

Appellate Tribunal for Electricity
(Appellate Jurisdiction)

APPEAL No.199 of 2012

Dated: 04th Sept, 2013

**Present: HON'BLE MR. JUSTICE M KARPAGA VINAYAGAM,
CHAIRPERSON
HON'BLE MR. RAKESH NATH, TECHNICAL MEMBER**

In the Matter of:

- 1. The South Indian Sugar Mills Association
"Karumuthu Centre"
No.634, Anna Salai,
Nandanam,
Chennai-600 035**

- 2. Ponni Sugars (Erode) Limited,
ESVIN House,
No.13, Rajiv Gandhi Sala
(Old Mahabalipuram Road),
Perungudi, Chennai-600 096**

- 3. EID Parry (India) Limited.,
"Sugar Division",
Dare House, No.234, NSC Bose Road,
Parry's Corner, Chennai-600 001**

- 4. Rajshree Sugars and Chemicals Limited,
No.7, 3rd Street,
Ganapathy Colony,
Teynampet,
Chennai-600 018**

- 5. Kothari Sugars & Chemicals Limited,
Kothari Buildings,
No.115, Utthamar Gandhi Salai,
Nungambakkam,
Chennai-600 034**

6. **Sakthi Sugars Limited,
180, Race Course Road,
PB No.3775,
Coimbatore-641 018**
7. **Dharani Sugars & Chemicals Limited,
PGP House, 57 Sterling Road,
Nungambakkam,
Chennai-600 034**
8. **Bannari Amman Sugars Limited,
No.1212, Trichy Road,
Coimbatore-641 018**
9. **Dhanalakshmi Srinivasan Sugars Pvt Ltd,
274-C, Thuraiyur Road,
Perambalur-621 212
Tamil Nadu**
10. **Madras Sugars Limited,
No.1212, Trichy Road,
Coimbatore-641 018**

...Appellant(s)

Versus

1. **Tamil Nadu Electricity Regulatory Commission
TIDCO Office Building,
No.19A, Rukmini Lakshmi Pathy Road (Marshalls Road)
Egmore, Chennai-600 008
Tamil Nadu**
2. **Tamil Nadu Generation & Distribution Corporation Ltd,
NPKRR Maaligai
No.144, Anna Salai,
Chennai-600 002**

..... Respondent(s)

Counsel for the Appellant(s) : Mr. Rahul Balaji,
Mr. Raguvaran Gopalan
Mr. K Gopal Chaudhary
Mr. T Srinivasa Murthy

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 Appellants are the South Indian Sugar Mills Association and its members. The Appellants 2 to 10 are all Sugar Mills who have set-up Bagasse based Cogeneration Power Projects in Tamil Nadu. All the members of the Appellant Association are Captive Consumers of the electricity generated from their respective Bagasse based Cogeneration Plants.
2. The Tamil Nadu State Commission passed the impugned tariff order No.7 of 2012 dt. 31.7.2012 for the Bagasse based Cogeneration Plants commissioned on or after 1.8.2012.

3. Aggrieved by the said order in regard to the manner in which the proceedings were initiated, carried out and decided, the Appellants have filed this Appeal.

4. The short facts are as follows:

(a) The Appellants 2 to 10, being the Captive Consumers of the Electricity generated from the respective Bagasse based Cogeneration Plants, entered into Power Purchase Agreements for the sale of surplus energy with the Tamil Nadu Generation and Distribution Corporation Limited, the 2nd Respondent.

(b) The 2nd Appellant's Cogeneration Plant was established after 1.8.2012. The 3rd to 10th Appellants had set-up their Cogeneration Plants prior to 1.8.2012.

(c) In pursuance of a policy initiative and directions issued by the Central Government and the State Government for promotion of Cogeneration in Sugar Mills and promotion of generation from New and Renewable Source of Energy, the Appellants 3rd to 8th established Cogeneration Plants at their Sugar Mills prior to 15.5.2006 and thereafter, entered into Agreements with Tamil Nadu Electricity Board for the purchase of the surplus energy available from such Cogeneration Plants.

(d) The State Commission in its suo motu proceedings in the matter of power purchase in respect of Non Conventional Energy Sources based Generating Plants and Cogeneration plants, issued Tariff Order No.3 of 2006 on 15.5.2006 which was applicable to all future agreements for the Non-Conventional Energy Sources based Generating Plants located within the State of Tamil Nadu.

(e) In the same order, it was provided that the existing Agreements between the Non-Conventional Energy Source based Generators and the Distribution Licensee, signed prior to 15.5.2006, would continue to remain in force.

(f) The State Commission fixed the levelised single part tariff for the Bagasse based co-generation plants commissioned on or after 15.5.2006 at Rs.3.16 per kWh and fixed the control period as 3 years.

(g) On 8.2.2008, the State Commission notified the "Power Procurement from New and Renewable Sources of Energy Regulations, 2008" and the said Regulations applied only to all New and Renewable Source based Generating Plants including co-generation Plants for which Agreements were entered into after 15.5.2006. The Agreements entered into

during the period prior to 15.5.2006 would continue to remain in force. However, the Generators and the Distribution Licensees were to have the option to mutually re-negotiate the Agreements signed prior to 15.5.2006 in line with these Regulations. However, none of the Appellants which had signed the Agreements prior to 15.5.2006 had opted for any such re-negotiation.

(h) On 6.5.2009, the State Commission issued Tariff Order No.3 of 2009 for the Bagasse based Co-generation plants. The Tariff fixed in this order was two part tariff i.e. fixed cost and variable cost. The fixed cost was determined for 12 years for the Plants commissioned between 15.5.2006 and 18.9.2008. It determined the same for 20 years in respect of the Plants commissioned thereafter.

(i) For revising the said order dated 6.5.2009, the State Commission issued a public notice on 3.5.2011 inviting the suggestions and views from the public.

(j) The Appellants also responded to the public notice and gave their views.

(k) Ultimately, the State Commission issued Tariff Order No.7 of 2012 dated 31.7.2012 being the

impugned order for the Bagasse based Cogeneration Plants commissioned on or after 1.8.2012.

(l) This order is challenged in this Appeal filed by the Appellants.

5. The following grounds have been urged by the learned Counsel for the Appellants in this Appeal:

(a) The Public Notice which was issued in the present case was vague and non-specific. Admittedly, the consultative papers containing the specific proposal and particulars to be decided in these proceedings to enable the public to respond, were not issued. Due to this, the Appellants were gravely prejudiced and thereby the proceedings were vitiated by procedural irregularity and violation of the principles of natural justice.

(b) The State Commission had not given appropriate consideration to the 'Promotional aspects as mandated by law'.

(c) The State Commission erroneously determined the lower normative capital cost at Rs.4.20 Crores/MW by ignoring the boiler configuration and use of air cooled condensers.

(d) The State Commission ought to have determined the Capital Cost of Rs.5.53 Crores/MW + 5% increase for use of air cooled condensers.

(e) The suggestions of the Appellants to fix the Capital cost of Rs.5.53 Crores/MW plus 5% considering that the Air cooled condensers are being used, was not given due consideration.

(f) The State Commission erroneously determined the Fuel Cost at Rs.1050 per MT for the year 2011-12 by following the impermissible methodology of 50% of the cane price plus transport cost.

(g) The State Commission was not justified in declining to fix the PLF at 55% on average of five years. It ought to have fixed the PLF on average of 5 years at 55%.

(h) The State Commission was not justified in allowing the incentive for generation beyond the threshold PLF at a mere 10% of the fixed cost.

(i) The State Commission was not justified in reducing the Operation and Maintenance Charges to 3% as against 4.6% provided in the 2009 order.

(j) The State Commission was not justified in considering only 30 days' receivables for the

computation of the working capital and also allowing 1% rebate if the bills were settled within one month.

(k) The State Commission ought to have considered two months receivables for computation of the working capital and only then allowed the rebate at 1% for payment within 30 days.

(l) The State Commission was not justified or correct in applying the decisions on 16 items relating to CDM benefits, reactive power charges, start-up power etc., to the cogeneration plants set-up before the impugned order including those set-up before 15.5.2006 contrary to the Regulations, 2008.

6. In justification of the impugned order dated 21.7.2012, the learned Counsel for the State Commission as well as the Distribution Licensees have elaborately argued and contended that the impugned order does not call for any interference.

7. On the basis of these contentions of the rival parties, the following questions would arise for consideration:

(i) Whether the State Commission's action in deciding the tariff of cogeneration plants in a suo-moto proceeding without circulating a consultative paper to the stakeholders as was done earlier before issuing

previous tariff order in the years 2006 and 2009 is legal?

(ii) Whether the State Commission has given sufficient consideration to the 'Promotional aspects as mandated by law' and to give effect to the legislative policy of encouragement and promoting co-generation and generation of electricity from renewable source of energy ?

(iii) Whether the State Commission was justified in fixing the capital cost purportedly in accordance with the Central Commission's Regulations and whether the determination of capital cost by the State Commission is in accordance with the law ?

(iv) Whether the State Commission was justified in determining the Fuel Cost of Bagasse on the basis of the cane procurement price instead of at the higher of the market price of the Bagasse or the equivalent heat value based on the cost of coal in accordance with approach of the Central Commission's Regulations ?

(v) Whether the State Commission was correct in determining the normative Plant Load Factor at 55% declining the prayer of the Appellant to fix the PLF for an average of 5 years and under generation below 55% in any year should be allowed to be set off in any

succeeding year in which the generation is over 55% ?

(vi) Whether the State Commission while conceding the need for an incentive has restricted this only to the extent of 10% of the fixed cost without fixing the appropriate incentive at a fixed cost of Rs.1/kWh in addition to variable cost for generation above 55% after setting off?

(vii) Whether the State Commission was justified in allowing the operation and maintenance expenses at 3% for co-generation plants established after 31.7.2012, when the Plants set-up before 31.7.2012 had been allowed substantially higher operation and maintenance expenses with annual escalation ?

(viii) Whether the State Commission was justified in allowing 1% rebate for payment within 30 days when the Working Capital and the interest thereon was allowed only for one months receivables and whether the State Commission ought to have allowed the said 1% rebate only when the Working Capital and the interest thereon was allowed for 2 months receivables?

(ix) Whether the State Commission has erred in supplying the charges determined under the head

“Related issues” to the co-generation plants established prior to the date of impugned order including prior to 15.5.2006 when the Regulations of the State Commission specifically provided that such plants would be governed by their pre succeeding contracts unless they voluntarily chose to re-negotiate the terms and conditions of the supply to the Distribution Licensees by mutual agreements?

8. Let us deal with the above **issues one by one.**

9. In regard to the **1st issue**, the Appellant has contended that the Public Notice in the suo-moto proceedings in the present case was vague and non specific and due to the failure to issue any consultative papers containing the specific particulars, the Appellants were gravely prejudiced and as such the entire proceedings were vitiated by the procedural irregularity and violation of the principles of natural justice.

10. The learned Counsel for the Respondents submitted that as per the Regulations, the State Commission can initiate the process of fixing tariff either suo motu or on an application filed by the generator and the Regulations do not speak about the issuance of consultative paper and therefore, the absence of the issuance of consultative paper would not affect the interest of the parties especially when all the particulars are contained in the public notice.

- 11.** It is also contended by the learned Counsel for the State Commission that of course earlier consultative papers were issued during 2006 since that was the first order of the Commission on Non Conventional Energy Source Power and the impugned order was issued in line with the previous orders after inviting the comments from public on every related issue u/s 62 of the Electricity Act, 2003 and that therefore, the Commission cannot be accused of having not followed the due process of law as envisaged u/s 62 of the Electricity Act, 2003.
- 12.** We have carefully considered the submissions made by the parties.
- 13.** On the very same issue we have rendered a judgment in Appeal Nos.197,198,200,201 and 208 of 2012 and 6 of 2013 dated 24.5.2013. In that judgment, we have observed that the issuance of consultative papers is not mandatory under the Regulations but however, the State Commission should have given opportunity to the Appellants in regard to the issues in which new method for determination and recovery of charges have been introduced which were not referred to in the public notice. This Tribunal in the said judgment remanded the matter to the State Commission in respect of some specific issues where it was felt that the Appellants should be heard before passing the fresh order and also gave general directions regarding procedure to be followed in suo-moto

proceedings and frame regulations accordingly. The said decision would apply to the present case also. The relevant portion of the submission of the Appellant and findings on the above issue in the **said judgment are as follows:**

“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.”

170. Summary of our Findings.

“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.”

- 14.** In the present case, the State Commission issued Public Notice on 3.5.2011 inviting the comments and suggestions from the stake holders by 31.5.2011. The public notice indicates that the State Commission invited the comments and suggestions on various heads set out in the public notice covering all the issues relating to the tariff order. Therefore, no pre-judice can be complained of by the Appellants. However, as we have held in the earlier judgment, it would be desirable for the State Commission to frame Regulations for issuance of consultative paper in the proceedings initiated

suo motu so that the public is given opportunity to make their comments and suggestions with regard to each of proposals and details contained in the consultative papers. This issue is decided accordingly.

15. The **2nd Issue** relates to the **non-encouragement of promotional measures for non-conventional energy.**

16. According to the Appellant, the State Commission has not given sufficient consideration to the promotional aspects as mandated by law and as such, the impugned order has failed to give effect to legislative policy of encouraging and promoting co-generation and generation of electricity from Renewable Source of Energy.

17. On the other hand, the learned Counsel for the State Commission submitted that the State Commission has always been promoting generation from renewable source of energy and the co-generation. However, certain rationalization of various parameters became necessary consequent to the unbundling of the Tamil Nadu Electricity Board.

18. It is further stated that the Generation of electricity and its sale to the Distribution Licensee makes it a regulated business while the production of the Sugar is an unregulated business and therefore, the State Commission has dual role to play for the promotion of Co-generation and generation of

Electricity from Renewable Source of Energy by providing suitable measures for connectivity with the Grid and sale of electricity to any person and at the same time, the State Commission has the responsibility to safeguard the consumer's interests while providing the recovery of cost of electricity in a reasonable manner. It is also contended by the learned Counsel for the State Commission that the State Commission made adequate arrangements for providing connectivity to the Generators and Open Access has been allowed to all the HT consumers even below 1 MW going up to 112 KW and that therefore, it cannot be said that the State Commission's impugned order does not show adequate promotional approach for the said sale.

19. We have considered the submissions made by the learned Counsel for the parties on this issue.

20. We are unable to accept the submission of the Appellant on this issue since the State Commission, as pointed out by the learned Counsel for the State Commission has a dual role to promote the Co-generation and Generation of Electricity by Renewable Source of Energy as well as to safeguard the consumer's interest while providing for recovery of the cost of the Electricity. The details given by the State Commission in the impugned order as well as in the Written Submissions would make it clear that adequate arrangements have been made by the State Commission for providing connectivity to

the Grid. That apart, as far as the sale of electricity to any person is concerned, it is noticed that the Open Access has been allowed to all the HT Consumers even below 1 MW going up to 112 KW. Open Access is being widely practiced in the State of Tamil Nadu since February, 2010. Renewable Purchase Obligation has also been set by the State Commission from time to time. Furthermore, the State Commission has specified only 60% of the charges applicable to the Conventional Power as transmission and wheeling charges for Bagasse based Co-generation Plants. This has been done as per the promotional measures specified in the Electricity Act and policy. Therefore, the contention of the Appellant that there was no encouragement to Renewable Energy Co-generation has no substance. Accordingly, the Appellants' contention is rejected.

21. The **3rd issue** is with regard to **Capital Cost**.

22. The State Commission has determined the normative capital cost of Rs.4.20 Crores per MW inclusive of evacuation cost for the co-generation plants established on or after 1.8.2012 by adopting the normative capital cost as determined by the Central Commission in its 2012 Regulations.

23. According to the Appellant, this determination is erroneous and unreasonable. It has been pointed out that in the earlier

order passed by the State Commission in the Order No.3 of 2009 dated 6.5.2009, the State Commission determined the Normative Capital Cost at Rs.4.67 Crores Per MW but the State Commission failed to consider the effect of escalation and increase in the cost during the intervening period of more than 3 years despite the fact that IREDA had suggested to the State Commission to fix the Capital Cost at Rs.5.5 Crores per MW for boiler configuration of 110 bar/540° C .

24. The Appellant further pointed out that the inclusion of evacuation cost in the capital cost fixed at Rs.4.20 Crores per MW, is contrary to the Central Commission's Regulations, 2012 and that therefore, it is clear that the State Commission fixed the Capital Cost without proper application of mind.

25. According to the Respondents, the State Commission examined the details which were available in different domain and also carefully studied the parameters considered by the Central Commission and adopted the capital cost of Rs.4.20 Crores per MW. It is further pointed out by the learned Counsel for the State Commission that Capital Cost considered by the Central Commission in the previous tariff fixation in 2009 was higher at Rs.4.45 Crores per MW but in the year 2012, the Central Commission fixed the Capital Cost at Rs.4.20 Crores per MW on the basis of the market price

and as such, the State Commission has followed the Central Commission's Regulations and fixed the Capital Cost at Rs.4.20 Crores per MW which is higher than the rates fixed by the other State Commissions.

26. We have carefully considered the submissions of the learned Counsel for the parties.

27. Let us refer to the finding on this issue in the impugned order. The finding is as follows:

"8.1.1.1 The Commission assumed Rs.4.67 Crores / MW as the capital cost for Order No.3 of 2009 dated 06-05-2009.

8.1.1.2. E.I.D.- Parry (India) Ltd, stated that the capital cost of bagasse based cogeneration has increased due to increase in steel cost, boiler cost etc. Therefore the Commission can consider the capital cost at Rs.6 Crores per MW. The South India Sugar Mills Association (SISMA) opined that the capital cost be fixed at Rs 5.65 Crores / MW as air cooled condensers are being used and the mills are also bearing the evacuation charges. M/s Empee Sugars & Chemicals Ltd wanted the Commission to fix the capital cost at Rs 4.96 Crores / MW. M/s IREDA, New Delhi suggested that the Commission fix the capital cost at Rs 4 Crores– Rs 5.5 Crores / MW with increase by 4-5% if the project used air cooled condensers . Terra Energy Limited suggested that the capital cost be increased to Rs.5.75 to 6 Crores per MW as the cost of evacuation is also being borne by the generators.

8.1.1.3. The licensee, M/s TANGEDCO suggested the capital cost to be fixed at Rs 3.9 Crores / MW as followed in Andhra Pradesh ERC.

8.1.1.4. In the previous Tariff Order No 3 of 2009 dated 6-5-2009, TANGEDCO had expressed that unless the cost is segregated between the sugar industry and cogeneration, the correct cost cannot be represented. The Commission sought clarification as to how the cost allocation is done for power generation and other uses since steam is used in power generation as well as sugar production. A generalized statement was made during the hearing on 08-06- 2012 by the representative of SISMA that steam generated in the boiler is used for power generation and a portion of the steam which is extracted from steam turbine is used for sugar manufacture. No further details were made available. When the steam is extracted from the turbine for use in sugar mill, it is also not clear whether the steam after use in the sugar mill is condensed and brought back to the steam cycle or it is wasted. The energy content of the steam extracted as well as the make up water requirement are not made available. If these details were available, the Commission could have worked out the allocation of cost for use of steam in power generation vis-à-vis sugar manufacture. In the absence of such a detailed analysis , the Commission would like to use thumb rule method for giving benefit to the power segment for the steam used for sugar manufacture which is not a regulated business . In case these details are made available by the bagasee based co-generation plants, a detailed analysis can be carried out in future, at least for the next tariff order. In the absence of any explanation by the generators and in the absence of any details in this regard, the Commission decides to deduct 10% of the capacity charges towards steam extracted and used in sugar manufacture.

8.1.1.5. CERC in its Renewable Energy Sources Regulations, 2012 has fixed the normative capital cost at Rs 4.20 Crores /MW which is inclusive of evacuation cost.

8.1.1.6. Therefore, considering the views of various stakeholders, the Commission decides to adopt the CERC rate of Rs 4.20 Crores / MW inclusive of evacuation cost in this Tariff Order. The Commission also apportions the capital cost on machineries, land and civil works at 85% and 15% respectively”.

28. The above finding would show that the State Commission had decided to adopt the Central Commission’s rate at Rs.4.20 Crores per MW inclusive of the evacuation cost. Since, the State Commission has followed the methodology adopted by the Central Commission for fixing the Capital Cost, it would be better to consider the Central Commission’s decision on the Capital Cost. On going through the order of the Central Commission, it is clear that the Central Commission has taken into consideration the following salient features:

(a) CERC has adopted capital cost of Rs.4.20 Cr/MW based upon IREDA norms for a configuration of 2500 TCD with 66 bar/480°C Configuration.

(b) The Capital cost adopted by CERC does not include evacuation cost beyond the line isolator on outgoing feeder on HV side of generator transformer in

terms of Clause 12 read with Clause 2 (1)(n) of the CERC Regulations, 2012.

(c) CERC recognises advancement in technology for generation and utilisation of steam at high temperature and pressure.

(d) CERC specifically states that higher capital cost is justified if one opts for higher temperature and pressure configuration.

(e) IREDA's capital cost norms for 2500 TCD 110 bar configuration is Rs.5.53 Cr/MW.

29. In the present proceedings before the State Commission, the IREDA has proposed Capital Cost to be fixed as follows:

“The Capital cost of projects are site/project specific and it depends on type of technology/system being employed, length and capacity of transmission line etc.,

As per the report prepared by MITCON for IREDA, the cost ceiling bench mark for Bagasse based co-generation projects ranges from Rs.4 to 5.5 Cr/MW depending upon boiler pressure configuration. Further, the cost may increase by 4% to 5% if the project is using air-cooled condensers”.

30. The suggestions by IREDA for fixing the Capital Cost would range from Rs.4 to 5.5 Cr/MW depending upon the boiler pressure configuration.

31. According to the Appellants, during the last 5 years, the co-generating plants set up by the Appellants 2 to 10, the Appellant have been having higher boiler pressure configuration which is as follows:

S.No.	Name of Company/Mill	Year of Cogen	Boiler Pressure (kg)	Temp (deg. cel)
1.	Sakthi (Modarkurichi)	2007	108	540
2.	Sakthi (Sivaganga)	2008	108	540
3.	Rajshree Sugars (Gingee)	2008	110	540
4.	Dharani Sugars (Thiagadurgam, Sankarpuram)	2009	110	535
5.	EID Parry (Pettavithalai)	2009	110	540
6.	Bannari Amman Sugars (Chengam, Thirunelveli)	2010	110	540
7.	Empee Sugars (Tirunelveli)	2010	110	540
8.	Dhanalkashmi Srinivasan (Perambalur)	2010	110	540
9.	Madras Sugars (Tirukoilur)	2011	110	540
10.	Ponni Sugars (Erode) Ltd	2012	112	540

32. It is further pointed out by the Appellants that all these Plants have air cooled condensers in order to save water and also to comply with Tamil Nadu Pollution Control Board norms. The State Commission is bound to take into consideration the actual plant configuration which is prevailing in Tamil Nadu. In the order dated 6.5.2009 passed by the State Commission it had determined the normative capital cost of Rs.4.67 Crores/MW. That was excluding evacuation cost. The State Commission in the present order did not consider the effect of inflation and increase in the costs during the intervening period of more than 3 years.

33. It is pointed out by the Appellants that the State Commission in the impugned order reduced the capital cost to Rs.4.20 Crores/MW from the Capital Cost of Rs.4.67 Crores/MW in the earlier order dated 6.5.2009. The State Commission has simply adopted the norm for capital cost specified by the Central Commission without considering the assumptions and the configuration of boiler. The State Commission has blindly gone by the CERC Regulations which were framed for a different and inapplicable configuration. The State Commission should have had due regard to the discussions of the Central Commission in the statement of objects and reasons and accordingly applied the principles and methodology therein reasonably while

fixing the Capital Cost in Tamil Nadu on the basis of the salient features as relevant to Tamil Nadu.

34. In Tamil Nadu, the interconnection point with the grid is at the line isolator on outgoing feeder on HV side of the Generator transformer at the generating plant premises. The cost of the evacuation line from there to the licensee's substation, which has been set up by the licensee is collected from the Sugar Mill. This aspect ought to have been taken into consideration by the State Commission. The State Commission cannot now justify its determination of capital cost by referring to the decisions of other State Commissions. The orders of other State Commissions are neither a binding decision nor a guiding principle for fixing the capital cost. It is the duty of the State Commission to make determination of the capital cost on its own upon the materials available before it after considering the local conditions.

35. As stated above, the State Commission cannot blindly follow the norms specified in the CERC Regulations without considering the assumptions behind the determination of the normative parameter. The CERC Regulations is only guiding in nature. As the CERC has given the Statement of Reasons, the same would form part of the guiding principles but the said principles have to be considered in the context of local /State circumstances.

- 36.** It is contended by the Respondent that the Capital Cost includes evacuation cost and the Generating Plants need not have to bear the evacuation cost from the line isolator on the outgoing feeder on the HV side of the generator transformer to the licensee's substation. This contention is not correct since the second Appellant has filed an additional affidavit before this Tribunal showing that the said Appellant was in fact called upon to bear the cost of evacuation and also compensate for the trees under the tower line.
- 37.** If the Appellants are called upon to bear the said additional evacuation cost then the same has to be added to the capital cost for the purposes of determination of tariff.
- 38.** The State Commission in the impugned order has noted that it had sought clarification from the Appellants regarding cost allocation for power generation and other uses as steam is used both for power generation and sugar production. However, the Appellants only made generalised statements regarding use of steam in sugar production and power generation. In the absence of the details, the State commission decided to deduct 10% of capacity charges towards steam extracted and used in sugar manufacture. We feel that the Appellants should furnish the requisite data regarding usage of steam in the sugar production to the State Commission to enable the State Commission to decide appropriate allocation of cost to power generation and sugar plant.

39. In view of the discussions made above, the rate of capital cost fixed by the State Commission is not correct. The State Commission has to consider the materials furnished by the Appellants as well as the suggestions made by IREDA, and the explanation given by the Central Commission in the statement of objects and reasons of the 2012 Regulations and fix the rate of capital cost on taking into consideration the local/State circumstances. The Appellants are also directed to furnish the information sought by the State Commission regarding steam used in the power generation and sugar production for deciding apportionment of cost between sugar plant and power generation.

40. Accordingly, this finding is set aside and the matter is remanded to the State Commission for fresh consideration on this issue.

41. The **4th issue** is relating to the **Fuel Cost**.

42. According to the Appellants, the State Commission in the impugned order has fixed the Fuel Cost in a cryptic and arbitrary manner without giving any reasons. The prayer of the Appellant is that the Fuel Cost may be fixed at the rate of **Rs.2,085** per MT having regard to the cost of coal or in the alternative to fix the Fuel Cost not below Rs.1408 per MT with an annual escalation of 5%.

43. On the other hand, it has been submitted by the learned Counsel for the Respondent that the Bagasse, being a by product, does not cost anything additional to the Sugar Mill and that it is freely available and it has no value in so far as it is an input for generation of power and supply to the Distribution Licensee and that therefore, the Fuel Cost has been correctly fixed by the State Commission.
44. Let us now refer to the findings on this issue by the State Commission:

“8.1.13. Fuel Cost:

8.1.13.1. Rajshree Sugars & Chemicals Ltd suggested a rate of Rs 2000 / MT to be fixed as the cost of fuel . E.I.D. Parry (India) Ltd and SISMA have suggested a rate of Rs 2000 / MT with 5% escalation each year . Empee Sugars & Chemicals Ltd requested the Commission to fix a rate of Rs 1750 / MT (inclusive of handling / transportation charges of Rs 250 / MT). Tamil Nadu Newsprint and Papers Ltd suggested a rate of Rs 5100 / MT for usage of Imported coal . IREDA opined that the fuel cost be fixed at Rs 1800-2000 / MT with 5% annual escalation, if purchased from outside. Terra Energy Limited opined that fuel rate may be fixed at Rs.2000/ MT as per current market rates.

8.1.13.2. TANGEDCO suggested a rate of Rs 1000 / MT. CERC in its Renewable Energy Sources Regulations, 2012 has fixed a cost of Rs 1408/Ton with an escalation factor of 5% per annum for Tamil Nadu.

8.1.13.3. *It is ascertained from Directorate of Sugar, Chennai that the cane price for 2011-12 is Rs 2000/MT with a transport cost of Rs 100/= totalling to Rs 2100 / MT. Therefore, the Commission decides to adopt the fuel cost at 50% of the above price of Rs 2100 / MT which is Rs 1050 / MT for FY 2012-13. The price for FY 2013-14 will be decided as and when the Government announces the sugar price for the next year. The same would then be adopted by the Commission.*

8.1.13.4. *However, for arriving at the receivables in connection with determination of interest on working capital, fuel cost is escalated at the rate of 5%”.*

45. The State Commission in the tariff order passed in the year 2006 held the view that price of sugarcane can not be the basis for price of Bagasse. The relevant extracts from the 2006 Tariff order are as under:

“There cannot be any relationship between price of sugar cane that is being fixed by Govt. and the price of Bagasse. Bagasse is also in demand by other industries like paper, cattle feed etc., and accordingly market forces determine the price of Bagasse. For determination of Bagasse price, equivalent heat value of coal can be adopted. The pit head cost and calorific value of coal have been considered to arrive at the fuel price linked to heat content. The fuel price in terms of Rupee/ton equivalent to gross calorific value of 2300 kcal/kg works out to around Rs.562/ MT. Therefore, Rs.575/MT is considered as a reasonable and fair price for Bagasse. The current rate of inflation is around 4% per annum but as the fuel is procured from un-organized sector, escalation for fuel price at the rate of 5% is assumed”.

46. So, even in this order passed in 2006, the State Commission has held that the prices of the Sugar Cane cannot be basis for the price of Bagasse. But in the impugned order, the State Commission has taken a contrary view without giving any reason whatsoever. While fixing the Fuel Cost, the State Commission failed to consider the following factors as quoted by the Appellant:

“(a) The cane price of Rs.2000/ MT for sugar season 2011-12 is applicable for the period October 2011-September 2012. Sugar mills during FY 2012-13 would be paying for sugarcane at this price till September 2012 and thereafter at the new State Advised Price fixed for sugar season 2012-13. In fact, the peak crushing season for a sugar mill is between December & April. Accordingly for dominant part of sugarcane purchase in FY 2012-13, sugar mills will have to pay cane price applicable for 2012-13 sugar season. Hence considering cane price of 2011-12 season is inappropriate for FY 2012-13;

(b) The cane price of Rs.2000/ MT is the minimum price for a base recovery of 9.5%. For every additional 0.1% increase in recovery, sugar mills will have to pay a premium of Rs.15.30/MT. For example, the 8th Appellant for its Sugar Mill had paid a cane price of Rs.2061/ MT and the 2nd Appellant paid a cane price of Rs.2046/ MT including such premium for 2011-12 sugar season. The Commission has totally ignored such additional cane price;

(c) Sugar mills will have to pay a Purchase tax of Rs.60/ MT and cane cess of Rs.5/ MT aggregating Rs.65/ MT. In addition they also extend various subsidies to cane growers involving Rs.15-25/ MT of cane. These have

been totally ignored in reckoning the cane price by the Hon'ble Commission”.

47. According to the Appellants, in the public notice issued in the present case, there was no indication that the State Commission would consider the cane price as the basis. In fact, this has been rejected by the State Commission in 2006 as indicated above. Even in the 2009 Tariff order, the State Commission determined the Fuel Cost at the rate of Rs.1000/MT. The finding of the State Commission in 2009 Tariff Order is as under:

“8.12 Fuel Cost

8.12.1 Fuel cost is a key determinant of the cost of power in a co-generation plant. The Commission adopted fuel cost of Rs.575/MT in order No.3 dated 15.5.2006. The consultative paper proposed a fuel cost of Rs.1000/MT with an escalation of 5% p.a. The Ministry of New and Renewable Energy Government of India have suggested that Rs.200/MT may be added towards the cost of loading, unloading, cutting and chipping. TNEB has suggested the fuel cost may be fixed below Rs.800/MT. South India Sugar Mills Association suggests fuel cost of Rs.1958/MT on the basis of a barter deal between certain Sugar Mills and Tamil Nadu Newsprints and Papers Ltd., Thiru A Vellaiyan, Member of the State Advisory Committee has quoted a deal of the Tamil Nadu Newsprints and Papers Ltd. to support a fuel cost of Rs.2000/MT. Thiru S.V. Balasubramaniam, CMD of Bannari Amman Sugars wanted an extra Rs.250/MT towards transport cost in addition to the price of fuel. Thiru T B

Chikkoba and Thiru K Venkatesan Members of the State Advisory Committee suggest a rate of Rs.1000/MT with 5% escalation per annum. Tamil Nadu Cooperative Sugar Mills Federation in its letter dated 10.10.2008 addressed to Tamil Nadu Newsprints and Papers Ltd., prescribed procurement rate of Bagasse from the various Cooperative Sugar Mills ranging from Rs.720/MT to Rs.1040/MT depending on quality and distance. The weighted average rate indicated by the Tamil Nadu Cooperative Sugar Federation works out to Rs.923/MT.

8.12.2 Taking into account the diverse figures, the Commission considers that a rate of Rs.1000/MT with escalation of 5% per annum including the cost of transportation is reasonable.”

48. When the Tariff Order was passed then, the State Commission went by the market prices for Bagasse and took a view upon the diverse figures placed before the State Commission. The representations were made by the Appellants before the State Commission on the basis of the market prices of Bagasse in 2011, which was the basis adopted in the 2009 order. Admittedly, none including the Distribution Licensee the TRANGEDCO suggested the cane price based methodology.

49. In view of the above, the Appellant's contention that there was no transparency and gross violation of the principles of natural justice as the said indication was not made in public notice has some substance.

50. The CERC has adopted the equivalent heat value approach and determined the Fuel price for Tamil Nadu at Rs.1408/- per MT based upon the landed cost of coal for thermal stations in Tamil Nadu.

51. It is important to notice that the Central Commission had specifically observed in the Statement of Reasons that the respective State Commissions may consider the prevalent price of Bagasse if the same is higher than the price on equivalent heat value basis.

52. In this context, we shall now refer to Clause 4 (2) of the TNERC Regulations which provides as follows:

“While deciding the tariff for power purchase by distribution licensee from new and renewable sources based generators, the Commission shall as far as possible be guided by the principles and methodologies specified by”

- (a) Central Electricity Regulatory Commission*
- (b) National Electricity Policy*
- (c) Tariff Policy issued by the Government of India*
- (d) Rural Electrification Policy*
- (e) Forum of Regulators (FOR)*
- (f) Central and State Governments”.*

53. The State Commission is bound to be guided by the Central Commissions principles and methodology having

regard to the local conditions in the State. Accordingly, the State Commission ought to have considered the equivalent heat value method and the market price of bagasse before deciding the price of bagasse.

54. As pointed out by the learned Counsel for the Appellants, the following facts need to be considered:

(a) The 2nd Appellant, Ponni Sugars, had sold 32650 MTs of surplus Bagasse to Seshasayee Paper & Boards during 2011-12 at Rs.1575/-per MT till September, 2011 and Rs.1490/- per MT thereafter. Chartered Account's Certificate for the same is filed in the Appeal paper book.

(b) Amongst others, there is a market mechanism through the Tamil Nadu Co-operative Sugar Federation Ltd for the purchase of Bagasse from Sugar Mills on tender basis. The market rates for Bagasse for relevant periods are ascertainable thereby. The rates for 2009-2010 were between 1350 to 1450 and for 2010-2011, the rates were between 1525 to 1575 under such market mechanism.

55. It cannot be disputed that the State Commission ought to have determined the Fuel Price on the basis of equivalent heat value method with coal as available to the generating plants or on the basis of market price of Bagasse.

56. It is well known that Bagasse has several uses and that it is saleable in the open market. Even the CERC explanatory memorandum for the 2012 Regulations explicitly states so. If the Bagasse is not used by the Sugar Mills in the power generation, it would be sold and it will fetch revenue at the market price. That revenue which is foregone when the Bagasse is used for power generation is cost to the sugar mill and consequently it is the cost of the input for power generation.

57. In view of the above discussions, the Fuel Price fixed is not in accordance with the principles as referred to in the State Commission's Regulations as well as Central Commission's Regulations. In this Appeal, the Appellants have prayed for fixing the Fuel Cost at Rs.2085 / MT on the basis of the Fuel equivalent cost of the coal or in the alternative, fix the Bagasse price on the equivalent heat value methodology taking an appropriate cost of imported coal and in any case the Fuel Cost should not be below Rs.1408/ MT with an annual escalation of 5%.

58. We are not inclined to fix the Fuel Cost in this Appeal/Proceedings, though we hold the Fuel Cost fixed in this impugned order is not correct. Therefore, we remand the matter to the State Commission to fix the correct Fuel Cost on the basis of the materials available on record after giving

an opportunity to the parties to furnish further materials and in the light of the observations made above.

59. Thus, this issue is decided accordingly.

60. The **5th issue** relates to the **Plant Load Factor**.

61. The State Commission has fixed the Plant Load Factor at 55% by rejecting the suggestions of the Appellants to fix the Plant Load Factor for an average of 5 years.

62. According to the Appellants, since the number of days of operation for co-generation plant is dependent on the length of crushing season for sugar mill which depends on availability of sugar cane, there is bound to be year to year variation for reasons beyond the control of the co-generating units like monsoon failure, draught conditions, crop diseases impact both area under cane and the yield. This aspect has not been considered by the State Commission.

63. The Appellant has prayed that the Plant Load Factor be considered on a 5 year average but alternatively the Appellants prayed that under generation below 55% in any year, should be allowed to be set off in any succeeding year in which the generation is over 55% and the fixed cost for such set off generation to be allowed at the rate as in the shortfall year in addition to the variable cost of the succeeding year.

64. This prayer is being objected to by the Respondent contending that the Plant Load Factor being an annual phenomenon is used for recovery of fixed full cost and as such based on the availability of the Bagasse, the annual Plant Load Factor has been rightly fixed as 55%. Any relaxation in Plant Load Factor would distort the picture with regard to recovery of fixed cost on annual basis. It is also a common practice for cogeneration plants to use fuels other than bagasse during non-crushing season. Even during crushing season the same generators may use additional fuel for augmenting generation.

65. We have carefully considered the submissions of both the parties.

66. On this issue, the State Commission has rendered the findings rejecting the contention of the Appellant. The same is as follows:

“8.1.2.1. The Plant Load Factor of a Bagasse based co-generation plant depends on a number of factors like mechanical efficiency of the Plant, vintage of the plant etc.

8.1.2.5 Some of the Sugar Mills also use fossil fuel during off seasons. Even during the crushing season if the sugarcane is not available supplementary fuel is used. The Commission would like to continue with the PLF of 55% on an annual basis. The PLF is an annual phenomenon for the purpose of cost recovery. The suggestion of various stake holders for adopting a

PLF over a 5 year period could not therefore be accepted”.

67. Thus, the State Commission rejected the contention of the Appellants regarding Plant Load Factor for 5 years instead of annual Plant Load Factor on the ground that Plant Load Factor is an annual phenomenon for cost recovery and the Sugar Mills could use alternate fuels during off-season and even during the season.

68. We feel that the Plant Load Factor depends on Availability of the Plant and fuel and these factors can not be treated as uncontrollable. The Central Commission’s Tariff Regulations of 2012 stipulate Plant Load Factor of 60% on annual basis for the State of Tamil Nadu. As against this, the Commission has decided the annual Plant Load Factor of 55%. Thus, we do not accept the contention of the Appellants for average Plant Load Factor of 55% for 5 years or carry forward of unrecovered fixed cost. Accordingly, this issue is decided against the Appellants.

69.The **6th issue** is relating to the **Incentives for Generation beyond threshold Plant Load Factor.**

70.The Appellants in this Appeal have prayed for the directions to the State Commission to allow incentives at Re.1 per kWh in addition to variable cost for generation above 55% after set off for previous years’ shortfall.

71. According to the Respondents, up to 55% a generator can use Bagasse or coal but above 55% Plant Load Factor if a Generator uses the coal, the incentive of 10% on the fixed cost would not apply and this condition was imposed by the State Commission primarily to discourage use of coal which is a fossil fuel by a Non-Conventional Energy Generator.

72. On this issue, the State Commission has given the following findings:

“8.1.2.6. It is quite likely that in some cases , generation may go beyond 55% PLF. Once the annual fixed charges or the capital cost recovery is achieved at the normative PLF of 55%, any generation beyond the normative PLF of 55% does not warrant payment of fixed charges. An incentive would be adequate for such extra generation for the extra efforts and wear and tear of the plant and equipment. Commission therefore introduces the concept of incentive which is already in practice in other conventional power stations. 10% of the fixed charge applicable for that year is allowed as incentive for extra generation beyond normative PLF. The variable cost as provided in this Order would be applicable if bagasee is used as fuel. If any other fuel is used , the total tariff shall be in accordance with Order No. 4 of 2006 dated 15-052006 , as amended from time to time. This tariff as per Order No. 4 of 2006 is the total tariff and the generator is not entitled for incentive and variable cost as in the case of generation with Bagasse as fuel”.

73. Thus, the State Commission has allowed incentives of the fixed cost for generation above the 55% threshold PLF in addition to the variable cost.

74. The incentive as per the impugned order on the final fixed cost determined by the State Commission is quoted as under:

	(Rs./Unit)	
Year	ECO	Incentive
1.	1.90	19
2.	1.91	19.1
3.	1.85	18.5
4.	1.80	18
5.	1.74	17.4
6.	1.68	16.8
7.	1.63	16.3
8.	1.57	15.7
9.	1.52	15.2
10.	1.47	14.7

75. The above calculation would indicate that the incentive fixed by the State Commission is as low as 19p during the 1st year of operation and reduces year after year to 14.7p per unit for the 10th year.

76. We notice from the counter affidavit of the State Commission that the conventional plants of TANGEDCO are provided with incentive of 25 paise per Kwh besides the normative variable charges. It is well settled by the various decisions of this Tribunal that allowing a lower rate to renewable energy plants than that allowed to conventional power plants does not conform to the legislative mandate

and the tariff policy. Thus, the State Commission on this issue has not followed a promotional approach as required.

77. All components of fixed cost would not remain unchanged for the extended period of operation. There would be higher wear and tear, higher repairs and maintenance and also higher employee cost. All these components must necessarily be considered as the necessary cost for power generation beyond the 55% normative PLF and compensated in the tariff fixation. On the other hand, the incentive for the bagasse based cogeneration plant appear to be declining with the passage of time and is less than that admissible to conventional plants.

78. The State Commission is directed to consider increasing the incentive adequately to incentivise the bagasse based cogeneration plants to maximise generation by procuring adequate quality of bagasse fuel and improving the availability of plants. In any case the incentive has to be better than that available to conventional power plants.

79. Accordingly, the issue of incentive is remanded to the Stte Commission to redetermine the same after hearing all the parties concerned.

80. The **7th issue** would relate to the **Operation and Maintenance Charge.**

- 81.** According to the Appellant, the State Commission has reduced the Operation and Maintenance Charge to 3% in the impugned order as against 5.25% provided in the 2009 order. It is stated that the operation and maintenance charges should continue to be maintained at not less than 4.5% on 100% of the capital cost and there should be no discrimination in fixing the percentage of operation and maintenance charges between the co-generating plants commissioned before or after 31.7.2012.
- 82.** Refuting this contention, the learned Counsel for the Respondents submitted that the State Commission has considered Operation and Maintenance cost of 3% on capital cost including the insurance charges as followed by other State Commission.
- 83.** Let us see the findings rendered by the State Commission on this issue:

“8.1.9. Operation and Maintenance Expenses

8.1.9.1. TANGEDCO and SISMA have opined that the Operation & Maintenance (O & M) expenses may be fixed at 4.5% of the capital cost with escalation of 5% from the 2nd year . E.I.D.Parry (India) Ltd stated that the O & M expenses could be fixed at 1.25% on the total capital cost with 5% escalation from the 2nd year onwards. IREDA has suggested the charges to be at 5% of project cost with 5% escalation . Empee Sugars & Chemicals Ltd requested the Commission to consider the same formula as assumed in Clause 8.9

of the previous Order No 3 Dated 06052009 which states that O & M expenses will be at a rate of 4.5% p.a with escalation of 5% from the second year onwards. With regard to maintenance of land and civil works, which constitutes 15% of capital investment, 0.9% of 15% of capital cost shall be allowed every year with annual escalation of 5%.

8.1.9.2 As regards Insurance charges, Empee Sugars & Chemicals Ltd wants the charges to be as assumed by the Commission in Clause 8.10 in the Order No 3 Dated 06.05.2009 . As per this clause, Commission had proposed an insurance rate of 0.75% of the machinery cost for the first year to be reduced by half a percent of the previous year's insurance cost every year thereafter. The licensee TANGEDCO has requested the Commission to waive the insurance charges as stipulated by other ERCs.

8.1.9.3. Other SERCs have also included insurance charges in the Operation & Maintenance expenses.

8.1.9.3.1 APERC in its Order Dt 20.03.2004 / 3103-2009 has considered O & M cost of 3% on capital cost (including insurance) with 4% escalation.

8.1.9.3.2. MPERC in its Order 59/08 Dt 03.09.2008 (valid till 2013) has approved O & M expenses including insurance at 3% of the capital cost with an escalation of 5% on O & M expenses p.a.

8.1.9.3.3. KERC in its Order Dt 11.12.2009 has considered O & M expenses at 1.5% on capital cost with 5% escalation and the O & M expenses is inclusive of insurance charges.

8.1.9.3.4. GERC in its Order 4 of 2010 Dt 31.05.2010 has assumed O & M expenses @ 3% of the capital

cost for the first year with 5% escalation thereafter. Here also, O & M expenses is inclusive of insurance charges. 8.1.9.4. The normal practice prevalent is that the insurance charges are included in the O & M charges. Other Commissions have also clubbed the insurance expenditure with O & M expenses. Hence, the Commission decides to include the insurance expenditure with the O & M expenses and therefore no separate provision for insurance is considered in this Order. Many of the Commissions in the country allowed O & M charges @ 3% including insurance with an annual escalation of 5%.

8.1.9.5. Therefore, the Commission approves this rate of 3% with annual escalation of 5% from second year as O & M expenses on 100% of capital cost” .

84. The Appellants have now pleaded for retaining the operation and maintenance charges at the rate of Rs.5.25% including insurance charges as provided in 2009 order irrespective of the date of commissioning of the co-generation either before or after 31.7.2012.

85. The findings given by the State Commission would indicate that the State Commission has examined the prevailing Operation and Maintenance expenses allowed by various State Commissions in the Country for Bagasse based Power Plants. Most of the Regulatory Commissions in India have allowed 3% as Operation and Maintenance Charges. The same has been adopted by the Tamil Nadu State Commission in the impugned tariff order. The Operation and

Maintenance Charges allowed in various States as referred to in the impugned order is given in the following table:

States	Uttar Pradesh	Andhra Pradesh	Gujarat	Karnataka	Madhya Pradesh
Date of Order	9.9.2009	31.3.2009 & 20.3.2004	31.5.2010	11.12.2009	9.2.2008
O&M Expenses	3% of Capital Cost	3% of Capital Cost	3% of Capital Cost	3% of Capital Cost	3% of Capital Cost
Escalation	5.72%	4%	4%	5%	5%

86. The Appellants have contended that there should be no discrimination in fixing the percentage on Operation and Maintenance Charges irrespective of the commissioning date. This argument would imply that no change is possible in the order already issued and only additional benefits may be allowed in future. This contention is not tenable.

87. Any price variation could be higher or lower and the same will have to be captured while fixing the tariff and having cut off dates for fixing the tariff is also a time tested practice. If there is any major change in the economy, the same cannot be ignored. The same thing applies to taxation, duties levied etc. If the changes cannot be captured then there is no need for having a control period and revision of parameters.

88. We find that the Central Commission's Regulations of 2012 provide for O&M expenses of Rs.16 lacs per MW for FY 2012-13 to be escalated at 5.72% per annum during the

subsequent years of control period. This translates into about 3.8% of the capital cost. We feel that the State Commission should have considered the Central Commission's Regulations while deciding the O&M charges.

89. We, therefore, remand the matter to the State Commission to redetermine the O&M cost after considering the Central Commission's Regulations.

90. The **8th issue** would relate to the **Working Capital**.

91. The submissions made by the learned Counsel for the Appellants on this issue are as follows:

(a) The State Commission has considered receivables for 30 days. in Para 8.2.9.3 of the impugned order, it has allowed a rebate of 1% if the bills are settled within one month from the date of presentation by a generating company. For this purpose, the generator will raise a bill every month. The CERC Regulations however provide for receivables at 2 months and thereafter it allows rebate for prompt payment within 30 days. Since receivables have been inbuilt for 2 months in the working capital component by CERC, it is but logical and equitable that prepayment by one month should warrant corresponding cash discount. In the case of the Appellants, the power generated from the beginning to

the end of the month is billed only at the beginning of next month. Thereafter, the purchaser is given 30 days time for payment. In effect, the Appellant's members bear 45 days average credit period against 30 days allowed by the State Commission in working capital cost. Further rebate for payment within 30 days would hence add to the uncompensated cost of the Generator and it is contrary to financial principles.

(b) The Appellants therefore submit that working capital component must be considered for receivables at 2 months like that of CERC Regulations and then for payment within 30 days rebate at 1% as provided in the order of the State Commission be allowed.

92. Refuting this prayer, the learned Counsel for the State Commission submits that the State Commission has followed the principles which had been followed earlier as the State Commission has considered as this procedure is tested over a period of time within Tamil Nadu. The State Commission has considered the receivable for 30 days in the impugned order as follows:

“8.1.14.3. Considering the processing period of power generation and the contractual period for billing and payment, the Commission decides to approve the working capital on the basis of one month each of Fuel stock, O & M expenses and Receivables”.

93. The State Commission has allowed a rebate of 1% on the bills if the payment is made within one month of the presentation of bills. The said finding is as follows:

“8.2.9.3. The Commission decides that when a renewable energy generator sells power to the distribution licensee, the generator will raise a bill every month for the net energy sold after deducting the charges for start up power and reactive power. As the interest at the rate of 12.5% has already been allowed for one month receivables in the working capital, the bill amount is due only after one month. If the distribution licensee makes the payment within a period of one month of presentation of bills by a generating company, a rebate of 1% shall be allowed. Any delayed payment beyond 30 days is liable for interest at the rate of 1% per month”.

94. The grievance of the Appellant is that the State Commission, instead of following the Central Commissions Regulations on this issue, has simply allowed only 01 months receivables in the computation of working capital and allowed 1% rebate for payment within one month.

95. According to the Appellant, this would tantamount to not allowing the carrying cost of the receivables for one month which is unreasonable and impermissible. Since the Appellant submitted that the State Commission ought to have followed the Central Commissions’ Regulations, we would now refer to those Regulations. In that Regulation, the Central Commission has considered 2 months’ receivables in

Clause 17(2) of the 2012 Regulations. The same is as follows:

“(2) The Working Capital requirement in respect of biomass power projects and non-fossil fuel based co-generation projects shall be computed in accordance with the following clause:

Biomass, Biogas Power and Non fossil Fuel Co-generation

- (a) Fuel costs for four months equivalent to normative PLF;*
- (b) Operation & Maintenance expense for one month;*
- (c) Receivables equivalent to 2 (two) months of fixed and variable charges for sale of electricity calculated on the target PLF;*
- (d) Maintenance spare @ 15% of operation and maintenance expenses*

96. Clause 19 of CERC, 2012 Regulations provides for the rebate. The same is as follows:

“19. Rebate

(1) For payment of bills of the generating company through letter of credit, a rebate of 2% shall be allowed;

(2) Where payments are made other than through letter of credit within a period of one month of presentation of bills by the generating company, a rebate of 1% shall be allowed”.

97. The reading of the above Regulations would reveal that the interest on working capital for 2 months’ receivables is

allowed as pass through in the tariff and a rebate of 2% or 1% is allowed if the payment is made against LC or within one month. On the basis of this Regulations of the Central Commission, it is submitted by the Appellants that the receivables should be allowed on 2 months' basis and rebate of 1% be given for payments made within one month.

98. On the basis of these Regulations, the Appellants has prayed to direct re-computation of the working capital allowing 2 months receivables; or in the alternative, to delete the 1% rebate for payment in one month.

99. The learned Counsel for the State Commission submitted that the provisions regarding working capital as per Central Commission's Regulations and as per Tamil Nadu State Commissions are entirely different. He has quoted the following factors to indicate that the Tamil Nadu State Commission has followed the State Commission's Regulations and passed the order. The provisions regarding Working Capital as per the Central Commission is as follows:

“CERC

(a) Fuel cost for 4 months equivalent to normative PLF;

(b) O&M expenses for 1 month,

(c) Receivables equivalent to 2 months of fixed and variable charges for sale of electricity calculated on the targeted PLF;

(d) Maintenance spares of 15% at O&M expenses

The rebate will be applicable as follows:

1. For payment of bills of the generating company through letter of credit, a rebate of 2% shall be allowed.

2. Where payments are made other than through letter of credit within a period of one month of presentation of bills by the generating company, a rebate of 1% shall be allowed”

100.The provisions relating to the Tamil Nadu Commission regarding Working Capital and rebate are as follows:

“TNERC

TNERC order provides for the following working capital and rebate:

(a) Fuel Stock of one month

(b) O&M Expenses for one month

(c) Receivables equivalent to one month

(d) Rebate is allowed @ 1% if paid within one month”.

101.According to the learned Counsel for the State Commission, the State Commission has followed the same principles for a long period and on this basis, the order in 2009 was fixed.

102.When the State Commissions’ Regulations are provided specifically for this Working Capital and rebate, the State Commission cannot be compelled to follow the Central

Commission's Regulations. Therefore, the finding on this issue rendered by the State Commission, in our view, is valid and as per its Regulations and the same does not warrant any interference.

103.Accordingly, this issue is decided as against the Appellant.

104.The **9th and last issue** is with reference to the **application of matters in relation to the Plants set-up before impugned order including before 15.5.2006.**

105.According to the Appellant, the State Commission was not justified in applying the decisions on 16 items referred to in paragraph 8.2 of the impugned order relating to the CDM benefits, the reactive power charges, start up power etc., to the co-generating plants set-up before the impugned order including those set up before 15.6.2006 contrary to the Commission's earlier orders and 2008 Regulations.

106.In reply to this ground, the learned Counsel for the State Commission submitted that the main objection with regard to the Fuel Cost for the Plant set up within 15.5.2006 and 31.7.2012 is not sustainable since the basic purpose of fixing a two part tariff was only to index the fuel cost with regard to the fluctuation in fuel price. With regard to the grievance of the Plants set up before 15.5.2006, it is stated by the learned Counsel for the State Commission that the Appellants are raising the issue of 16 items which are non tariff items and

application of the same to all the co-generation plants irrespective of their date of commissioning is on the basis of the Regulation 6 which is a general provision which has been followed by the State Commission in the impugned order.

107.The Commission decided with the related issues which are as under:

“8.2 Related Issues

The following are the related issues for energy generation from Bagasse based cogeneration plants:

- 1. Transmission and wheeling charges*
- 2. Cross subsidy surcharge*
- 3. CDM benefits*
- 4. Reactive power charges*
- 5. Grid availability charges*
- 6. Adjustment of energy generated*
- 7. Scheduling and system operation charges*
- 8. Application fees and agreement fees*
- 9. Billing and payments*
- 10. Payment security and security deposit*
- 11. Power factor*
- 12. Metering*
- 13. Connectivity and Evacuation of power*
- 14. Energy purchase and wheeling agreement*
- 15. Scheduling of power generation*
- 16. Tariff review period / Control period”.*

108. Similar issue regarding applicability of the order has been decided by this Tribunal in its judgment dated 24.5.2013 in Appeal No.197 of 2012 and batch in the matter of Beta Wind Farm(P) Ltd Vs Tamil Nadu Electricity Regulatory Commission & others, etc.

109. This issue is decided accordingly.

110. Summary of Our Findings

- i) Issuance of consultative paper: This issue is decided in accordance with the judgement of this Tribunal dated 24.5.2013 in Appeal No.197 of 2012 & batch with certain directions to frame the Regulations for issuance of consultative paper in the suo-moto proceedings.**
- ii) Non-encouragement of promotional measures for non-conventional energy: The contention of the Appellant that there is no encouragement to Renewable Energy Cogeneration has no substance.**
- iii) Capital cost: The finding of the State Commission on this issue is set aside and the matter is remanded to the State Commission for fresh consideration. The Appellants are also directed to furnish the data sought by the State Commission regarding usage of steam in sugar production and power generation to**

enable the State Commission to decide appropriate apportionment of the Capital cost.

- iv) **Fuel cost:** We remand the matter to the State Commission to fix the correct fuel cost afresh after giving an opportunity to the parties to furnish further materials and in the light of the observations made by us in this judgement.

- v) **Plant Load Factor:** We reject the contention of the Appellant for determination of Plant Load factor on a 5 year average or setting off of generation below 55% in any year in any succeeding year in which the generation is above 55%.

- vi) **Incentive for generation beyond threshold Plant Load Factor:** The finding of the State on this issue is set aside and the issue is remanded to the State Commission for fresh determination after hearing all concerned and in light of the observations made by us in this judgment.

- vii) **O&M charges:** The finding of the State Commission is set aside and the matter is remanded to the State Commission for fresh determination in light of our observations.

viii) **Rebate: This issue is decided as against the Appellant as the finding of the State Commission is according to its Regulations.**

ix) **Applicability of the order on related issues to the plants set up before the date of the impugned order: This matter is decided according to the findings of this Tribunal in Appeal No.197 of 2012 and batch as against the Appellants.**

111.The Appeal is allowed to the extent indicated above and the matter is remanded to the State Commission for fresh determination on the issues indicated above after hearing all concerned at the earliest but not later than 180 days from the date of communication of this judgement.

112.Pronounced in the open Court on this **4th day of Sept.2013.**

(Rakesh Nath)
Technical Member

(Justice M. Karpaga Vinayagam)
Chairperson

Dated: 04th Sept. 2013

✓ ~~REPORTABLE/NON-REPORTABLE~~