access charges, banking charges, etc., would come into picture. The open access charges have to be revised in accordance with the Open Access Regulations and Tariff Regulations from time to time hence they cannot be made static. The fixation of control period and applicability of the tariff for wind energy fixed for supply to the distribution licensee have nothing to do with the fixation of other charges, i.e. open access and other charges for captive use and third party sale.”

68. In the light of the reply to this issue made by the Respondents, we shall now examine the Power Procurement from New and Renewable Source of Energy Regulations, 2008.

69. Regulation 1 is relating to the applicability. The relevant portion of the said Regulation is given below:

“(1) These Regulations may be called “The Power Procurement from New and Renewable Sources of Energy Regulations, 2008.

(2) These regulations shall be deemed to have come into force on the 15th May 2006, the date on which the Commission’s order No: 3 dated the 15th May 2006 had been issued.

(3) These regulations shall apply to all new and renewable source based generating plants including co-generation plants located within the State of Tamil

*Nadu for which power purchase agreements/contracts were **signed on or after** the 15th May 2006. The contracts and agreements between new and renewable sources based generators and the distribution licensees signed prior to the 15th May 2006 would continue to remain in force. However, the generators and the distribution licensees shall have the option to mutually re-negotiate the agreements/contracts signed prior to the 15th May 2006 in line with these regulations even before the expiry of the agreements/contracts. Any renewal of the said contracts/agreements, new contracts/agreements shall be in line with these regulations”.*

70. Regulation 6 provides for Agreement and Control period, which is reproduced as under:

“6. Agreement and Control period

The tariff as determined by the Commission by a general or specific order for the purchase of power from each type of renewable source by the distribution licensee as referred to in clause 4(3) shall remain in force for such period as specified by the Commission in such tariff orders. The control period may ordinarily be two year. When the Commission revisits the tariff and allied issues, the revision shall be applicable only to the generator of new and renewable energy sources commissioned after the date of such revised order.

71. Regulation 7 provides for Energy Purchase Agreement and Energy Wheeling Agreement and the same is reproduced below:

“7. Energy Purchase Agreement (EPA) and Energy Wheeling Agreement (EWA)

The format of the Energy Purchase Agreement (EPA) and Energy Wheeling Agreement (EWA) shall be evolved by the Commission after discussion with the generators and the distribution licensee. Before 10th of succeeding month, the licensee / generator shall furnish the list of Energy Purchase Agreements executed during the preceding month and pay applicable fees as stipulated in the Tamil Nadu Electricity Regulatory Commission’s Fees and Fines Regulations, 2004. The distribution licensees/STU shall sign an Energy Wheeling Agreement taking cognizance of the energy wheeling principles elaborated in the general or special tariff order”.

72. Regulation 8 defines the issues relating to captive use and third party sale and the same is reproduced below:

“8. Issues related to captive use and third party sale

While issuing the general or specific tariff order, the Commission may consider appropriate criteria/procedure/parameters/charges for each type of new and renewable source, on the following issues, for sale of power to distribution licensee, captive use and

third party sale of power by the new and renewable source generators.

- (1) Applicable demand charges*
- (2) Applicable energy charges*
- (3) Grid availability charges*
- (4) Scheduling and system operation charges*
- (5) Transmission & wheeling charges and line losses*
- (5 A) Banking charges*
- (6) Reactive power charges*
- (7) Adjustment of peak and off peak power*
- (8) Power factor incentive / disincentive*
- (9) Payment of security deposit by the captive/third party user*
- (10) Billing and payment to the generators by distribution licensee*
- (11) Applicable open access registration fee and open access agreement fee*
- (12) Any other related issues.”*

73. The conjoint reading of the above Regulations indicate the following aspects:

- (a) These Regulations provide for terms and conditions for determination of tariff for procurement of power by the distribution licensees from new and renewable sources of energy. The Regulations also provide for determination of issues relating to captive use and third party sale from wind energy generators;

(b) These Regulations would apply to all new and renewable sources based generating stations for which Power Purchase Agreement/contracts were signed on or after 15.5.2006. The agreements/contracts signed prior to 15.5.2006 would continue to remain in force. However, the generators and the distribution licensees have the option to mutually re-negotiate the agreements/contracts signed prior to the 15th May, 2006 in line with these regulations even before the expiry of the agreements/contracts. Further, any new contracts/agreements have to be in line with these regulations;

(c) Regulation 6 relates to agreement for purchase of power by the distribution licensee. The tariff for purchase of power by the distribution licensee shall remain in force for such period as specified in the tariff order. When the State Commission revisits the tariff and allied issues, the revision shall be applicable only prospectively.

(d) Regulation 7 provides that Energy Wheeling Agreement and Energy Purchase Agreement shall be signed by the distribution licensee/STU taking cognizance of the energy wheeling principles elaborated in the tariff order.

(e) Regulation 8 provides for issues related to captive use and third party sale. While issuing the tariff order, the State Commission may consider various issues related to captive use and third party sale.

(f) According to these Regulations, the tariff for power purchase from wind energy by the distribution licensee entered into during a control period will not be revised. The State Commission may consider appropriate procedure to determine appropriate charges for captive use and third party sale while issuing the tariff order.

74. In the light of the above aspects culled out from the Regulations, let us now examine the agreements entered into between wind energy generators who are using their energy for captive use as well as for 3rd party sale and the distribution licensees.

75. The Relevant articles of the agreement entered between M/s. Beta Wind Farm (P) Ltd. (the Appellant) and TANGEDCO dated 29.3.2012 are given below:

“5(3) The STU shall raise bills on the REG holder for the charges payable towards transmission charges, scheduling and system operation charges, etc. as per the order/regulations of the commission for the time being in force”

“7(1) Transmission and wheeling charges including losses:

The REG is permitted to pay provisionally the transmission and wheeling charges at 5% vide Commission's order 01 dt. 20.03.09. As and when the Commission indicates the normative transmission and wheeling charges, the REG agrees to pay the difference to the STU/Distribution licensee and continue and to pay the transmission and wheeling charges as per the Commission's Regulations, codes or orders in force. At present the charges applicable as per CE/NCES Lr. No. CE/NCES/WBP/AEE2/F.REC-Wheeling/D. 1253/12. Dt. 15.2.12.

2. Grid Availability Charges:

(a) Start-up power:

The drawal of energy by the REG during the start up from the Distribution licensee shall be claimed as per the Commissions orders/Regulations in force.

(b) Standby Power:

If adequate generation does not materialize or if drawl by the captive consumer exceeds generation, energy charges and demand charges shall be regulated as follows:

(i) Energy Charges:

When the REG is synchronized with the grid, the captive consumer shall be liable to pay to the distribution licensee for the net energy consumed during the billing month at the applicable rate. The net energy consumption shall be slot wise.

ii) Demand Charges

100% of the applicable demand charges for that category of user for the demand supplied by the Distribution licensee and the applicable percentage of “deemed demand charges” as per Commission’s order applicable from time to time for the demand supplied by the REG.

(3) Scheduling and System Operation charges: *As per the Commission’s regulation/order in force.*

ii) Demand Charges

100% of the applicable demand charges for that category of user for the demand supplied by the Distribution licensee and the applicable percentage of “deemed demand charges” as per Commission’s order applicable from time to time for the demand supplied by the REG.

(3) Scheduling and System Operation charges: *As per the Commission’s regulation/order in force.*

(4) Power Factor disincentive: *Captive consumers of renewable energy shall be liable for disincentive based on the gross energy consumption and the applicable demand as per the Tariff Order in force.*

.....
(7) *Any additional charges that may be approved by the Commission at a later date shall also be levied as approved by the Commission”*

76. The above articles in the agreements make it clear that the transmission charges, wheeling charges etc., have to be paid by the wind energy generators as per the order of the State Commission from time to time.

77. There are two types of Wind energy Generators. The **first type** of wind energy generators are those who supply their entire energy to the distribution licensees. The **second type** of wind energy generators are those who supply their energy mainly for captive use or to third parties by availing open access and also bank their energy with distribution licensee for reuse during the specified banking period. However, the payment for unutilized wind energy at the end of the specified banking period is made by the distribution licensee at the rates determined by the State Commission. For the first type of wind energy generators, the wheeling charges, line losses, banking charges, applicable demand charges and energy charges for captive use etc., are not relevant as these wind energy generators supply their entire energy at the delivery point directly to the distribution licensees. The charges as indicated in Regulation 8 are relevant to the second category of wind energy generators.

78. The reading of both the Regulations and the provisions of the wheeling agreement would make it evident that the tariff of the wind energy generators who have signed PPA for supply of their energy output to the distribution licensee would not be re-opened with subsequent revision of wind energy tariff. However, wheeling charges, line losses, transmission charges etc. for wind energy generators who

supply their energy mainly for their captive consumption or for third party sale through open access has to be decided by the State Commission from time to time. The wheeling charges, transmission losses, transmission charges, banking charges etc., are decided in the tariff order for the control period and during that control period the same charges would prevail. With subsequent revision in the open access charges by tariff order, new charges would become applicable to such wind energy generators who are supplying power through open access.

79. Section 42(2) of the Electricity Act, 2003 provides that the State Commission shall introduce open access in phases and would determine the charges for wheeling, etc. Section 42(3) provides that the distribution licensee has to provide wheeling to any person within its area of supply who requires the supply of electricity from a generating company in accordance with Regulations made by the State Commission. The duties of the distribution licensee with respect to such supply shall be of a common carrier providing non-discriminatory open access. As such, non-discriminatory open access has to be provided to all consumers who propose to take supply from a generator or any licensee other than the distribution licensees. Appellants have argued that the impugned order for wheeling charges etc. would have to be made applicable only prospectively. If this argument is

accepted, then it would result in charging of open access charges from wind energy generators who were commissioned prior to the date of the impugned order at lower rates which were prevailing at the time of signing the wheeling agreement, whereas the new wind energy generators who are commissioned subsequent to the date of impugned order will have to pay higher charges.

80. There cannot be a differentiation in open access charges on the basis of the date of signing the wheeling agreement. Therefore, the argument of the Appellant deserves rejection.

81. The State Commission through the impugned order, has determined the tariff for procurement of power by distribution licensee from wind energy generators which are commissioned subsequent to the date of the impugned order i.e. w.e.f. 1.8.2012. However, the tariff of the wind energy generators who have signed Power Purchase Agreement with distribution licensees for supply of their energy to latter prior to the date of the impugned order, the rate prevailing at the time of signing of the agreement as per the earlier tariff order would be applicable. However, for wind energy generators supplying energy for captive use or third party sale irrespective of their date of commissioning or signing of the wheeling agreement, the rates for various charges for transmission, wheeling etc, as decided in the impugned

order will be applicable from 1.8.2012 as decided in the impugned order.

82. Therefore, the contention in respect of applicability of the tariff order is decided as against the Appellant.

83. The **third issue** is regarding the **Capital Cost**.

84. According to the Appellants, the State Commission has failed to include various items like infrastructure, development charges, operation & maintenance charges and Panchayat taxes etc in the capital cost. As per the calculations made by the Appellants, the capital cost should be Rs. 6.5 crores to Rs. 7 crores/MW as against Rs. 5.75 crores/MW as decided by the State Commission.

85. The reply made by the learned Counsel for the State Commission on this issue is as follows:

“ The State Commission had examined the details which were available in the public domain as well as comments received from various stakeholders. After carefully studying the same, capital cost of Rs. 5.75 crores/MW was decided. The stakeholders had furnished break up of costs supported by legal documents like invoices, tax receipts etc., in spite of Commission’s reminders to the stake holders to

furnish the same. In fact, the infrastructure development charges, operation & maintenance charges and taxes are included in the capital cost decided by the State Commission.”

86. The reply made by the learned counsel for the TANGEDCO, on this issue is as follows:

“The capital cost of coal based Thermal Power Stations and Gas Engine based generating stations is lower than what is considered for the wind energy generators in the impugned order. With the advancement in technology and competition in the wind turbine manufacture industry, the capital cost of wind generating unit is less. Moreover, the wind energy generators did not furnish the audited accounts for establishing the exact capital cost before the State Commission. In the absence of audited accounts, the cost as decided by the State Commission cannot be considered as low.”

87. Now let us examine the impugned order on this issue.

88. The State Commission in the impugned order has taken into consideration submissions of various wind power Associations and Wind Turbine Manufacturers Association who have indicated varying capital cost from Rs. 5.88 crores/MW to Rs. 7 crores/MW. In fact, TANGEDCO

suggested capital cost in the range of Rs. 4.5 crores/MW. The Central Commission's Regulations 2012 provide for capital cost of Rs. 5.75 crores/MW for the year 2012-13. Taking into consideration all these things, the State Commission as found as follows:

“7.2.3 In the stakeholders meeting held on 8.6.2012, the Commission requested Indian Wind Energy Association (In WEA) to furnish break up details of capital cost. In response, InWEA has furnished Rs. 5.83 Crs./MW as the total capital cost.

7.2.4 The capital cost mentioned by CERC is nearer to the average cost arrived from the capital cost range reported by IREDA. The Commission considers that the views of the IREDA based on the recent applications is a reliable indicator of cost and therefore estimates that Rs. 5.75 Crores per MW is a reasonable figure.”

- 89.** The reading of the impugned order would show that the State Commission has examined the submissions of the various stakeholders and on that basis, it decided the capital cost of Rs. 5.75 crores/MW, the average of the range of capital cost indicated by Indian Renewable Energy Development Agency.
- 90.** In this decision, we do not find any infirmity as the State Commission has given a reasoned order after analysing the capital cost and considering submissions of all the stakeholders and the Central Commission's Regulations.

91. The Appellants have challenged the capital cost on the ground that the infrastructure development charges and O&M charges have not been included. The capital cost comprises land cost, wind generator cost, cost of the evacuation facilities and infrastructure development cost, etc.

92. The State Commission has taken into consideration the same and fixed the capital cost. The Appellants have not been able to establish their case before us that the capital cost determined by the State Commission is not adequate to cover their costs. In our view, the capital cost has been fixed correctly by the State Commission. Accordingly, this issue is decided as against the Appellants.

93. The **Fourth Issue** is regarding **Return on Equity**.

94. According to the learned counsel for the Appellants, Return on Equity has been decided without considering the present rate of Minimum Alternate Tax (MAT).

95. The reply made by the learned Counsel for the State Commission on this issue is as follows:

“The State Commission, in the present case, has fixed pre-tax Return on Equity at 19.85% which is independent of MAT. MAT applicable for Indian Companies with book profit of Rs. one crore is 20%. For Companies with book profit of less than Rs. one crore, it is 19%. Similarly, MAT is different for foreign

companies. The tariff is decided for a period of 20 years. Therefore, the current year MAT cannot be taken for all the 20 years of tariff period particularly when the MAT keeps on changing year after year. In the changing scenario of MAT, the State Commission decided 19.85% pre-tax Return on Equity independent of MAT and corporate income tax. The Return on Equity of 19.85% is more than what is allowed by other States to wind energy generators and also more than what was allowed to conventional generating stations in Tamil Nadu. The conventional generators in the State have been allowed RoE of 14% post tax which translates to 17.63% pre-tax RoE at the current MAT rate of 20%.”

96. Let us now refer to the findings of the State Commission on this issue in the impugned order. The relevant paragraph is reproduced below:

“7.8 Return on Equity

7.8.1 Commission in its previous order No. 1 dated 20.3.2009 allowed 19.85% pre-tax return on equity. TANGEDCO in its comments has stated that return on equity of 19.85% is high when compared to the return on equity allowed by other State Electricity Regulatory Commissions such as Madhya Pradesh (16% pre-tax), Karnataka (16%) and Andhra Pradesh (AP) (15.5% pre-tax). TANGEDCO suggested a RoE of

15.5% pre-tax. Commission decides to allow 19.85% pre-tax return on equity in this order as adopted in the previous tariff order”.

- 97.** The above findings would show that the State Commission decided to maintain the pre-tax Return on Equity as adopted in the previous tariff order dated 20.3.2009.
- 98.** The State Commission in the Tariff order dated 15.5.2006 decided pre-tax RoE of 16% for wind energy projects. In the tariff order dated 20.3.2009, the State Commission decided pre tax RoE of 17.63% upto 31.3.2009 which was equivalent to what was allowed to conventional power projects and pre-tax RoE of 19.85% after 31.3.2009. In the impugned order, the State Commission has retained the same pre-tax RoE as allowed to the wind energy generators in the previous tariff order dated 20.3.2009. Thus, the Return on Equity available to the wind energy projects commissioned after 1.8.2012 and those commissioned between 1.4.2009 and 31.7.2012 is the same from 1.8.2012. The Return on Equity allowed to wind energy generators in the impugned order is more than RoE allowed to conventional power projects by the State Commission i.e. 14% post tax which amounts to pre-tax RoE of less than what was allowed to the wind energy generators in the impugned order.
- 99.** In other words, the wind energy projects have been allowed Return on Equity more than that was allowed to conventional

power projects in the State. The RoE is applicable to new projects to be set up after the date of the impugned order. Therefore, the developers will have to take the decision for investment keeping in view the RoE available for setting up project in the State of Tamil Nadu.

100. As indicated above, when the Return on Equity allowed to wind energy projects is more than what is available to conventional projects in the State, we cannot hold that the Return on Equity is unreasonable. As such, we do not find any infirmity in the findings on this issue in the impugned order. This issue is decided as against the Appellant.

101. The **Fifth Issue** is regarding **Annual Maintenance Contract Charges and Insurance Charges.**

102. According to the Appellants, the actual annual maintenance contract charges with insurance charges works out to 2.8% of the total cost every year but the State Commission, in the impugned order had allowed only 1.1% of the total capital cost which is not as per the practice in vogue.

103. On the other hand, the learned Counsel for the State Commission submits that adequate annual maintenance charges and insurance have been allowed and the charges in the impugned order by the State Commission are at par with the charges allowed by the other State Commissions.

- 104.** Admittedly, the State Commission in the previous tariff order dated 20.3.2009 decided to divide the capital cost on plant and machinery and land and civil works in the ratio of 85:15. On that basis, the State Commission allowed O&M charges at 1.1% of the cost of plant & machinery and at 0.22% of the cost of land and civil works with escalation of 5% per annum. In addition to this, the State Commission allowed insurance charges of 0.75% on cost of plant and machinery i.e. 85% of the capital cost for the first year to be reduced by 0.5% of the previous years' insurance cost every year thereafter. This calculation would make it clear that this will work out to be 1.08% of the total capital cost for the first year.
- 105.** We find that the Central Commission in its 2012 Regulations has allowed O&M charges of Rs.9 lakhs/MW for FY 2012-13 to be escalated @ 5.72% p.a. This translates into 1.56% of the capital cost for the first year of the control period. There is no separate insurance charge.
- 106.** The State Commission, in the impugned order, has decided to club the insurance charges and O&M expenses and allowed O&M expenses at 1.1% of the plant and machinery and 0.22% of land and civil work. Thus, the State Commission maintained O&M charges at the same level as in the previous year.

- 107.** However, the State Commission did not allow insurance charges without adducing any reason. It is simply stated in the impugned order that the operation and maintenance expenses are reasonable enough to take care of insurance cost. This cannot be the valid reason for disallowing the insurance charges.
- 108.** We feel that the insurance charges should have been given separately as allowed in the previous year. Accordingly, we direct the State Commission to allow the same O&M charges and insurance charges as a percentage of capital cost as decided in the previous tariff order dated 20.3.2009 i.e. O&M charges of 1.1% on 85% of the capital cost and 0.22% on 15% of capital cost and insurance charges @ 0.75% of 85% of capital cost for the first year to be reduced by 0.5% of the previous years' insurance charges every year thereafter.
- 109.** This issue is decided accordingly in favour of the Appellants.
- 110.** The **6th Issue** is regarding **Plant Load Factor/Capacity Utilisation Factor**.
- 111.** According to the Appellants, there has been a loss of generation of about 44.58 MUs at the wind energy generators on account of backing down of generation due to transmission constraints and grid problems but this has not been taken into consideration by the State Commission while

deciding the normative Plant Load Factor/Capacity Utilization Factor.

- 112.** The Appellants, in order to substantiate this point, have given month wise data of loss of generation caused by grid problems during the period April, 2012 to January, 2013.
- 113.** On this point, we have heard the learned Counsel for the Respondents. Admittedly, the State Commission in its first tariff order dated 15.5.2006, decided the capacity utilization factor as 27.46% based on the performance of the machine installed immediately before 15.5.2006. Similarly, the State Commission in its next tariff order dated 20.3.2009 decided the capacity utilization factor of 27.15%. The short point raised by the Appellants is that the State Commission ought to have considered the loss of generation on account of grid problems during the said period while deciding the capacity utilization factor.
- 114.** We have gone through the data given by the Appellants relating to loss of generation due to grid problems from April, 2012 to January, 2013. The total loss of generation during the said period was about 44.5 million units. Considering loss of 44.5 million units for the above period, based on 6900 MW of wind generation capacity in the State, the loss would amount to less than 0.1% in terms of load factor. This is insignificant for consideration in deciding the

normative Capacity Utilization Factor. However, we feel that the loss due to weakness in the transmission and distribution system has to be minimized. Therefore, we direct the TANGEDCO and TANTRANSCO to appropriately augment the transmission and distribution system to avoid loss of generation due to inadequate power evacuation infrastructure from wind energy projects. TANGEDCO and TANTRANSCO are also directed to file an affidavit in this regard before the State Commission indicating the extent of the problem, identification of weak areas in transmission system affecting evacuation from wind generators, remedial measures proposed and schedule of implementation of the preventive measures within three months from the date of this Judgment. The State Commission is directed to consider those details contained in the said Affidavit and pass appropriate order after hearing the parties on this issue.

115. In the light of our above observations, this issue is decided accordingly.

116. The 7th **Issue** is regarding **Time Value of Money**.

117. According to the Appellants, the tariff of wind energy generators has been determined by the State Commission on the basis of average as against the levelised tariff in spite of the fact that this Tribunal in its Judgment in Appeal No.205 and 235 of 2006 dated 18.12.2007 directed the State

Commission to re-determine the tariff by fixing the Time Value for money even though the judgment has been appealed before the Hon'ble Supreme Court and stay has been granted. It is further contended that the State Commission ought to have accepted the cost plus single part average tariff since the stay order passed by the Hon'ble Supreme Court cannot be an impediment to consider the time value of money especially when there is an amendment to the regulations. As pointed out by the Appellants, the State Commission in the impugned order has decided to continue the present methodology of cost plus single part average tariff instead of levellised tariff as directed by this Tribunal in the judgment dated 18.12.2007 in view of the stay granted by the Hon'ble Supreme Court. But it is to be pointed out that subsequent to the judgment of this Tribunal, the State Commission notified the tariff Regulations, 2008 for power procurement from New and Renewable Source of Energy. In this Regulation it was specified that while determining the tariff, the State Commission may adopt cost plus single part average tariff which can be reviewed later. Admittedly, these Regulations have been framed in 2008 only after the judgment of this Tribunal. On 3.3.2008, the judgment dated 18.12.2007 rendered by this Tribunal has been stayed by the Hon'ble Supreme Court. Only subsequent to the said stay order, the State Commission has further amended its Regulations. Through the said amendments, the principle available for

determination of tariff under Regulation 4(6) was amended to “appropriate tariff methodology” instead of “cost plus single part average tariff.”

- 118.** As pointed out by the Appellant, the stay of the judgment of this Tribunal granted by the Hon’ble Supreme Court cannot now be an impediment in the light of the amended Regulations framed later for considering the time value of money for determining the tariff of wind energy generators.
- 119.** As correctly pointed out by the Appellants that it is settled law as laid down by the Hon’ble Supreme Court in (1991) 4 SCC 1, that a stay order is always in relation to the implementation of the order under challenge and not the principle on the basis of which the order had been passed. As a matter of fact, the concept of time value of money has been explained in detail in the judgment of this Tribunal dated 18.12.2007. The Central Commission’s Regulations, 2012 for Renewable Energy Generators also provide for determination of generic tariff on levellised basis for the tariff period. Therefore, the concept as decided by this Tribunal being valid can be considered by the State Commission on the strength of the amended Regulations which were framed subsequent to the stay order. Therefore, the State Commission is directed to pass appropriate order in the light of the observations made in this judgment on this point.

- 120.** Thus, this issue is decided in favour of the Appellant.
- 121.** The **8th Issue** is regarding **Recovery of Transmission Charges on the basis of Plant Load Factor.**
- 122.** According to the Appellants, the transmission charges should be recovered on the basis of Plant Load Factor or units generated by wind energy generators as the wind generators and not on the basis of installed capacity of wind energy generators.
- 123.** According to the Appellant, this Tribunal in its judgment dated 4.2.2013 in Appeal No. 102 of 2012 in the matter of Beta Wind Farm Private Ltd. vs. Tamil Nadu Electricity Regulatory Commission & Ors has decided this point and held that computing the transmission charges on Plant Load Factor adjusted capacity is contrary to the Regulations. We have gone through the said judgment. The very same Appellant is also the Appellant in one of the batch of the present Appeals i.e. Appeal No.197 of 2012. In the judgment dated 102 of 2012, this Tribunal has considered the question as to whether the transmission charges are to be recovered on the basis of installed capacity or Plant Load Factor adjusted capacity.
- 124.** In that judgment it was held that the Regulations provide for determination of transmission charges on the basis of the allotted transmission capacity and not on energy transmitted

or PLF adjusted capacity. When the very same argument as advanced in the present batch of case was made by the Appellant, this Tribunal rejected the contention of the Appellant for determination of transmission charges on the basis of the energy transmitted or PLF adjusted capacity. The relevant portion of the judgment is as follows:

“17. This Tribunal in its judgment dated 23.11.2012 in Appeal no. 91 of 2012 in the matter of Sai Regency Power Corporation Pvt. Ltd. vs. Tamil Nadu Electricity Regulatory Commission & Ors. has dealt with this issue and has remanded the matter to the State Commission for determination of the transmission charges after the re-organisation of the Electricity Board as per the directions given in the judgment as under:

“37. We are of the view that after unbundling of the Electricity Board, the annual transmission charges as of TANTRANSCO as determined by the State Commission have to be billed and recovered from TANGEDCO (R-4) and other open access customers as per the Regulations. We feel that the total Annual Transmission Charges for TANTRANSCO (R-3) as determined by the order dated 15.5.2006 have to be apportioned to TANGEDCO (R-4) and other long term open access customers including the Appellant in proportion to their respective allotted transmission capacities as per the Regulations. In our opinion after the reorganisation of the Electricity Board, the rate of transmission charges payable by TANGEDCO and other long term open access customers should have been determined. However, this was not done and as pointed by the Respondents after the

reorganisation of the Electricity Board, TANTRANSCO has been billing and recovering from TANGEDCO the total Annual Transmission Charges less the amount recovered from other open access customers at the rate determined in order No.2 dated 15.5.2006 on the allotted transmission capacity. This is not correct as the rate of transmission charges have to be determined as per the Regulations and apportioned to the allotted transmission capacity to the distribution licensee and other long term open access customers. This is also against the principle of non-discriminatory open access as emphasized in the Electricity Act, 2003 as it is resulting in different rate of transmission charges being recovered by the transmission licensee from TANGEDCO and other long term open access customers of the intra state transmission system. According to Section 40 (C) of the Electricity Act, 2003, the transmission licensee has to provide for non-discriminatory open access to its transmission system for use by any licensee or generating company on payment of transmission charges. Accordingly, same rate of transmission charges is to be recovered from the licensee and other open access customers.

38. In our opinion, the allotted transmission capacity for TANGEDCO should be the summation of its own net generation capacity connected to TANTRANSCO's transmission system, share in central sector stations, other long term contracted capacity from IPPs connected to the TANTRANSCO's system, etc. Similarly the allotted transmission capacity for the Appellant and other wind energy generators should be their respective installed capacity.

39. Therefore, on this issue we remand the matter to the State Commission with the

direction to determine the transmission charges per MW per day charged by TANTRANSCO for use of its transmission network by TANGEDCO and other long term open access customers after the reorganisation of the Board on the basis of summation of transmission capacity allotted to long term open access customers including TANGEDCO. For the wind energy generators, the allotted capacity shall be the installed capacity of the respective generators. On the other hand the transmission capacity allotted to TANGEDCO would be on the basis of sum of net capacity (Installed Capacity less auxiliary consumption) of own generating stations connected to the transmission system, capacity contracted from IPPs, share in Central Sector Stations, etc. However, the Annual Transmission Charges determined by order No. 2 dated 15.5.2006 will not be reopened”.

The findings of the Tribunal in the above judgment will be applicable to this case also for determination of the transmission charges payable by the users of the intra-State transmission system”.

.....

21. We are also not convinced by the argument of the Appellant that the transmission charges should be determined on the basis of energy transmitted or PLF adjusted capacity. The Regulations clearly provide for determination of transmission charges on the basis of the allotted transmission capacity and not on energy transmitted or PLF adjusted capacity. Therefore, we reject the contention of the Appellant for determination of the transmission charges on the basis of energy transmitted or PLF adjusted capacity”.

125. The findings to the effect that transmission charges should not be based on PLF adjusted capacity but it should be based on the installed capacity of wind generators, would also apply to the present case as well.
126. Accordingly, this issue is decided as against the Appellant.
127. The 9th **Issue** is regarding **Abnormal Rise of Banking Charges**.
128. According to the Appellants, while the State Commission recognises that in terms of the existing Regulations, banking is permissible and that the R-2 licensee is obliged to bank Renewable Energy, the State Commission has changed the methodology of computation of banking charges thereby increasing the banking charges to 94 paise/kWh which is a manifold increase from the earlier banking charge of 5% in kind thereby causing tariff shock to the Appellants and therefore, the arbitrary increase of banking charges to 94 paise/kWh needs to be set aside.
129. On this point, we have heard the learned Counsel for the Respondents.
130. It is true that the State Commission is empowered to determine the banking charges by considering appropriate criteria/procedure as per its Tariff Regulations, 2008. However, the State Commission in the impugned proceedings has decided new criteria and concept for determination of

banking charges that too, without giving an opportunity to the Appellants or the Respondent distribution licensees.

- 131.** The distribution licensees before the State Commission objected only the concept of banking that it should not be continued or in case the State Commission decides to continue banking, then the charges should be increased from 5% to 20%. The State Commission has come to the conclusion that the Distribution Licensee is incurring loss on account of banking of energy and that is to be compensated. It is obvious that the State Commission did not arrive at this conclusion on the basis of any statistics or figures. The State Commission has decided the banking charges as the difference between the average purchase rate of energy through bilateral trading on all India basis i.e. Rs. 4.45 per kWh and the tariff of wind energy generator i.e. Rs. 3.51 per kWh. Thus, for supply of banked energy to the wind energy captive consumer is considered at the market rate and the supply of energy for banking by the wind generator to the distribution licensee has been considered at the tariff rate of the wind generators. This computation, in our view, is not proper. In this context, it would be useful to refer to the judgment of this Tribunal in Appeal No.98 of 2010 which was filed by the Tamil Nadu Electricity Board, the predecessor of the Second Respondent against the previous wind energy tariff order dated 20.3.2009 passed by the State

Commission. The relevant extract of the said judgment is reproduced as below:

“18. Before getting into the merits of Appellant Board’s arguments, on this issue let us understand the very concept of Banking of Electrical Energy. Banking of energy is analogous to small saving bank account in a financial bank. A person deposits his surplus amount in a saving bank account. He can withdraw his money from bank any time according to his requirement. For this deposited money, he earns some interest. The bank in turn gives loan to some other needy customer at a higher rate of interest. In this process, saving account holder as well as bank is benefited. Now come to electricity banking. Electricity is a commodity which cannot be stored. It is to be consumed at the very instant it is produced. Generation by Wind Energy Generators solely depends upon availability of wind at a particular velocity. In other words it is periodical in nature. Its generation is not constant even during a period of 24 hours of a day. It could be possible that it generates electricity when captive user does not require it. In such a case energy generator banks it with distribution licensee who supplies this energy to its consumers at applicable tariff. However, for returning the banked energy, Licensee may have to procure additional electricity from other sources. Unlike the Banks which pay interest to saving account holder, here the licensee, banker of electrical energy, earns interest on this banked energy. Thus banking rate electrical energy should be nominal. In the light of above fact situation, we would now examine the merits of Appellant Board’s contentions vis-a-vis findings of State Commission on this issue.

19. The State Commission is empowered to make provisions for banking of energy generated by Renewable Sources of Energy under the Power

Procurement from New and Renewable Sources of Energy Regulations, 2008. The Said Regulation is as follows:-

“3. Promotion of new and renewable sources of energy.....

(4) The Commission may consider appropriate banking mechanism for generation of power from a particular kind of renewable source depending upon the inherent characteristics of such source.

20. The relevant portion of the findings given on this issue by the State Commission is as follows:

“8.2.1. Banking as a concept was introduced by the Tamil Nadu Electricity Board in 1986 to encourage generation of wind energy. The banking charge was fixed at 2% in 1986 and raised to 5% in 2001. The figure remained at 5% when the Commission issued order No.3 dated 15.5.2006. The banking period was fixed at one month in March 2001 by the TNEB and doubled in September, 2001. It was further raised by TNEB to one year in March, 2002 commencing from 1st April and ending on 31st March of the following year.

8.2.2 The banking charges shall be realised every month for the quantum of units generated during the billing month less the consumption of the captive users/third party sale. Slot-wise banking is permitted to enable unit to unit adjustment for the respective slots towards rebate/extra charges. No carry over is allowed beyond the banking period. Unutilised energy at the end of the financial year may be encashed at the rate of 75% of the relevant purchase tariff.

The Commission proposes to retain the same features with some modifications based on the suggestions made by the stakeholders. As and when the distribution licensee enforces restriction control measures for restricting the consumption of wind energy generators, the Commission finds justification in the plea that the unutilized energy at the end of the financial year may be encashed at full value of the relevant tariff for sale to the licensee. The plea of the TNEB to raise the banking charge from 5% to 15% and curtail the banking period from one year to one month are too radical to be accepted by the Commission.

8.2.3. Therefore, the Commission decides to retain banking charges at 5%. Banking charges will be levied on the net energy saved by the generator in a month after adjustment of the consumption during that month. The banking period commences on 1st April and ends on 31st March of the following year. The energy generated during April shall be adjusted against consumption in April and the balance if any shall be reckoned as the banked energy for April. The generation in May shall be first adjusted against the consumption in May. If the consumption exceeds the generation during May, the energy banked in April shall be drawn to the required extent. If the consumption during May is less than the generation during May, the balance shall be reckoned as the banked energy for May and banking charges for May will be leviable only for this component. This procedure shall be repeated every month”.

From the above observations, it is clear that concept of banking has been introduced by Appellant Board itself in 1986 to encourage

generation of electricity from abundant wind power potential available in the state. Banking charges were fixed at 2% in 1986 which were enhanced to 5% in 2001. The figure remained at 5% till 2009 when the impugned order was delivered by State Commission. Thus, there was no reason for State Commission to enhance the same to 15%. State Commission has rightly observed that the plea of TNEB (Appellant) to raise the banking charge from 5% to 15% were too radical. As regards Appellant Board's demand for reduction of banking period from one year to one month, it is pointed out banking period was fixed at one month in March 2001, doubled to two months in September 2001 and then further increased to one year in March 2002 by Appellant Board itself. Thus Appellant Board has increased it from one month to one year within a span of one year. There should have been some rationale on the part of Appellant Board to do so. Appellant Board has not assigned any new development, which was not present in 2001-02 and which has warranted the curtailment of banking period from one year to one month now. The State Commission has rightly rejected it as otherwise it would have rendered banking mechanism as meaningless.

.....

23. Therefore, there is no justification for the Appellant to pray for the increase of Banking charges from 5% to 15% and curtailment of banking period from one year to one month. Therefore, this point is also answered accordingly.”

132. In the above decision, this Tribunal specifically held that while dealing with the previous tariff order in the Appeal filed by the

distribution licensee, it is observed that the State Commission has rightly decided that the prayer of the Tamil Nadu Electricity Board was too radical. This decision would squarely apply to this case also.

133. Therefore, the findings on this issue regarding the increase of the banking charges is set aside. The State Commission is to reconsider the computation of the banking charges after hearing the stake holders and keeping in view the observations made by this Tribunal in Appeal No.98 of 2010. This issue is decided in favour of the Appellants.

134. The **10th Issue** is regarding the **Levy of Transmission Charges as well as the Recovery of Transmission Losses.**

135. The submissions made by the learned Counsel for the Appellants on this issue are given below:

(a) Prior to the impugned order the transmission and wheeling charges were being recovered collectively at the rate of 5% of the energy wheeled in kind and no transmission losses were being charged earlier. As a matter of fact, in the previous tariff order dated 20.3.2009, the State Commission had rejected the proposal of TANGEDCO to raise the transmission and wheeling charges from 5% to 15%. However, by the impugned order the transmission charges, wheeling

charges and line losses have been increased exorbitantly. As per the impugned order, the transmission charges, wheeling charges and line losses works out to 96.63 paise per kWh as against the old rate of 28.45 paise/kWh.

(b) The rationale for charging 40% of the transmission charges and wheeling charges for transmitted and wheeling wind energy has also not been explained in the impugned order.

(c) The transmission and wheeling charges should not be changed and remain static at 5% according to the transmission and wheeling agreements signed by the Wind Energy Generators with the licensees.

(d) The revised transmission charges come to Rs.47.33 P calculated at 40% as decided by the order No.1 of 2012 and this is abnormal increase.

136. On this issue, we have heard the learned Counsel for the Respondents.

137. Let us now examine the relevant portion of the impugned order on this issue:

“8.3.3 Commission in its order No. 1 of 2012 and 2 of 2012 has fixed Transmission Charges of Rs.6483/MW/day and wheeling charges of 23.27 paise/kWh. Now that the TNEB has been unbundled,

charging a single charge in kind as transmission and wheeling charges is not implementable. Therefore, it has been decided to fix transmission and wheeling charges in terms of rupees/paise as in the case of conventional power. As a promotional measure, under Section 86(1)(e) of the Act, the Commission has decided to fix 40% of the transmission charges and 40% of the wheeling charges as applicable to the conventional power to the Wind power. Apart from these charges, the WEGs shall have to bear the actual line losses in kind as specified in the respective orders of the Commission and amended from time to time”

138. Thus, the State Commission had determined the Transmission and Wheeling Charges for use of intra-state transmission system and distribution system by separate orders prior to issuance of the impugned order. Now, the Electricity Board has been unbundled, charging a single charge in kind as transmission and wheeling charges is not possible.

139. The transmission business of the Electricity Board has now been vested with TANTRANSCO. The Distribution and Generation business has been entrusted with TANGEDCO. The State Commission has decided transmission charges for TANGEDCO by Order no. 1 of 2012. Similarly, the State Commission has also decided wheeling charges for utilizing TANGEDCO distribution system by order No. 2 of 2012. The State Commission has decided to fix 40% of transmission charges and 40% of wheeling charges as fixed by the

respective orders by the State Commission for wheeling of wind energy for captive use and for third party sale. Besides, the wind energy generators will have to bear actual line losses in kind for the energy transmitted/wheeled as specified in the respective orders. However, the State Commission has given a concession in transmission and wheeling charges to the captive users over other open term access customers as a promotional measure under Section 81(1) (e) of the Electricity Act, 2003.

- 140.** We find that till the issuance of the impugned order the State Commission was levying transmission and wheeling charges at an adhoc rate of 5% in kind without any consideration to the actual cost of transmission and wheeling. When the wind energy generators supplying power for captive use and third party sale do not pay the full transmission and wheeling charges and line losses the same is loaded on the tariff of the consumers. In other words, the captive users of the wind energy generators are subsidized by the consumers of the distribution licensees.
- 141.** The Annual Revenue Requirement of the transmission licensee and distribution licensee are decided by the State Commission. This Annual Revenue Requirement has to be recovered by the licensees from the open access users of their transmission & distribution system and the consumers ultimately.

- 142.** Therefore, the transmission charges, wheeling charges and line losses which are not fully recovered from energy wheeled from wind energy generators for their captive use and third party sale, the burden of the same falls on the consumers of the distribution licensees. It is true that the wind energy has to be promoted but the promotion has to be balanced by taking into account, the interest of the consumers.
- 143.** In the present case, the State Commission has decided to charge the losses incurred in transmitting wind energy for use by its captive consumers or third party sale in kind but the State Commission has actually given a concession to the wind energy generators by charging only 40% of the normal transmission and wheeling charges.
- 144.** The distribution and transmission business of the Electricity Board has now been unbundled and therefore, two charges cannot be combined. Thus, the State Commission has correctly segregated the two charges. Accordingly, the State Commission decided to align the transmission charges and wheeling charges with the actual cost of transmission and wheeling. Even as per the wheeling agreement signed by the parties, transmission and wheeling charges have to be recovered as decided by the State Commission from time to time. If transmission and wheeling charges change for other open access consumers and the consumers of the distribution licensees from time to time, the same cannot

remain static for the captive users of the wind energy generators.

- 145.** The Appellants have indicated that the revised transmission charges come to 47.33 paisa calculated at 40% of Rs. 6483/MW per day. In this connection, we have to observe that this Tribunal in the judgment in Appeal No.102 of 2012 dated 4.2.2012 has already directed the State Commission to re-determine the transmission charges as per directions given in that judgment.
- 146.** In the light of the said directions, the Appellants are at liberty to make submissions before the State Commission for getting the benefit on account of redetermination of the transmission charges.
- 147.** In view of the above, this issue is decided accordingly.
- 148.** The **11th issue** is regarding **scheduling and system operation charges.**
- 149.** The gist of the contentions urged by the Appellants on this issue is as under:

“The State Commission in the impugned order allowed collection of scheduling and system operation charges. The Scheduling of the wind energy generation is not possible due to infirm and seasonal nature of wind energy. Therefore, the question of

collection of scheduling and system operation charges would not arise. Therefore, collecting a charge towards scheduling of wind energy is unjustifiable.”

- 150.** On this ground we have heard the learned Counsel for the Respondents.
- 151.** The State Load Despatch Centre is not only responsible for scheduling but also for system operation and energy accounting. According to Section 32(3) of the Electricity Act, 2003, the State Load Dispatch Centre is responsible for optimum scheduling and dispatch of electricity within the State, monitor grid operations, keep energy accounts of electricity transmitted through the State grid, exercise supervision and control over the intra-state transmission system. The State Load Despatch Centre would also carry out real time operations for grid control and dispatch of electricity within the state through secure and economic operation of the State grid.
- 152.** According to Section 32(3) of the Electricity Act, 2003, the State Load Despatch Centre may also levy and collect such fee and charges from the generating companies and licensees engaged in intra-state transmission of electricity as may be specified by the State Commission.
- 153.** System operation and control becomes more difficult with large percentage of infirm power like wind energy which is not

scheduled due to sudden changes in transmission system loading, frequency, etc. when large capacity of wind generators comes on or off the system with change in wind velocity. Therefore, these charges are payable for operation of State Load Despatch Centre.

- 154.** As indicated in the impugned order, the State Commission by its Tariff Order no. 2 of 2012 has considered Scheduling and System operation charges of Rs. 2000/- per day for conventional power. However, for the wind energy the State Commission has decided the Scheduling and System Operation Charges of Rs. 600/- per day for wind generator capacity of 2 MW in the impugned order instead of Rs.2000 per day as applicable to conventional power. For wind energy generators for less than 2 MW capacity, the charges have also been proportionately reduced. Thus, the State Commission has allowed concession to the Wind Energy Generators by charging lower than the normal scheduling and operation charges.
- 155.** In the previous order dated 20.3.2009 also the State Commission had decided that other open access charges such as scheduling charges, etc., as specified in the Commission's Open Access Regulations would be applicable.
- 156.** Therefore, there is no infirmity in the finding on this issue rendered by the State Commission.

- 157.** The 12th Issue is regarding **Deemed Demand Charges.**
- 158.** According to the Appellants, the State Commission in the impugned tariff order passed in 2006 and 2009, introduced Deemed Demand concept as well as formula as to how the Deemed Demand concept should be worked out but in the impugned order, the State Commission has taken a “U” turn on the whole concept and wrongly withdrew the entire Deemed Demand Charges without any reasons whatsoever.
- 159.** On this issue, we have heard the learned Counsel for the Respondents.
- 160.** As correctly pointed out by the Appellants, the State Commission in the first tariff order dated 15.5.2006 introduced Deemed Demand Concept. According to this order, the wind energy user has to pay 81.2% of deemed demand supplied by the generator plus 100% of the applicable demand charges for that category of user for the balance demand supplied by the distribution licensee. This concept was continued in the second tariff order dated 20.3.2009 also. In this order, it was decided that a wind energy user draws power from two sources, namely wind energy generator and the licensee and in regard to power drawn for wind energy generator, the demand charges @ 80.30% of demand supplied by generator and in regard the balance demand

supplied by the licensee, the user will pay the full demand charges.

161. However, as pointed out by the Appellants, the State Commission in the impugned order has withdrawn the deemed demand concept which was followed for last so many years without giving valid reasons and without giving an opportunity to the Appellants to file objections/suggestions for the proposal for withdrawal of the same. Therefore, the findings on this issue are set-aside. Accordingly, this issue is remanded to the State Commission for reconsideration after giving opportunity to all the persons concerned and in the light of the earlier tariff orders passed. Thus this issue is decided in favour of the Appellants.

162. The 13th issue is regarding **Encashment of lapsed units by REC captive users.**

163. According to the learned counsel for the Appellants, non-extension of banking facility to wind energy generators under the REC scheme is not in consonance with the Central Commission's Regulations and this issue has been fully analysed in the order passed in Appeal nos. 45 & 91 of 2012 by this Tribunal and this decision ought to have been followed by the State Commission.

164. On the other hand, the learned counsel for the State Commission has submitted that the said concept of banking

and encashment of unutilized units at the end of the specified banking period is only applicable for non REC captive users. REC captive users are not eligible for banking facility as per the State Commission's Renewable Purchase Obligation Regulations. The wind energy generators opting for REC is allowed sale of the lapsed unit apart from selling all units produced under REC, then it would be double benefit to such wind energy generator which would amount to discrimination to other wind generators not availing REC.

- 165.** We have carefully considered this submission. In the impugned order, the State Commission has decided that only one month adjustment period is allowed to wind energy generators availing REC as permitted to conventional power and the unutilized energy will get lapsed as in case of conventional power after one month. The State Commission, admittedly, has not given any reasons in the impugned order for not allowing the benefit of encashment of lapsed units/banking to the wind energy generators availing REC.
- 166.** Now the learned counsel for the State Commission is trying to give various reasons for not allowing the same but these reasons are not found in the impugned order. Therefore, the State Commission cannot be permitted to adduce the new reasons which are not in the impugned order. Admittedly, the Appellants did not get an opportunity to file their objections on the proposal of the State Commission. This issue, as pointed

out by the learned Counsel for the Appellant, has been dealt with by this Tribunal in judgment in Appeal Nos. 45 and 91 of 2012.

- 167.** Therefore, the findings on this issue is set aside and remanded back to the State Commission and State Commission is directed to hear all the parties concerned by giving opportunity and decide the issue in the light of the judgments rendered by this Tribunal referred to above.
- 168.** Accordingly, this issue is remanded to the State Commission to reconsider after hearing the concerned parties.
- 169.** Since we have given general directions to all the Commissions by invoking Section 121 of the Act,2003 we direct the Registry to send a copy of this judgment to all the State/Joint Commissions and the Central Commission regarding our observations in paragraph 64 above on conducting suo-moto hearings by circulating the consultative papers to facilitate effective participation of the stake-holders and to obtain specific and relevant suggestions and objections from the public. Hence, Commissions are directed to follow the procedure by keeping in view of our findings for conducting suo-moto hearings and to frame appropriate Regulations.

170. Summary of Our Findings

- i) Circulation of Consultative Paper prior to issuing the tariff order: No prejudice has been caused by non-circulation of Consultative Paper regarding determination of tariff of wind energy generators for procurement of power by the distribution licensee as the base for this proceeding was the last tariff order. All the stake-holders had given their suggestions for either retaining or modifying the various norms decided in the earlier tariff order and the State Commission after giving them an opportunity of hearing and after considering their suggestions and objections on the various components of tariff has finally determined the tariff. However, regarding the some issues relating to the transmission and wheeling of energy from wind generators for captive use and third party sale, the State Commission has introduced new method for determination of charges as well as the mode for recovery of charges and revised the charges substantially, Hence, we feel that the State Commission should have circulated a Consultative Paper on these issues. All these issues have been specifically challenged by the Appellants in these Appeals. At this stage, when the**

State Commission has already given its findings and given its own reasons for the same, Circulation of a Consultative Paper by the State Commission and de-novo hearing of the case would not be necessary. However, after considering the submissions of the parties on some specific issues, we have given our findings and remanded the matter to the State Commission for reconsideration of those issues where we felt that the Appellants have to be heard by the State Commission.

- ii) Applicability of Tariff order: The Tariff of the wind energy generators for procurement of energy by the distribution licensee would apply prospectively i.e. w.e.f. 1.8.2012 for the projects which are commissioned and entered into PPA on or after 1.8.2012. For wind energy generators who have entered into PPAs for sale of power to the distribution licensees prior to 1.8.2012, the then prevailing tariff would be applicable. However, the transmission and wheeling charges for wind energy wheeled for captive use or third party sale irrespective of date of wheeling agreement, the rate as decided in the impugned order will be applicable w.e.f. 1.8.2012.**

- iii)Capital cost: We confirm the order of the State Commission regarding Capital cost.**
- iv)Return on Equity: We do not find any infirmity in the findings of the State Commission.**
- v) Annual Maintenance Contract Charges and Insurance Charges: We direct the State Commission to allow the same O&M charges and insurance charges as a percentage of Capital Cost as decided in the previous tariff order dated 20.3.2009.**
- vi)Plant Load Factor/Capacity Utilisation Factor: We are not inclined to allow any reduction in Capacity Utilisation Factor on account of loss of generation due to grid problems. However, we have given directions to the State Commission, TANGEDCO and TANTRANSCO in paragraph 114 for augmentation of transmission and distribution system to avert loss of generation at Wind Energy Generators due to inadequate power evacuation infrastructure.**
- vii) Time Value of Money: This issue is decided in favour of the Appellants in terms of this Tribunal's findings in judgement dated 18.12.2007 in Appeal No.205 and 235 of 2006.**

viii) Recovery of Transmission Charges on the basis of Plant Load Factor: This issue is decided as against the Appellants in terms of our findings in judgment dated 4.2.2013 in Appeal No.102 of 2012.

ix) Abnormal Rise of Banking Charges: The findings of the State Commission on this issue are set aside. The State Commission is directed to reconsider the computation of the charges after hearing the stakeholders and decide the issue afresh keeping in view the observations made by this Tribunal in Appeal No.98 of 2010.

x) Levy of transmission charges and transmission loss: Levy of a single transmission and wheeling charges is not possible after unbundling of the erstwhile Electricity Board. The State Commission has determined the transmission charges for TANTRANSCO and wheeling charges for TRANGEDCO by its orders 1 of 2012 and 2 of 2012 respectively. When the captive users of wind energy do not pay the full transmission charges, wheeling charges and losses, the burden of the same falls on the consumers of the distribution

licensees and other open access customers/consumers. No doubt the wind energy has to be promoted but the promotion has to be balanced with the interest of the consumers of the distribution licensees. The State Commission has balanced the interest of both by charging only 40% of the normal transmission and wheeling charges and recovering the actual losses fully from the wind energy generators supplying energy for captive use or third party sale.

xi) Scheduling & System Operation Charges: We do not find any infirmity in the order of the State Commission in deciding the Scheduling & System Operation Charges payable by the Appellants.

xii) Deemed Demand Charges: We set aside the order of the State Commission and remand the matter to the State Commission for reconsideration after giving opportunity to all the persons concerned and in the light of the earlier tariff orders.

xiii) Encashment or lapsed Units by REC Captive users: The findings of the State Commission on this issue are set aside and the matter is remanded back to the State Commission with directions to hear all the parties concerned and decide the issue in the light of the judgment rendered by this Tribunal in Appeal No. 45 and 91 of 2012.

171. Accordingly, the Appeal is allowed in part as indicated above. The Registry shall forward a copy of this judgement to all the State/Joint Commissions and the Central Commissions for necessary action as directed under paragraphs 64 and 169 above. The State Commission is directed to comply with our directions and pass the consequential orders on the specified issues after hearing the parties and after allowing the parties to furnish the materials. There is no order as to costs.

(Rakesh Nath)
Technical Member

(Justice M. Karpaga Vinayagam)
Chairperson

Dated: 24th May, 2013

✓ ~~REPORTABLE/NON-REPORTABLE~~