

Appellate Tribunal for Electricity
(Appellate Jurisdiction)

Appeal No. 24 of 2010

Dated: 21st April, 2011

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

In the matter of

**Madhya Pradesh Power
Generation Company
Shakti Bhawan, Vidyut Nagar
Rampur, Jabalpur-482008**

... Appellant(s)

Versus

- 1. Madhya Pradesh State Electricity
Regulatory Commission
4th & 5th floor, Metro Plaza
E-5, Area Colony
Bittan Market
Bhopal-462016**
- 2. Madhya Pradesh Trading Co. Ltd.
Shakti Bhawan
Vidyut Nagar
Rampur, Jabalpur-482008**
- 3. Madhya Pradesh Poorv Kshetra
Vidyut Vitaran Company Ltd.
Block No. 7, Shakti Bhawan
Rampur, Jabalpur-482008**

4. **Madhya Pradesh Madhya Kshetra
Vidyhut Vitaran Company Ltd.
Bijti Nagar Colony
Nishtha Parisar
Govindpura Bhopal-462023**
5. **Madhya Pradesh Paschim Kshetra
Vidyut Vitaran Company Ltd.
GPH Campus Polo Ground
Indore-452015**
6. **Madhya Pradesh Power Transmission
Company Ltd.
Shakti Bhawsan, Block No. 3
Rampur, Jabalpur-482008**
7. **Madhya Pradesh State Electricity Board
Shakti Bhawan, Vidyut Nagar
Rampur, Jabalpur-482008Respondents**

Counsel for Appellant(s): Mr. M.G. Ramachandran
Ms Sneha Venkataramani
Ms Ranjitha Ramachandran
Ms Swapna Seshadri

Counsel for Respondent(s): Mr. S. Ravi Shankar
Mrs. Yamunah Nachair
Ms Surbhi Sharma
Mr. Ashok Upadhyay
Ms Garima Goswami
Mr. Anurag Sharma
Mr.A.Dvivedi
Mr. Praveen Jain
Mr. Gajendra Tiwari
Mr. Sanjay Sen
Ms Sikha Ohri
Ms Subhalakshmi
Ms Gunjan Gupta

JUDGMENT

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

Madhya Pradesh Power Generation Company Ltd is the Appellant. Madhya Pradesh State Electricity Regulatory Commission (State Commission) is the first Respondent. Other Respondents are Trading Company, Transmission Company and Distribution Companies.

2. Having aggrieved over the impugned order dated 17.6.2008 passed by the Madhya Pradesh State Electricity Commission, truing-up the finances of the Appellant for the tariff year 2006-07, the Appellant has filed the present Appeal. The relevant facts are as follows:

- (i) The Appellant is a generating Company. The Appellant, in addition to generation operates and manages some capacity which belongs to some

other States. The Respondent 2 M.P. Power Trading Co. Ltd. is engaged in the business of bulk purchase and bulk sale of electricity. Respondent No. 3,4 and 5 are the Distribution Licensees. The Appellant and Respondents 2 to 6 are all entities, which have succeeded to the function of State Electricity Board, pursuant to the reorganization of the said Board.

(ii) The State Commission in the year 2005, framed tariff regulations namely “MP State Electricity Regulatory Commission (Terms and Conditions for determination and generation of tariff) Regulations 2005” in regard to tariff determination of the generating Companies like the Appellant.

(iii) In accordance with the said Regulations, the Appellant filed a Petition being no. 149 of 2005

before the State Commission on 23.1.2006 for determination of multi-year generation tariff for the control period 2006-07 to 2008-09. In the said petition, the State Commission by the order dated 7.3.2006, issued a multi year tariff order for the above control period.

(iv) After the closure of the financial year 2006-07 and after the accounts of the Appellant have been audited, the Appellant filed a Petition being No.56 of 2008 on 31.7.2008 for truing-up of the generation tariff for the financial year 2006-07. The State Commission after observing the formalities, passed the impugned order dated 17.6.2009, deciding the said Petition. In the said order, the State Commission did not allow truing-up of the financials in respect of some of the claims. Hence the Appellant filed a review Petition RP No.40/2009 on 13.8.2009 before the State Commission. However,

the State Commission dismissed the said petition by the order dated 10.11.2009 holding that there are no valid grounds for review.

(v) Aggrieved by the main impugned order dated 17.6.2009, the Appellant has now filed this present Appeal.

3. The Learned Counsel for the Appellant has raised the following grounds as against the impugned order:

(i) The main MYT tariff order was passed on 07.3.2006. In that order, the State Commission proceeded on the basis of the Net Calorific Value for the tariff determination and adjustments of variable charges. But strangely, in the truing-up of the order dated 17.6.2009, the State Commission proceeded on the basis of the Gross Calorific Value. This change of methodology is utterly wrong.

(ii) The expenses on account of common service payable to State Electricity Board amounting to Rs.13.81 crores have been disallowed.

(iii) Normative interest on working capital on account of above disallowance of coal cost and common expenses payable to the Electricity Board towards the employees cost has also been disallowed.

4. In reply to the above, the Learned Counsel for the State Commission argued in detail contending that disallowance on these claims by the State Commission is perfectly justified.

5. In the light of the rival contentions, the following questions of law may arise for consideration in the present Appeal:-

(i) Whether the State Commission is justified in changing the methodology of calculation of coal consumption and cost of coal at the time of truing-up

of the finances as compared with methodology adopted at the time of initial tariff order?

(ii) Whether the State Commission is justified in not allowing the employees cost for the common expenditure on employees incurred by the State Electricity Board to the share of the Appellant?

(iii) Whether the State Commission is justified in not revising the normative interest on working capital pursuant to the revision in various elements of tariff occasioned on by the truing-up of the finances of the Appellant for the tariff year 2006-07 on account of the coal cost and common expenses ?

6. Let us now deal with these questions one by one.

7. The first question relates to the change of methodology adopted by the State Commission at the time of truing up.

According to the Appellant, the State Commission has changed the methodology for deciding on the coal quantum from the Net Calorific Value as adopted in the main tariff order to Gross Calorific Value in the truing-up order, without any justification or without making corresponding adjustments in the Station Heat Rate, which is not permissible as per settled law.

8. According to the State Commission, the Net Calorific Value is only approximation and since the Central Commission and other State Commissions, have been allowing coal cost on the basis of the Gross Calorific Value, the same stand had been adopted by the State Commission while allowing the coal cost in the truing-up order which is not wrong.

9. Let us now look into the factual background for proper appreciation on this issue. The Electricity Boards had been following the determination of the variable cost/fuel cost on the Net Calorific Value basis. The variable cost including the

variable cost adjustments for the Electricity board was being done by the State Commission on Net Calorific basis.

10. In the above formula/methodology, as approved by the State Commission, the Heat Rate considered was based upon the Net Calorific Value. The above methodology was continued to be applied even after unbundling of the Electricity board and vesting of generation functions with the Appellant w.e.f 1.6.2005.

11. The difference between Net Calorific Value and Gross Calorific Value is that the Net Calorific Value takes into account the latent heat used for converting latent moisture present in coal into vapor and is less than the Gross Calorific Value. The quantum of the coal required when calculated based upon Net Calorific Value is different from the quantum of the coal required when calculated based upon the Gross Calorific Value, in order to maintain the same Station Heat Rate. The Heat Rate can be described as the quantity of heat required to generate one unit of electrical energy and represented as Kilo Calories/Kilo Watt

Hours. The Heat Rate, according to the practice followed by the State Commission is monitored by consumption method and calculated on the following basis:

$$\text{Heat Rate} = \frac{[(\text{CV of coal} * \text{quantity consumed}) + (\text{CV of fuel oil} * \text{quantity consumed})]}{\text{units generated}}$$

12. The coal used inherently contains some amount of physical moisture as well as the latent moisture which contribute in reducing the rate of heat generated upon firing the coal used in the plant as opposed to the amount of heat generated upon firing the said coal in laboratory conditions. The Gross Calorific Value corrected with total moisture of the coal takes into consideration the physical moisture as present in the coal. On the other hand, the Net Calorific Value takes into consideration the latent moisture present in the coal, which is determined in specific laboratory only. Therefore, a difference of approximately 180-200 kCal/Kg in Calorific Value exists between the Gross Calorific Value and Net Calorific Value.

13. Admittedly, the State Commission in the main tariff order dated 7.3.2006 had considered the Net Calorific Value for calculation of the coal cost. In that order, the State Commission has dealt with the determination of the energy charges for the thermal power stations. The State Commission in the said order after considering the transit loss decided to apply the Net Calorific Value instead of Gross Calorific Value. The relevant observations made vide the tariff order dated 7.3.2006 are as under:

“3.16 The Commission instead of GCV of coal considers NCV for computation of coal cost. NCV accounts for the loss of heat content on account of reasons mentioned by the petitioner.”

14. According to the Appellant, the decision to base determination on Net Colorific Value basis for computation of coal cost was a conscious decision by the State Commission. In other words, the decision to base determination for computation of coal cost which was a conscious decision taken by the State Commission taking into consideration that no additional losses of heat content on account of stacking losses

can be allowed. However, in the impugned order which is a truing up order, the State Commission has varied basis of the calculation of the coal cost from Net Calorific Value to Gross Calorific Value without taking into consideration adjustments of the heat rate. As a result, the quantum of coal allowed in the truing-up is lesser than the actual quantum of coal allowed and used in corresponding tariff order. Correspondingly, the amount of coal cost allowed is lesser than the amount as allowed as per the tariff order. According to the Appellant, this has resulted in a huge financial loss to the Appellant.

15. In this context, the decision of the State Commission in the impugned order dated 17.6.2009 with regard to adoption of Gross Calorific Value for undertaking truing-up needs to be considered. The relevant observations in the impugned order is as follows:

“The Petitioner vide its letter No.07-12/CP-MPPGCL/MPERC/TU-FY07/107 dated 9.02.2009 and in the subsequent meeting held with its Officers on 24 Feb, 2009 at the Commission’s office, submitted

that the details of calorific value of coal as mentioned in the true-up Petition are based on the existing method of determination of Calorific Value. MPPGCL further informed that the calorific value of coal mentioned in the true-up Petition for FY 2006-07 for the Thermal Power Stations is GCV corrected to total moisture. MPPGCL has estimated the NCV from the above data as per empirical method provided in INDIAN STANDARD 1350 (Part II) – 1970 (1st revision). MPPGCL has submitted the month wise/power house-wise summary of figures to the Commission. MPPGCL has also submitted the source data received from respective sites, in respect of daily coal analysis for the three power stations. In MYT generation regulation, clause 3.13 indicates that the energy (variable) charges shall cover fuel cost and shall be computed on the basis of gross station heat rate and gross calorific value of primary fuel.

2.27 Hence the Commission concludes that the Calorific Value filed by the petitioner in the Petition is Gross Calorific Value of Coal on as fired basis in Kcal/kg. The Commission has considered the same value in this true up exercise”.

16. The Learned Counsel for the State Commission during the course of hearing, has stated that the Regulations provided for calculation of the coal cost only on the basis of Gross Calorific Value but the State Commission by mistake had adopted the Net Calorific Value in the main tariff order which has been rectified in the impugned order. Admittedly, the

impugned order dated 17.06.2009 does not refer to this reason for rectification.

17. As pointed out by the Learned Counsel for the Appellant it is only in the review order dated 10.11.2009 that the State Commission has stated that it had committed an error in the impugned order. The relevant extracts from the review order dated 10.11.2009 are as under:

“(a) The Commission has observed from the correspondence made with the petitioner and also during the discussions held with the petitioner that the petitioner, in its true up petition, had mentioned only calorific value of the coal without specifying whether Gross Calorific Value (GCV) or Net Calorific Value (NCV).

(b) The Commission while processing the true-up petition asked the petitioner to clarify the issue. A meeting was also convened in the office of the Commission on

24th February, 2009 with the senior officers of the petitioner to find out correct information. The petitioner during the course of the meeting had informed the office of the Commission that the calorific value of coal as mentioned in the true-up petition for FY 2006-07 is GCV corrected to total moisture.

(c) It is further noted by the Commission that the petitioner has neither claimed the NCV of coal in the true-up petition nor mentioned anywhere at anytime in its reply and discussions held on this issue right from the filing of the petition till the issue of the said true-up order.

(d) The Commission has further drawn the attention of the petitioner to the fact that the Commission's tariff order may be corrected in light of audited annual accounts and the provisions under the Regulations while truing up of that order. The provisions of the Regulations can be changed only through notification of its

amendments or revision only after adopting a procedure specified by the Commission.

- (e) *The Commission has also observed during the course of the motion hearing that the petitioner had never challenged the provisions of MYT Regulations notified by the Commission for the control period FY 2007-08 to FY 2009-10. Even the petitioner had not represented anything regarding the provisions of GCV of coal while issuing MYT Regulations for the new control period.”*

18. Let us now examine the relevant Regulation 42 which is reproduced below:

“42. Energy Charges”

“

i. Rate of Energy Charges (REC) shall be the sum of the cost of normative quantities of primary and secondary fuel for delivering ex-bus one kWh

of electricity in Rs/kWh and shall be computed as under:

$$REC = \frac{100\{P_p \times (Q_p)_n + P_s \times (Q_s)_n\}}{(100 - (AUX)_n)} \text{ (Rs./kWh)}$$

Where, P_p = Price of primary fuel namely coal or lignite or gas or liquid fuel in Rs./Kg or Rs./cum or Rs./litre, as the case may be.

$(Q_p)_n$ = Quantity of primary fuel required for generation of one kWh of electricity at generator terminals in Kg. or litre or cum, as the case may be, and shall be computed on the basis of normative Gross Station Heat Rate (less heat contributed by secondary fuel oil for coal/lignite based generating stations) and gross calorific value of coal/lignite or gas or liquid fuel as fired.

P_s = Price of Secondary fuel oil in Rs./ml,

$(Q_s)_n$ = Normative Quantity of Secondary fuel oil in ml/kWh as per clause 36, as the case may be, and

AUX_n = Normative Auxiliary Energy Consumption as % of gross generation as per clause 36, as the case may be.

ii. Adjustment of rate of energy charge (REC) on account of variation in price or heat value of fuels

Initially, Gross Calorific Value of coal/lignite or gas or liquid fuel shall be taken as per actuals of the preceding three months. Any variation shall be adjusted on month to month basis on the basis of average Gross Calorific Value of coal/lignite or gas or liquid fuel in stock, received and burnt and weighted average landed cost incurred by the generating company for procurement of coal/lignite, oil, or gas or liquid fuel, as the case may be for a power station. In its bills, generating company shall indicate rate of energy charges at base price of primary and secondary fuel specified by the commission and the fuel price adjustment to it separately. No separate petition needs to be filed with the Commission for fuel price adjustment. In case of any dispute, an appropriate application in accordance with Madhya Pradesh Electricity Regulatory

Commission (Conduct of Business Regulations), 2004, shall be made before the Commission”.

19. It is clear from the Regulation 42 that quantity of coal has to be determined on the basis of Gross Station Heat Rate and Gross Calorific Value of coal. The Clause ii of the Regulation regarding adjustment of rate of energy charges on account of variation in price or heat value of fuel also clearly indicates that Gross Calorific Value of coal only has to be used for working out variation in price and heat value of fuel.

20. The Regulation 36 also indicate Gross Station Heat rate for the power stations of the Appellant for the MYT control period from FY 2006-07 to 2008-09 as under:-

Gross Station Heat Rate (Kcal/kWh)

Station	FY 2007	FY 2008	FY 2009
ATPS, Chachai-Complex	3573	3573	3573
STPS, Sarni-Complex	2960	2926	2873
SGTPS, Birshinghpur-Complex	2825	2800	2757

The Regulations 2005 also define “Gross Calorific Value” and “Net Calorific Value” is not defined or mentioned anywhere in the Regulation. Thus the Regulations provide for only Gross Calorific Value and the Gross Station Heat Rate corresponding to Gross Calorific Value.

21. Strangely in the main order dated 7.3.2006 while the State Commission adopted the Station Heat Rate as per the Regulations as tabulated above, it considered Net Calorific Value of coal instead of Gross Calorific Value for determining the quantity of coal and variable charges of coal. In this order the State Commission also did not give any indication that it was deviating from the Regulations or gave any justification for deviating from the Regulations in adopting NCV instead of GCV. Therefore, in main tariff order the State Commission did not apply the regulations correctly. However, the main tariff order is not under challenge in the present Appeal. Other than recording that the State Commission has not been careful

while deciding the main tariff order, we cannot go into the matter any further, as far as the main tariff order is concerned.

22. Learned Counsel for the Appellant has referred to Regulation 13 regarding fuel cost adjustment indicating application of formula for VCA charges as per its order dated 29.11.2002. The formula specified in its order dated 29.11.2002 is for recovery of additional charges for adjustment of tariff on account of fuel related cost of electricity generation, differential power purchase cost, change on account of unpredicted and unforeseen cost not envisaged at the time of tariff fixation. The approved formula is also subject to review from time to time as the State Commission may deem it fit. We notice that this formula was given in the order dated 29.11.2002 for adjusting the tariff of the Electricity Board in its integrated functions. However, the order did not specify any station heat rate corresponding to Net Calorific Value. It also did not specifically state that Net Calorific Value is to be used in place

of Gross Calorific Value. Therefore, the relevant regulations here are Regulation 42 giving clearly formula for determination of energy charges and adjustment of rate of energy charges on account of variation in price or heat value of fuel and Regulation 36 specifying the Gross Station Heat Rate. The Regulation only define Gross Calorific Value and Net Calorific Value is not indicated or defined. In our view the State Commission has correctly determined the quantity of coal and cost of fuel according to the Regulations taking both Gross Calorific Value of coal and Gross Station Heat Rate as per the Regulations. In our view if in the main order an error has been committed by the State Commission by not following the Regulations without assigning any reasons, the same error cannot be perpetuated and is required to be corrected in the true up .

23. The Learned Counsel for the Appellant cited judgment of this Tribunal in Appeal No. 100 of 2007 dated 4.12.2007 ELR (APTEL) 193- North Delhi Power Ltd. vs. DERC and Ors. In our

view, this judgment is of no use to the Appellant as in the present order the State Commission has correctly done the true up as per the Regulations. Accordingly we hold that the true up order is correct and according to the Regulations. Thus this point is answered against the Appellant.

24. According to the Appellant, in spite of the fact that employees cost which relates to the expenses of the Electricity Board were paid by the Appellant as per the Statutory notification of the State Government dated 31.5.2005 and 3.6.2006, the State Commission disallowed the share of the Appellant which is not correct. According the to Respondent Commission, Clause 38 of the Madhya Pradesh Electricity Regulation Commission (Terms and Conditions for Determination of Generation Tariff) Regulations 2005, provides the normative operation and maintenance expenses as per normative Basis and accordingly the State Commission has allowed the operation maintenance expenses as per the said regulations in the main tariff order passed on 7.3.2006 which

was never challenged by the Appellant and therefore, the findings on this aspect by the State Commission can not be found fault with.

25. As correctly pointed out by the Learned Counsel for the State Commission, the MYT order dated 7.3.2006 contains detailed reasons for not allowing the common employees expenses separately by the State Commission. Admittedly, the Appellant has neither filed review petition before the State Commission nor preferred any Appeal before this Tribunal as against the disallowance of said common expenses as such it has attained finality. In the true-up order dated 17.6.2009, the State Commission allowed the actual operation and maintenance expenses which is said to be more than the normative operation maintenance expenses. The particulars are given below:

Normative O&M expenses as per Regulation =Rs.299 Cr.

Actual O&M expenses allowed in true-up order = Rs.315 Cr.

Additional O&M expenses allowed in true-up order=Rs.16 Cr.

26. The reasons for not allowing the electricity board common expenses have been described in Para 3.20 (g) of the impugned order which is as follows:

“Para 3.20: The common expenses by MPSEB amounting to Rs.13.81 crores are not allowed. The Commission had not been allowing these expenses to the Distribution Companies also since the erstwhile MPSEB had already been disintegrated into successor Companies and one of them has been entrusted with the responsibility of a Trading Company i.e. MP Power Trading Company”

27. In view of the above we do not find any merit in this contention. Accordingly, this point is answered against the Appellant.

28. The next question relates to interest on working capital due to increase in cost of fuel and common expenses of the Electricity Board. In view of our findings on the cost of fuel and common expenses of the Electricity Board, the Appellant is not entitled to any increase in interest on working capital.

29. Accordingly, this point is answered against the Appellant.

30. Summary of our Findings:

(i) The State Commission has correctly worked out the cost of coal taking into account the Station Heat Rate and Gross Calorific Value of coal according to the tariff regulations. In the main tariff order the State Commission had adopted Net Calorific Value contrary to the Regulations while adopting the Station Heat Rate according to the Regulations without even indicating that it was deviating from the Regulations and without giving any justification for deviation from the Regulations. In the true up order the State Commission has corrected the error committed in the main order. Incorrect application of the Regulation in main order cannot be perpetuated in the true up order.

Accordingly, this issue is decided against the Appellant.

(ii) Regarding the common expenses including the employees cost , already orders have been passed by the State Commission in the main tariff order dated 7.3.2006 which has not been challenged and as such the same has attained finality. This can not be interfered with in this Appeal which is confined to the impugned order dated 17.6.2009 as above.

(iii) In view of our above conclusion, the Appellant is not entitled to any increase in the interest on working capital.

31. In the light of our above findings, the Appeal is dismissed.

No order as to cost.

**(Rakesh Nath)
Technical Member**

**(Justice M. Karpaga Vinayagam)
Chairperson**

Dated: 21st April, 2011
REPORTABLE/NON-REPORTABLE