

WBPDCI TARIFF ORDER DATED 29/03/2005**ORDER****OF THE****WEST BENGAL ELECTRICITY REGULATORY COMMISSION
IN****Case No. TTP - 5/05 - 06****AND****Case No. TP - 19/05 - 06****IN RE THE TARIFF PETITION OF THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED FOR THE YEAR 2005-2006 UNDER SECTION 64(3)(a) READ WITH SECTION 62(1) OF THE ELECTRICITY ACT, 2003.****CHAPTER - 1****INTRODUCTION**

1.1 The West Bengal State Electricity Regulatory Commission (Referred to as the Commission hereafter) was constituted by the State Government of West Bengal u/s 17 of the Electricity Regulatory Commissions Act, 1998 and the Commission was empowered u/s 22(1) of the latter Act, inter-alia, to determine tariff for electricity, wholesale, bulk, grid or retail as the case may be in the manner provided in Section 29 of the said Act. Subsequently, the Electricity Act, 2003 was passed, repealing the Indian Electricity Act, 1910, the Electricity (Supply) Act, 1948 and the Electricity Regulatory Commission Act, 1998, with certain savings provided in Section 185 of the Electricity Act, 2003. Section 82(1) of the last named Act has provided, inter-alia, that a State Electricity Regulatory Commission, established by a State Government under Section 17 of the Electricity Regulatory Commission Act, 1998 and functioning as such immediately before the appointed date shall be the State Commission for the purposes of this Act. Since the West Bengal Electricity Regulatory Commission fulfilled this condition, the latter has become the State Commission also under the Electricity Act, 2003.

1.2 Section 86 of the Electricity Act, 2003 enumerates the functions of the State Commissions. Among others, one of the functions of a State Commission, as per Section 86(1)(a) is determination of tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State. Besides, Section 62(1)(a) of the Act specifically lays down that the appropriate Commission shall determine the tariff in accordance with the provisions of this Act for, inter-alia, supply of electricity by a generating company to a Distribution Licensee. Therefore, this Commission is duly empowered by the law to determine the tariff(s) of a generating company.

1.3 The West Bengal Power Development Corporation Ltd. (referred to as WBPDCI hereafter), which was constituted in 1985 under the Companies Act, 1956 is a generating company as defined by clause (4-A) under Section 2 of the Electricity (Supply) Act, 1948, and thereafter also in terms of Section 2(28) of the Electricity Act, 2003. The generation tariff of the power generated by the WBPDCI is therefore to be determined by the Commission. The tariff petitions of WBPDCI for determination of its tariff for the years 2000 - 2001, 2001 - 2002, 2002 - 2003, 2003 - 2004 and 2004 - 2005 have, as a matter of fact, already been disposed of by the Commission. The Commission has also passed Orders on a number of FPPCA claims filed by WBPDCI in terms of the relevant tariff Orders.

1.4 While passing the tariff orders till 2004 – 2005, the Commission was guided by, apart from the provisions of Section 29 of the Electricity Regulatory Commission Act, 1998, the provisions contained in Clause 43 under Chapter – IV of the WBERC (Conduct of Business) Regulations, 2000, which was notified by Notification No. 1/WBERC dated 3rd February 2000. The Electricity Regulatory Commissions Act, 1998, along with the Indian Electricity Act, 1910 and the Electricity (Supply) Act, 1998 was repealed by the Electricity Act, 2003 which came into force from 10.06.2003. But when the last tariff petition, i.e., the petition for 2004 – 2005 was filed, the new Regulations under the Electricity Act, 2003 were not yet available. Hence, availing of the proviso to Section 61 of the Electricity Act, 2003, the tariff petition for 2004 – 2005 was treated by the terms and conditions for determination of tariff under the Electricity Regulatory Commission Act, 1998.

1.5 While treating the tariff petition for 2005 – 2006, the Commission has guided itself by, apart from the provisions in Section 62 (1)(a) and 64 of the Electricity Act, 2003, the provisions contained in Chapter – III – particularly Regulation 38 and Schedule III pertaining to Regulation 38 – of the WBERC (Conduct of Business) Regulations, 2003 of the Commission which was notified by Notification No. 12/WBERC dated 12th November 2003 (which came into force with effect from 1st March 2004 which was the date of publication of the said Notification in the Official Gazette).

1.6 The WBPDCCL submitted on 30th November 2004 a petition for determination of its generating station-wise tariff for the year 2005 – 2006. On examination of the contents of the petition, it was found that information on a number of items that are relevant and are required to be furnished, had not been submitted in the same petition. A hearing as required under Section 64(3)(b) of the Electricity Act, 2003, was given to the tariff petitioner on 20th December 2004 and it was held that the tariff petition had become inaccurate and inappropriate to a significant extent due to absence of some vitally important data / information required by the WBERC (Conduct of Business) Regulations, 2003 and the WBERC (Tariff) Regulation, 2003. The petition was rejected by the Commission by an Order dated 21st December 2004 and the WBPDCCL was asked to submit its tariff petition within 4 (four) weeks' time with all the data / information that had been found missing. The WBPDCCL was given the liberty to submit additional information, which according to them would be useful for a proper appreciation of their tariff proposal by the Commission. While passing that order, it was made clear that the Commission had not gone into the merits of that tariff petition.

1.7 Accordingly, the WBPDCCL resubmitted its tariff petition on 17th January 2005. The resubmitted tariff petition was admitted by the Commission, which then directed the tariff petitioner to publish a gist of the petition in a proforma prescribed in Schedule – III pertaining to Regulation 38 (1) of the WBERC (Conduct of Business) Regulations, 2003. The gist was published in 4 leading dailies – 2 in English and 2 in Bengali on 22nd January 2005. The gist gave some salient features of the tariff proposal and called for comments and objections, if any, from all stakeholders as also from the members of the public within 30 days from the date of publication of the gist in the newspapers. The comments and objections received from the stakeholders, interested persons and members of the public have been recorded and described in Chapter 3 hereafter.

1.8 On the issue of the modalities of dealing with the instant tariff petition with specific reference to hearing, it is to be noted that while issuing tariff orders under Section 64(3)(a) of the Electricity Act, 2003 read with other relevant Sections *ibid* in 2004 – 2005, the Commission did not give any hearing to either the licensees / generating companies, or to the members of the public, or to the objectors. This was challenged before the Hon'ble High Court at Calcutta. By an order and judgement dated 4th October 2004 in W.P. No. 16166 (W) of 2004 (Rohit Ferro Tech. Pvt. Ltd. & Ors. – vs – West Bengal Electricity Regulatory Commission & Ors.), Hon'ble Justice Mr. P. C. Ghosh held that no hearing was to be given while determining tariff under the Electricity Act, 2003. Subsequently, this order and judgement have been affirmed by the Division Bench of the Hon'ble High Court at Calcutta, comprising of Hon'ble Justice Mr. Alope Chakrabarti and Hon'ble Justice Mr. S. P. Talukdar in an order dated 25th February 2005 in appeal case no. AST 2295 of 2004 (Rohit Ferro Tech. Pvt. Ltd. & Ors. –vs- West Bengal Electricity Regulatory Commission & Ors.). Therefore, in accordance with the provisions of law and in compliance with the above spoken orders of the Hon'ble High Court at Calcutta, no oral hearing has been given by the Commission to the tariff petitioner, or anyone else while issuing this instant tariff order for West Bengal Power Development Corporation Limited for the year 2005 – 2006.

CHAPTER - 2

THE CASE OF WBPDCCL 2005 - 2006

2.1 The petition for revision of tariff applicable to the year 2005 – 2006 has been filed by the West Bengal Power Development Corporation Limited (WBPDCCL) in terms of Clause 3.1 and 3.2 of the West Bengal Electricity Regulatory Commission (Tariff) Regulations, 2003. In terms of these Regulations, all the Licensees or Generating Companies shall provide to the Commission the details of calculation along with other information and particulars in terms of the West Bengal Electricity Regulatory Commission (Conduct of Business) Regulations, 2003 in the manner prescribed therein along with requisite fees, etc. The WBPDCCL has submitted the Tariff Petition power station-wise in terms of those Regulations.

2.2 WBPDCCL has stated that it needs to recover the increased cost over the tariff determined by the Commission by its Order dated 3rd June 2004 for the financial year 2004 – 2005. It has pointed out that power utilities are statutorily required to provide critical services and must be able to finance their ongoing operations including essential repairs and maintenance and attract necessary amount of investment for creation of capacity to protect the consumers' interest. The WBPDCCL has also stated that any ad-hoc disallowance of costs results in non-recovery / under-recovery of money actually spent and therefore, impairs the utility's capacity to operate smoothly.

2.3 The Tariff Petition states that it is based on projections of generation for 2005 – 2006 which, in turn, is based on the overall demand of WBSEB during the whole of 2003 – 2004 and first 6 months of 2004 – 2005, as also on the target determined by the Commission for the year 2004 – 2005. On this basis, the WBPDCCL has projected a generation of 6733 MU for Kolaghat with a projected PLF of 61%, 3780.378 MU for Bakreswar with a projected PLF of 68.50%, generation of 1798 MU from Bandel with a PLF of 38.73% and generation of 1262 MU from Santaldih with a PLF of 30%.

2.4 The WBPDCCL has pointed out that after the introduction of Availability Base Tariff, the earlier PLF standard of 68.5% for the central generation has been increased by the CERC. Since WBPDCCL does not come under the purview of ABT, they have retained the PLF level of 68.5% while projecting generation from Bakreswar, and further suggested that there should be an incentive in case the Commission feels that the PLF for Bakreswar should be increased from 68.5% to 72%.

2.5 It has also suggested that in the absence of any incentive, but simultaneous increase of the PLF, WBPDCCL should be allowed to export the additional power generated at Bakreswar to outside the Eastern Regional Grid.

2.6 It has also stated that while projecting the target generation for 2005 – 2006, loss of generation due to non-drawal by WBSEB has also been taken into consideration. According to WBPDCCL, the loss of generation causes out of the above fact during the first 6 months of 2004 – 2005 is of the order of 340.802 MU for Kolaghat, 171.546 MU for Bakreswar, 105.445 MU for Bandel and 15.775 MU for Santaldih.

2.7 It has been pointed out that the WBPDCCL has already proposed derating of Bandel Thermal Power Station and has indicated that their proposal for derating has been referred to the Central Electricity Authority by the Commission.

2.8 The WBPDCCL has made an appeal that the entire Fixed Costs incurred by the WBPDCCL should be allowed to be recovered at the projected generation level because the generation targets are fixed entirely on the basis of demand by WBSEB.

2.9 The WBPDCCL has requested for allowing recovery of Fixed Costs based on the target generation level in 12 monthly equal instalments for 2005 – 2006 as had been done in the earlier Tariff Order. However, adjustment for recovery of Fixed Costs based on the PLF in respect of the shortfall in Kolaghat, Bandel and Santaldih along with Bakreswar should be done on yearly basis instead of quarterly rolling month basis.

2.10 The WBPDCCL has pleaded that there should be a system of giving incentive which it has quantified as 0.7% of Paid and Subscribed Capital for each percentage point increase of PLF above the normative level of PLF of 68.5% per year.

2.11 The WBPDCCL has submitted a projection of Auxiliary consumption for different power stations for the year 2005 – 2006 as follows:

Kolaghat	10.5%
Bandel	9.5%
Bakreswar	10.74%
Santaldih	11%

The generating company stated that the projections have been made on the trend of Auxiliary consumption in the earlier years.

2.12 The WBPDCCL has pointed out that it has a number of impediments on the front of consumption of fuel and operation of power stations, which is why the actual consumption necessarily conform to the normative parameters. It is stated that WBPDCCL is not connected to any dedicated colliery of Coal India Limited; it receives various grades of coal from as many as 5 (five) different coal companies; variety of coal quality made it difficult to maintain boiler combustion on a stable regime, and further in view of adverse peak / off-peak variation of load demand, it is usually not possible to sustain the rated operation of units.

2.13 On the basis of actual consumption trend in 2004 to 2005, the station heat rates have been projected by the WBPDCCL for the year 2005 – 2006 as follows:

Kolaghat	2851.250 K.Cal / Kg.
Bakreswar	2675.000 K.Cal / Kg.
Bandel	2916.675 K.Cal / Kg.
Santaldih	3700.000 K.Cal / Kg.

2.14 The WBPDCCL has stated that its computation of fuel costs for 2005 – 2006 is based on actual parameters. The average coal and oil price have been considered on prevailing price basis, which has registered a considerable rise in 2004 – 2005 compared to those in 2003 – 2004.

2.15 It has also stated that fuel related costs in some of the power stations are projected to go up in 2005 – 2006. In two power stations of Bandel and Santaldih, it has not projected any increase in the fuel related costs. But in Kolaghat and Bakreswar, these are anticipated to go up by 3.57% and 30.89% respectively.

2.16 The WBPDCCL has submitted that the estimation of Fixed Costs for Bandel and Santaldih Thermal Power Station is based on the book value of assets and liabilities as on 1st April 2001, the deemed effective date from which these two thermal power stations have been transferred from West Bengal State Electricity Board to the West Bengal Power Development Corporation. It has made a plea that the estimates, in question, will undergo changes in case it is subsequently found that these two power stations will be transferred to WBPDCCL at a price other than book value as on 31st March 2001. In such an eventuality, the effect of the transfer value should be allowed to be basis on to the tariff.

2.17 For Operation and Maintenance Costs, the company has indicated following percentage of rise of Operation and Maintenance Costs over the revised estimated for 2004 – 2005 power station-wise.

Kolaghat	19.63%
Bakreswar	15.00%
Bandel	10.02%
Santaldih	04.98%

2.18 The WBPDCCL has pointed out that it has not yet been able to repatriate non-optee employees from WBSEB to WBPDCCL mainly for the difficulty of the replacement of the personnel who would have to go back to WBSEB.

2.19 It has projected the employees' costs for 2005 – 2006 for its 4 (four) power stations as follows:

Kolaghat	Rs. 34.65 Crores
Bakreswar	Rs. 10.63 Crores
Bandel	Rs. 26.55 Crores
Santaldih	Rs. 21.53 Crores.

2.20 Under depreciation, the WBPDCCL has pointed out that it has followed the direction of the Commission given in respect of depreciation in the tariff Order dated 12th July 2001 to the effect that depreciation should be computed on 100% costs up to 90% of costs. WBPDCCL states that it has followed the above direction and projection of depreciation for 2005 – 2006 has been made accordingly at appropriate rates.

2.21 The WBPDCCL stated that it has followed the direction of the Commission given in the Tariff Order dated 3rd June 2004 and has tried to repay as much of costly loans as possible and substituted the same by cheaper loans. It has already repaid the loans borrowed from IDBI, IFCI, and LIC during 2004 – 2005. 13% interest bearing bond will mature in 2007 and there has been reduction in the rate of interest from 16.53% to 10.75% on PFC loan. It has also taken up the matter of Government loan with the State Government. It has calculated interest and financing charges for 2005 – 2006 and has come up with the following statistics power station-wise.

Kolaghat	Rs. 125447.12 Lakhs.
Bakreswar	Rs. 66283.11 Lakhs.
Bandel	Rs. 33642.79 Lakhs.
Santaldih	Rs. 27964.57 Lakhs.

2.22 The WBPDCCL has stated that for the financial year 2004 – 2005, shortfall based on the loan orders received till the date of filing of the tariff petition is of the order of Rs. 76.66 Crores. It has not claimed, however, shortfalls for the financial year 2004 – 2005 as the financial year 2004 – 2005 is not yet over and it has submitted that further shortfall, if any, will be claimed in the tariff petition for 2006 – 2007. It has given detailed calculation showing separately the loan orders received subsequent to the filing of the earlier tariff petition as attachment to the Statement of Loans and Calculation of Interest thereon (Form 'C'). It has also given detailed break-up showing EMI payable to PFC Limited after re-schedulement.

2.23 According to the WBPDCCL, there will be small increase in the Administrative and General Expenses in the year 2005 – 2006 compared to the year 2004 – 2005. The amounts claimed on this score for Kolaghat for 2005 – 2006 is Rs. 7.92 Crores, Rs. 3.83 Crores for Bakreswar, Rs. 2.66 Crores for Bandel and Rs. 3.63 Crores for Santaldih.

2.24 Regarding Reasonable Return, the WBPDCCL has stated that disallowance of rate of return of 16%, which had been claimed by the Company earlier, has resulted in under-recovery of Reasonable Return amounting to Rs. 668.28 crores during the period from 2000 – 2001 to 2004 – 2005. In this petition, however, the WBPDCCL has calculated Reasonable Return on the basis of Clause 2 of Schedule III of the West Bengal Electricity Regulatory Commission (Tariff) Regulations, 2003. According to WBPDCCL, Reasonable Return at the rate of 14% comes to Rs. 116.66 Crores for Kolaghat, Rs. 49.64 Crores for Bakreswar, Rs. 7.53 Crores for Bandel and Rs. 10.96 Crores for Santaldih Thermal Power Stations. However, it has also pointed out that the Returns for Bandel and Santaldih Thermal Power Station have been calculated on the basis of inter-unit balance taken from WBSEB as on 31st March 2001. The WBPDCCL has also stated that the calculation of Reasonable Return is subject to finalisation of the purchase considerations at which power stations at Bandel and Santaldih will be transferred from WBSEB to WBPDCCL and fixing of Equity Investment for these two power stations.

2.25 The WBPDCCL has worked out the annual revenue requirements for the year 2005 – 2006 for all the four power stations as follow:

Kolaghat	Rs. 1315.9299 Lakhs
Bakreswar	Rs. 767.5294 Lakhs

Bandel	Rs. 331.6567 Lakhs
Santaldih	Rs. 280.3108 Lakhs

2.26 It has also given Cash Flow Statement in details in the required format.

2.27 The Company has also prayed that it should be allowed to adjust the fuel purchase cost variation in future through the usual fuel costs adjustment formula. It has also prayed that in addition to the periodicity, as may be prescribed by the Commission in this behalf, the Company should be allowed to approach the Commission as and when there is increase in price of fuel by more than 5%.

2.28 It has also prayed that the Company should be allowed to claim interest on further loans or further interest arising out of any change in the terms and conditions of the existing loans given by the Government of West Bengal and applicable for the financial year 2004 – 2005 and 2005 – 2006.

2.29 The WBPDCCL has also submitted to the Commission that any tax liability that may arise during the course of year, should be allowed as a pass through to the tariff.

CHAPTER - 3

OBJECTIONS

Objections against the Tariff Petition of West Bengal Power Development Corporation (2005 - 2006)

3.1 A notification dated 22nd January 2005 was issued by West Bengal Power Development Corporation Ltd., (i.e. WBPDCCL) as per direction of the Commission, providing the gist of the tariff petition of the Corporation and seeking objections etc. from all interested parties within 30 days from the date of publication of the gist. The gist was published in 4 (four) leading dailies of Kolkata. In response to the notification, 1 (one) objector i.e., West Bengal State Electricity Board (WBSEB) has submitted objections in writing to the Commission within the given time. The objections of this objector are discussed below:

3.2 A number of objections have been recorded by West Bengal State Electricity Board (i.e. WBSEB), which is a statutory body constituted in term of Sec. 5 of the Electricity (Supply) Act, 1948. WBSEB has been purchasing electricity from WBPDCCL's thermal power station at Kolaghat in accordance with an agreement of 4th May 1991. WBSEB is also purchasing power from the latter's thermal power stations at Bakreswar, Bandel and Santaldih though formal agreements on this score are yet to be made between the Board and the Corporation.

3.3 WBSEB has pointed out that in the tariff petition filed by WBPDCCL for the year 2005 – 2006, the latter has mentioned that in the projection, generation of all the power stations are based on the overall demand of the WBSEB during 2003 – 2004 and first six months of 2004 – 2005, as well as target fixed by the Hon'ble Commission for the year 2004 – 2005, except for Bakreswar. However, the projections made by the WBPDCCL for the year 2005 – 2006 in respect of all the 4 (four) power stations are not commensurate with the generation WBPDCCL has already achieved between April 2004 and January 2005. WBSEB has observed that WBPDCCL has achieved more than targeted PLF fixed by the Commission for the year 2004 – 2005 in respect of all the power stations other than Bakreswar Thermal Power Station where WBPDCCL is lagging behind the targeted PLF marginally.

In view of the above, WBSEB has urged that fixed cost should be allowed based on PLF as already achieved by WBPDCCL over the period mentioned above.

3.4 WBSEB has further pointed out that WBPDCCL, in its petition, has stated that WBPDCCL can achieve higher PLF at Kolaghat, Bandel and Santaldih Power Stations to some extent subject to allowing incentive or permitting export of power beyond the region. WBSEB has contended that WBPDCCL requires prior approval of Government of West Bengal for selling of power to any Utility other than WBSEB.

3.5 WBSEB has also pointed out that the WBPDCCL has calculated fuel cost of Kolaghat Thermal Power Station on the basis of estimated heat rate of 2851.25 K. cal / Kwh. However, the

Commission, in its Tariff Order for 2004 – 2005 for Kolaghat Thermal Power Station, has considered a heat rate of 2735.38 K.Cal / Kwh. WBSEB has submitted that calculation of fuel cost of Kolaghat Thermal Power Station for the year 2005 – 2006 should be based only on such heat rate as has been considered by the Commission for the year 2004 – 2005.

WBSEB has similarly urged that instead of considering the heat rate furnished by WBPDCCL in its tariff petition in case of other Power Stations viz. Bakreswar, Bandel and Santaldih, the Commission might consider the heat rate already fixed by it for 2004 – 2005.

WBSEB has further strengthened its contention by mentioning that in case of a new power station like Bakreswar, fuel cost should be considered based on such heat rate of 2650 K. Cal / Kwh as per the Regulations of Central Electricity Regulatory Commission.

3.6 WBSEB has also questioned WBPDCCL's contention that incentive should be payable for availing benefit of higher PLF from Bakreswar Thermal Power Station beyond 68.5%. WBSEB has reminded that based on CERC Regulations on Terms and Conditions of Tariff dated 26th March 2004, the eligible target PLF for incentive is based on schedule generation beyond 80%.

3.7 WBSEB has further pointed out from the summarised Revenue Requirement as furnished by WBPDCCL in its tariff petition for 2005 – 2006, that WBPDCCL has asked for a 5% increase in the Employees' cost over 2004 – 2005. In this context, WBSEB have mentioned that the increase in Employees' cost for 2005 – 2006 over 2003 – 2004 reckons to be 13.74%. No detailed element wise cost break-up of employees' cost has been furnished and therefore, reasons of such variation can not be ascertained. Moreover, whether the effects of retiring employees' costs were taken into account is not clear.

3.8 WBSEB has further prayed that in respect of ash handling and fuel related costs, a normal increase over the last year's approved costs, may be considered by the Commission as was done previously in 2004 – 2005.

3.9 WBSEB has also pointed out that WBPDCCL has claimed 61% hike in the costs on account of rent, rates and taxes over the costs approved by the Commission for the year 2004 – 2005. Under such circumstances, a normal hike of 6% over the costs approved for the year 2004 – 2005 may be considered for the year 2005 – 2006.

3.10 WBSEB has contended that WBPDCCL has provided lesser depreciation of Rs. 33.51 Crores in the year 2004 – 2005 against the approved quantum, and further under depreciation of Rs. 95.19 crores has been proposed in their tariff petition for 2005 – 2006. This will result in increase in assets which will attract higher returns but which are open to serious objections.

3.11 WBSEB has submitted that WBPDCCL has projected R & M expenses with an increase of 13.23% in 2005 – 2006 over 2004 – 2005 which is not acceptable as there is no considerable changes in operation and maintenance costs excepting the cost of dredging at Kolaghat.

3.12 WBSEB has further observed from the Director's report of WBPDCCL that despite of earning profit every year, the Government Loans are not being repaid, As a result the impact of interest on Government loans has been increasing over the years cumulatively, thereby posing incremental burden every year.

CHAPTER – 4

VARIABLE COST & EXPENDITURE

4.0 FUEL COST:

4.1 Fuel cost per unit of sent out power from different power stations of WBPDCCL as per their projections comes as under:

	Paise/kwh
Kolaghat	130.10
Bakreswar	112.00
Bandel	140.00
Santaldih	172.90

Such rates are very much on the higher side in comparison with the rates allowed by the Commission in its last tariff order for the year 2004 - 2005. The increase in the ex-pit head coal price with effect from 16th June 2004 and also in the price of oil are said to be the main reasons for such hike in the cost of fuel per unit of sent out power.

4.2 Besides the price of coal and oil, the average fuel cost depends on other factors such as rate of auxiliary consumption of energy in the stations, station heat rates, specific consumption of secondary fuel i.e. oil, calorific value of coal and oil and also on the extent of transit loss of coal. The Commission has made a detailed study of the projections made by WBPDCI with reference to all the related factors and arrived at the total fuel cost needs to be allowed to WBPDCI for their different power stations. The fuel cost per unit of sent out energy of each of the station has also been worked out as under:

STATEMENT SHOWING ALLOWABLE FUEL COST

Sl. No.	Particulars	Unit	Kolaghat	Bakreswar	Bandel	Santaldih
1.	Generation	MU	7560.760	4139.100	1798.160	1261.440
2.	Rate of Auxiliary Consumption	%	10.50	9.50	10.74	11.00
3.	Auxiliary Consumption	MU	793.88	393.22	193.12	138.76
4.	Sent-out Energy (1-3)	MU	6766.88	3745.88	1605.04	1122.68
5.	Station Heat Rate	Kcal/Kwh	2740.00	2650.00	2845.57	2934.00
6.	Total Heat Required (1x5)	MK cal	20716482.40	10968615.00	5116790.15	3701064.96
7.	Specific Consumption of Oil	MI/kwh	2.50	2.00	5.00	4.50
8.	Oil Consumption (1x7)	Kl	18901.90	8278.20	8990.80	5676.48
9.	GCV of Oil	K.cal/ltr.	9500.00	9450.00	9450.00	9450.00
10.	Heat from oil (8x9)	MK cal	179568.05	78228.99	84963.06	53642.74
11.	Heat from coal (6-10)	MK cal	20536914.35	10890386.01	5031827.09	3647422.22
12.	Declared Heat Value of Coal	Kcal/kg	3925.00	4930.00	4905.00	5015.00
13.	Coal required for consumption (11/12)	MT	5232334.87	2209003.25	1025856.70	727302.54
14.	Coal purchase with 2% transit loss	MT	5339117.21	2254084.95	1046792.55	742145.45
15.	Average price of oil	Rs./KL	22000.00	21713.00	21714.00	21714.00
16.	Average price of coal	Rs./MT	1383.82	1769.20	1889.94	1870.38
17.	Cost of oil (8x15)	Rs. Lakhs	4158.42	1797.45	1952.26	1232.59
18.	Cost of coal (14x16)	Rs. Lakhs	73883.77	39879.27	19783.75	13880.94
19.	Total cost of fuel (17+18)	Rs. Lakhs	78042.19	41676.72	21736.01	15113.53
20.	Fuel cost per unit of sent-out energy (19/4)	Paise/Kwh	115.33	111.26	135.42	134.62

4.3 The above working out of allowable total fuel cost are based on consideration of under noted factors:

i) Plant Load Factor (PLF) & Gross Generation

The Plant Load Factor at different power stations projected by WBPDCCL is as under:

Kolaghat	61%
Bakreswar	68.50%
Bandel	38.73%
Santaldih	30.00%

It has been explained that such projections are based on the overall demand of WBSEB during 2003 – 04 and the first six months of 2004 – 05 as also on the targets fixed by the Commission for the year 2004 – 05 except for Bakreswar. WBPDCCL, however, stated that the Plant Load Factor at Bakreswar can be achieved up to 72% provided proper incentive is allowed to them or alternatively if they are permitted to export power to any importer outside Eastern Regional Grid. The Commission has observed that the actual PLF achieved in 2003 – 2004 by Kolaghat and Bakreswar is 62.53% and 78.16% respectively, and these are higher than their projections in 2005 – 2006. The Commission is of the opinion that there is sufficient scope for improvement in the company's performance in Kolaghat as also in Bakreswar, i.e., the generation in these two stations should be increased and sustained at an increased level. Therefore, considering all factors including practicality, the Commission fixes the following PLF and generation targets for different power stations of WBPDCCL.

Power Station	PLF(%)	Gross Generation (MU)
Kolaghat	68.5%	7560.76
Bakreswar	75%	4139.10
Bandel	38.73%	1798.16
Santaldih	30.00%	1261.44
		14759.46

In this regard considering the points raised by WBPDCCL, the Commission feels that although attaining of 68.5% PLF at Kolaghat and 75% at Bakreswar does not call for any incentive as per norms of the country, the generating company is required to be suitably encouraged to improve performance from its present level. For giving due consideration to the remarks of WBPDCCL that non-drawal of power by WBSEB is the major cause inhibiting the improvement in PLF, the Commission directs that hourly / 15 minutes time block wise data for each month showing declared capability of Plants of WBPDCCL, Schedules of Generation allowed by SLDC and actual generation of WBPDCCL should be submitted by WBPDCCL from April 2005 onwards to the Commission for taking an objective view in due course.

4.3.1 Rate of Auxiliary Consumption:

Rates of Auxiliary Consumption projected by WBPDCCL for different power stations are as under:

Power Station	%age
Kolaghat	10.50
Bakreswar	9.50
Bandel	10.74
Santaldih	11.00

It has been explained by WBPDCCL that the above projections have been made on the basis of the trends of Auxiliary Consumption of earlier years. Achieving a lower rate is not possible according to the company mainly due to wide fluctuation of system demand. The Commission agrees to allow the rate of Auxiliary Consumption as projected by WBPDCCL.

4.3.2 Station Heat Rate

The Station Heat Rates projected by WBPDCCL on the basis of actual performance trend in 2004-05

for their different power stations vary considerably from the norms set by the Commission in the previous year in accordance with the recommendations given by the Committee appointed by the Government of West Bengal, and accepted by the latter. A comparison between the Station Heat Rates projected by the WBPDCCL for 2005 - 2006 and those that were accepted by the Commission in the previous year for different power stations comes as under:

Power Station	As per orders of Commission for 2004-05	As projected by WBPDCCL for 2005-06
Kolaghat	2735.380	2851.250
Bakreswar	2650.000	2675.000
Bandel	2845.570	2916.675
Santaldih	2934.000	3700.000

It has been stated by WBPDCCL that their power Stations are not tied up with any dedicated colliery and the company is getting supply of different grades of coal from different collieries. As a result, tuning of combustion control cannot be maintained in the desired way. It has also been pointed out that WBPDCCL's generating units are tied up with the Power Transmission Grid. Consequently, the system frequency excursions beyond normative level are thrust upon the operating units. Under such conditions, it has become difficult to have better heat rate in the power stations of WBPDCCL.

The above stated reasons for asking higher heat rates by WBPDCCL have already been considered by the Committee set up by the Government of West Bengal before making its recommendations and in 2004 - 2005, the Commission went by the recommendations of that Committee only. The Commission sees no reason to reconsider the Station Heat Rates already set by it in the earlier year on the same grounds and decides to retain those for the year 2005 - 06 also, the only exception being admission of due effect of change in vintage slab of unit no. 1 of KTPS and thereby change in the latter's overall station heat rate to 2740 unit. Accordingly, Station Heat Rate approved by the Commission for 2005 - 2006 for various power stations of WBPDCCL is as follows:

Power Station	As projected by WBPDCCL for 2005-06	As approved by Commission for 2005-06
Kolaghat	2851.250	2740.000
Bakreswar	2675.000	2650.000
Bandel	2916.675	2845.570
Santaldih	3700.000	2934.000

4.3.3 Specific Oil Consumption:

WBPDCCL has asked for a rate of oil consumption (ml / kwh) that is lower than the rate allowed in the earlier year, based on the past trend of actual consumption. The specific consumption of oil projected by WBPDCCL for their different power stations are as under:

Power Station	MI/Kwh
Kolaghat	2.50
Bakreswar	2.00
Bandel	5.00
Santaldih	4.50

The Commission agrees to the above projections made by WBPDCCL.

4.3.4 Gross Calorific Value (GCV) of Oil:

Commission also admits the GCV of oil projected by WBPDCCL for different power stations as under depending on the quality of oil supply received by them in the past.

Power Station	K.cal/Ltr.
Kolaghat	9500
Bakreswar	9450
Bandel	9450
Santaldih	9450

4.3.5 Declared Heat Value of Coal:

Calorific value of coal is a variable factor for assessing the quantity of coal required for consumption and depends on the grades of coal available to the power station. Declared heat value of coal projected by WBPDCCL for their different power stations on the basis of probable grade wise consumption pattern is as under:

Power Station	Average Declared Heat Value (K.Cal/Kg)
Kolaghat	3900
Bakreswar	4930
Bandel	4905
Santaldih	4950

WBPDCCL has stated that collieries from where, and at which quantity, the coal will be supplied, are decided by Standing Coal Linkage Committee. Therefore, it is not possible to estimate the quality and quantity of coal to be received during 2005 - 2006. Therefore, actual mix of coal received during first six months of 2004 - 2005 has been taken as a basis for estimation of requisition of coal during 2005 - 2006. Moreover, since the supplies received from all the collieries are mixed up in the coal yard and finally put into furnace, the ground mix segregation of coal consumption is not feasible and therefore the acquisition mix has been considered as consumption mix.

After analysing the likely mix of different grades of coal projected to be procured during 2005 - 06 and after considering the declared minimum calorific value of different grades of coal, the projected Declared Heat Value at Bakreswar and Bandel are admitted by the Commission. For other two power stations, the minimum average Declared Heat Value works out as under:

Power Station	Average Declared Heat Value (K.Cal/Kg)
Kolaghat	3925
Santaldih	5015

It is, however, made clear that any variation in the admitted average declared heat value of coal from the actual will be taken care of at the time of allowing Fuel Cost Adjustment (FCA) for the year.

4.3.6 Average price of Oil.

The average price of oil as projected by WBPDCCL for different power stations is also admitted by the Commission and given hereunder. Any variation will be taken care of in the FPA calculation.

Power Station	Rs./KL.
Kolaghat	22,000.00
Bakreswar	21,713.00
Bandel	21,714.00
Santaldih	21,714.00

4.3.7 Average price of Coal.

Average price of coal per MT projected by WBPDCCL for different power stations is as under:

Power Station	Rs. per M.T.
Kolaghat	1530.00
Bakreswar	1795.00
Bandel	1950.00
Santalalih	1950.00

Above prices are said to be inclusive of Railway freight. WBPDCCL has, it appears, worked out the average price of coal consumption on Residual Method under which the total cost and quantity of coal procured during the year is added to the cost and quantity of opening stock of coal at the power station. From the total of opening stock and procurement cost, the cost of ground stock at the end of the year is deducted to arrive at the quantity and cost of consumption. The problem with this method of arriving at the average price of coal consumption is that the cost of coal lost in transit gets automatically absorbed in the consumption and the actual quantity of coal lost in transit remains un-identified. It is because of this method of computation of price of coal that WBPDCCL has not asked for the cost of the transit loss of coal separately in its tariff proposal. As Commission proposes to allow the cost of reasonable transit loss separately, the average price of coal is required to be worked out by the Commission separately for each of the power stations with reference to the latest price list of coal suppliers and the probable grade wise pattern of coal procurement provided by WBPDCCL. As fuel cost constitutes a considerable part of the average cost of supply of energy from the power station, Commission likes to present its workings hereunder to avoid any confusion in this regard. These workings ascertaining the average price of coal for different stations are as under:

AVERAGE PRICE OF COAL FOR DIFFERENT STATION					
Station	Grade & Source	Pit Head Price (Rs./MT)	Actual Quantity Mix	Product	Average Price (Rs./MT)
Kolaghat	ECFL/B	2156.31	0.1343	289.59	
	ECFL/C	1897.78	0.0953	180.86	
	ECFL/D	1639.04	0.0527	86.38	
	ECFL/E	1033.91	0.0194	20.06	
	BCML/C	1075.19	0.1741	187.19	
	BCML/D	866.67	0.1493	129.39	
	BCML/E	659.38	0.0569	37.52	
	BCML/F	512.43	0.0197	10.09	
	MCFL/F	536.64	0.2184	117.20	
	MCFL/G	422.24	0.0369	15.58	
	BCCL/D	994.24	0.0039	3.88	
	BCCL/E	817.44	0.0174	14.22	
	BCCL/F	661.44	0.0135	8.93	
	BCCL/G	505.44	0.0082	4.14	
		Total		1	
	Freight				278.79
	Grand Total				1383.82
Bakreswar	ECFL/B	2156.31	0.2841	612.61	
	ECFL/C	1897.78	0.4189	794.98	
	ECFL/D	1639.04	0.0351	57.53	
	BCML/C	1075.19	0.0998	107.30	
	BCML/D	866.67	0.1069	92.65	
	BCML/E	659.38	0.0489	32.24	

	BCML/F	512.43	0.0063	3.23	
	Total		1		1700.54
	Freight				68.66
	Grand Total				1769.20
Bandel	ECFL/A	2285.06	0.0014	3.20	
	ECFL/B	2156.31	0.3027	652.72	
	ECFL/C	1897.78	0.3099	588.12	
	ECFL/D	1639.04	0.1707	279.78	
	ECFL/E	1033.91	0.0011	1.14	
	BCML/C	1075.19	0.0692	74.40	
	BCML/D	866.67	0.1398	121.16	
	BCML/E	659.38	0.0052	3.43	
	Total		1		1723.95
	Freight				165.99
	Grand Total				1889.94
Santaldih	ECFL/A	2285.06	0.0052	11.88	
	ECFL/B	2156.31	0.4781	1030.93	
	ECFL/C	1897.78	0.2239	424.91	
	ECFL/D	1639.04	0.0773	126.70	
	BCML/C	1075.19	0.0710	76.34	
	BCML/D	866.67	0.0178	15.43	
	BCML/E	659.38	0.0532	35.08	
	BCML/F	512.43	0.0062	3.18	
	BCCL/D	994.24	0.0059	5.87	
	BCCL/E	817.44	0.0614	50.19	
	Total		1		1780.51
	Freight				89.87
	Grand Total				1870.38

4.3.8 Cost of the Transit Loss of Coal:

WBPDCCL has not submitted any separate claim to recover the cost of the transit loss of coal. As explained in the earlier sub-para, the quantity of transit loss has been absorbed in the average price of coal consumption without identifying the quantum of such transit loss. Since the Commission has worked out the average price of coal based on the prevailing notified price list of the suppliers and railway freight as projected by WBPDCCL, the Commission agrees to allow the transit loss separately @ 2% of the coal procurement as against 4% allowed in the previous year. The Commission is of considered view that such reduction in the rate of transit loss of coal is possible. As reported by the company, deployment of a Security Agency for escorting coal wagons, which was initiated in the year 2002 – 2003 continued to help its endeavour in reducing the cost on account of Transit Loss of Coal. The tariff petitioner must strive hard to reduce transit loss to the degree worked out here.

4.4 Based on our analysis and computations as given in above paragraphs, we allow total fuel cost and unit rate of such cost on sent out power from the generating stations as under:

Power Station	Total Fuel Cost (Rs. in Lakhs)	Average Cost per Unit of sent-out Energy (Paise/Kwh)
Kolaghat	78042.19	115.33

Bakreswar	41676.72	111.26
Bandel	21736.01	135.40
Santaldih	15113.53	134.62

4.5 Fuel Cost Adjustment (FCA):

The fuel cost allowed by the Commission is subject to adjustment normally at the end of every six month period in terms of the FPPCA formula enunciated by the Commission vide Schedule 4 of the Commission's Tariff Regulations 2003. However, the Commission is aware of a distinct possibility of there being a significant upward adjustment in the fuel cost due to a steep increase in the cost of coal during the later part of 2004 – 2005. A significant mid-year increase in tariff should best be avoided if possible. Although simply delaying the process may not necessarily be useful, particularly if other factors remain unchanged, or if other factors also become unfavourable, there is always a possibility that given sufficient time, the tariff seeker will be able to counter the increase in fuel cost at least to some extent by increasing his own operational efficiency. We, therefore, proceed to direct the West Bengal Power Development Corporation Limited to submit its fuel cost adjustment claims for 2004 – 2005 along with the same for 2005 – 2006 supported by annual audited accounts, necessary cost data, quantitative details and all other relevant information / documents, etc. However, there should be a separate FPPCA petition for each of these years, i.e., the petitions should not be merged with each other. We also direct the WBPDCCL to try to the best of its ability to improve upon its operational efficiency and by the consequent reduction in fuel use, neutralize the increase in fuel cost as best as possible.

CHAPTER – 5 FIXED CHARGES

5.1 An examination of the projected fixed charges claimed by WBPDCCL for the year 2005 – 2006 under different accounts is taken up in this chapter. The components of the total fixed charges are:

- i) Operation and Maintenance Expenses,
- ii) Depreciation,
- iii) Return on Equity
- iv) Financing charges comprising of (a) Interest on Loan Capital and (b) Interest on Working Capital.

We shall take up our analysis of each of the above components to record the extent of their admissibility.

5.2 Operation and Maintenance Expenses:

Operation and Maintenance Expenses comprise of the expenses under the following heads of accounts.

5.2.1 Employees cost:

The Employees' cost claimed by WBPDCCL for their different power stations is as under:

Power Station	Rs. in Lakhs
Kolaghat	3464.58
Bakreswar	1063.30
Bandel	2654.82
Santaldih	2152.65
Total	9335.35

It appears from the submission of WBPDCCL that it has increased the employees' cost in the year 2005-06 over the estimated expenditure during 2004-05 by 5% on the average. WBPDCCL has submitted a copy of their audited accounts for the year 2003 – 04. Taking the actual employees' cost incurred at different power stations in the year 2003 – 2004 as base, and allowing 5% annual increase over that amount, we allow employees' cost for the year as noted below. We have, however, kept the proposed employees' cost at Bakreswar unchanged.

Power Station	Rs. in Lakhs
Kolaghat	3274.04
Bakreswar	1063.30
Bandel	2602.61
Santaldih	2046.10
Total	8986.05

In its tariff order dated 3rd June 2004, the Commission observed that the employees' cost at Bandel and Santaldih Power Stations are very much on the higher side and not commensurate with their generating capacities and actual generation and also urged WBPDC and WBSEB to speed up the process of re-deployment of excess manpower in these stations for gainful purposes so that the cost of supply of energy from these stations gets a correct reflection. Though nothing positive in this regard has yet come up, it has been stated by WBPDC that it is endeavoring its best to settle the issue as early as possible. The Commission has observed that WBPDC has engaged itself in some capital construction works especially in Bakreswar, Sagardighi and Santaldih. Hence re-deployment of excess manpower in these power stations should not pose much problem for WBPDC. The repatriation issue of non-optee employees is also required to be settled early. WBPDC is also to ensure that cost of employees engaged / to be engaged in such capital construction works are properly capitalized and not charged to Revenue Accounts.

5.2.2 Repairs & Maintenance Charges:

The Repairs & Maintenance charges including the cost of consumables claimed by WBPDC for different projects are as under:

Power Station	Rs. in Lakhs
Kolaghat	7451.02
Bakreswar	3180.90
Bandel	4634.58
Santaldih	2783.18
Total	18049.68

It has been clarified by WBPDC that there has not been any major change in the nature of expenses for repairs and maintenance excepting for Kolaghat where emergency expenditures have been proposed for dredging of river Rupnarayan at Kolaghat Intake Pump House to ensure necessary water supply to the plant. In regard to other power stations no such needs for special maintenance has been highlighted. We, therefore, take the amount of actual expenditure incurred during 2003 - 04 as per the audited accounts as basis and will allow 5% annual increase over such actual expenses for the year 2005-06. We are also allowing Hydraulic Works for special maintenance at Kolaghat. The station wise expenses towards repairs and maintenance on the basis as stated above comes as under:

Power Station	Rs. in Lakhs
Kolaghat	6843.04
Bakreswar	2284.31
Bandel	3830.23
Santaldih	1772.91
Total	14730.49

5.2.3 Ash Handling and other Fuel related Cost:

Ash and other fuel related costs include expenses for evacuation of settled ash, picking of stones, unloading and sizing of coal, cleaning and maintenance of coal handling equipment, sample testing, railway siding and shunting charges, etc. The projected expenditures under this head for different power stations are as under:

Power Station	Rs. in Lakhs
Kolaghat	3100.00
Bakreswar	411.39
Bandel	750.00
Santaldih	150.00
Total	4411.39

The Commission has viewed this claim with reference to actual expenditures incurred in the year 2003 – 2004 and found that the amounts claimed for different power stations are very much on the higher side. The actual expenditures incurred during 2003 – 2004 are given hereunder. The Commission agrees to allow a 5% annual increase over the actual of 2003 – 2004. The allowable amounts thus come to the following:

Power Station	Actual (2003-04)	Rs. in Lakhs Amount Allowed for 2005-06
Kolaghat	1569.62	1730.51
Bakreswar	279.22	307.84
Bandel	573.72	632.53
Santaldih	82.02	90.43
Total	2504.58	2761.31

5.2.4 Rent, Rates & Taxes, Legal & Professional Charges and Audit Fees:

The expenditures projected by WBPDCCL under above heads of accounts for their different power stations are accepted by the Commission as reasonable. Such expenses are as under:

Name of power Station	Rent, Rate & Taxes	Legal & Professional Fees	Audit Fees	Total
Kolaghat	70.88	26.25	2.00	99.13
Bakreswar	22.00	30.00	1.00	53.00
Bandel	57.75	4.73	0.93	63.41
Santaldih	6.83	13.72	0.88	21.43
Total	157.46	74.70	4.81	236.97

5.2.5 Other Administration & General Charges:

Other Administration and General charges comprise of Security Expenses, Travelling Expenses, Education Expenses, Advertisement, Printing and Stationery Expenses, etc. The charges claimed by WBPDCCL on these accounts for different power stations are as under:

Power Station	Rs. in Lakhs
Kolaghat	693.00
Bakreswar	330.00
Bandel	202.13
Santaldih	341.81
Total	1566.94

The claims have been examined by us with reference to the station wise audited accounts submitted along with the tariff petition. The amounts claimed for Bakreswar and Bandel are found to be justified. So far as Kolaghat and Santaldih are concerned, we allow a 2% annual hike on the average over the actual expenses incurred during the year 2003-04. The allowable amounts thus

come to Rs. 548.62 lakhs for Kolaghat and Rs. 312.65 lakhs for Santaldih. The total expenditure under this general head of account, as allowed for different stations, thus comes as under:

Power Station	Rs. in Lakhs
Kolaghat	548.62
Bakreswar	330.00
Bandel	202.13
Santaldih	312.65
Total	1393.40

5.3 Depreciation:

5.3.1 In terms of item No. 5(II)(viii) in Schedule - 3 of the Tariff Regulation notified by the Commission, vide No. 18/WBERC dated 09.06.2004, the Generating Companies are to charge depreciation on fixed assets in operations on straight line method adopting the rates under the Companies Act as amended from time to time. The Commission, however clarified, vide para 5 in the referred Regulations that in case of any difference of its Regulation with National Electricity Policy and Tariff Policy or with the principles and methodologies specified by the Central Commission in case of Generating Companies and Transmission Licensees, the Commission shall be guided by the same though subject to other provisions.

5.3.2 Now that the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulation No. L-7/25(5)/2003-CERC dated 26th March 2004, amended by the notification of even no. dated 3rd September 2004 is available with the Commission, it will be correct to adopt the methodology of depreciation at par with the Central Electricity Regulatory Commission (CERC).

5.3.3 As per CERC's Regulations, depreciation requires to be charged on straight line method upto 90% of the historical cost of assets at the rates prescribed by it. Depreciation shall also be chargeable from the first year of operation of assets pro-rata for the period of such operation. CERC has also adopted the policy of allowing Advance Against Depreciation in appropriate cases to enable the Generating Companies to meet up their Capital Loan repayment commitments.

5.3.4 The chargeable depreciations as worked out by WBPDCCL adopting the rates as per Companies Act were as under:

Power Station	Rs. in Lakhs
Kolaghat	8215.28
Bakreswar	12999.31
Bandel	990.70
Santaldih	621.50
Bakreswar Transmission	1872.87
Total	24699.66

5.3.5 If depreciation is worked out adopting the rates and methodologies specified by CERC, the depreciation charges for Kolaghat and Bakreswar power stations of WBSEB will come approximately as under:

Sl. No.	Asset Classifications	Gross Block on which depreciation has been claimed (Rs. in Lakhs)	Rate of depreciation in terms of CERC Regulation (%)	Amount of Depreciation (Rs. in Lakhs)
KOLAGHAT				
1.	Roads & Drainage	2644.72	1.80	47.60
2.	Building Main Plant	14903.03	3.60	536.51
3.	Building - Others	790.16	1.80	14.22
4.	Railway siding	2621.61	1.80	47.19
5.	Plant & Machinery	131813.88	3.60	4745.30

6.	Electrical Installation	4661.79	6.00	279.71
7.	Electrification & Signaling of Rly. track	1078.36	6.00	64.70
8.	Ash pond	1096.32	3.60	39.47
9.	Office Buildings	169.40	1.80	3.49
10.	Office Equipments	294.93	6.00	17.70
11.	Roads & Drainage	49.19	1.80	0.89
12.	Buildings - Residential	2469.33	1.80	44.45
13.	Water Supply Arrangement	174.37	3.60	6.28
	Total	165258.47		5847.51

BAKRESWAR

1.	Roads & Drainage	1913.03	1.80	34.43
2.	Building Main Plant	17880.05	3.60	643.68
3.	Building - Others	422.86	1.80	7.61
4.	Other Civil Works	98.08	1.80	1.77
5.	Water Supply, Drainage, etc.	465.56	3.60	16.76
6.	Reservoir & Dam	3057.32	1.80	55.03
7.	Water Intake & Plant Water System	12099.08	3.60	435.57
8.	Railway Siding	1576.20	1.80	28.37
9.	Plant and Machinery	199540.95	3.60	7183.47
10.	Communication System	409.71	6.00	24.58
11.	Electrical Installation	281.29	6.00	16.88
12.	Air Conditioning System	11.28	6.00	0.68
13.	Vehicle & Speed Boat	5.65	18.00	1.02
14.	Wagon Tripper	770.00	3.60	27.72
15.	Hydrogen Generation Plant	560.12	3.60	20.16
16.	Capital Spare	11428.12	3.60	411.41
17.	Office Buildings	74.36	1.80	1.34
18.	Furniture - Office	46.33	6.00	2.78
19.	Office Equipments	22.64	6.00	1.36
20.	Assets not owned	233.52	3.60	8.41
21.	Roads & Drainage	386.29	1.80	6.95
22.	Buildings - Residential	2409.37	1.80	43.37
23.	Water Supply Arrangement	84.53	3.60	3.04
24.	Guest House	124.89	1.80	2.25
25.	Electrical Installation	18.87	6.00	1.13
26.	Furniture & Fixture	8.46	6.00	0.51
27.	Hospital Equipment	1.14	3.60	0.04
28.	BOBR Wagon	3785.60	3.60	136.28
29.	Simulation Training package	2622.86	6.00	157.37
	Total	260338.16		9273.98

BAKRESWAR TRANSMISSION SYSTEM : *

1.	Land & Land Development	344.92	Nil	Nil
2.	Communication Equipment	542.47	6.00	32.55

3.	Lines, Cables, Networks and other Installations	29109.73	5.00*	1455.49
	Total	29997.12		1488.04

*Rates specified by the CERC for Lines, Cables, Networks and different Installations are 3.60% and 6.00%. As rate wise grouping of assets can not be made at this stage, an average rate of approximately 5% is considered.

5.3.6 Fixed Assets of Bandel and Santaldih Power Stations were acquired second hand by WBPDCI from the WBSEB with effect from 1st April 2001. In terms of the policy adopted by CERC, such assets are to be depreciated during such reasonable period as the competent Government determines in each case having regard to nature, age and condition of the assets at the time of its acquisition by the owner. As we note from the copy of the letter from the Government of West Bengal, submitted by WBPDCI along with its Tariff Petition, that the State Government is considering to transfer these assets to WBPDCI at their Book Values, on the date of the acquisition and the re-valuation of the concerned fixed assets will not be involved. It has also been noted that there had not been any major addition to fixed assets of these power stations since the date of acquisition. We, therefore, decide to allow depreciations on the fixed assets of these two power stations following the principles and methodologies adopted by the CERC restricting total depreciation to 90% of the gross value of fixed assets. Power stations at Bandel and Santaldih are above 30 years of age and hence most of the fixed assets are depreciated up to residue value. Our analysis shows that allowable depreciations on the fixed assets of these two power stations for the year 2005 – 2006 adopting the principles and methodologies of CERC come as under:

Sl. No.	Particulars	Gross Block (Rs. in Lakhs)	Rate of Depreciation	Amount of Depreciation (Rs. in Lakhs)
BANDEL				
1.	Other Civil work of Power Plant	188.50	3.60%	6.79
2.	Furniture	9.14	6.00%	0.55
3.	Office Equipment	23.36		1.40
4.	Plant (Balance depreciation allowed to reach 90% of Gross Block)	18370.44		108.16
	Total			116.90
SANTALDIH				
1.	Building Plant	735.44	3.60%	26.48
2.	Other Civil work in Plant	594.35	3.60%	21.40
3.	Furniture	10.59	6.00%	0.64
4.	Office Equipment	15.61	6.00%	0.94
5.	Buildings (Others)	8.01	1.80%	0.14
6.	Plant (Addition after acquisition)	43.27	3.60%	1.56
	Total			51.16

Based on foregoing computations we allow Depreciation charges for different power stations as under:

Power Station	Rs. in Lakhs
Kolaghat	5847.51
Bakreswar (Generation)	9273.98
Bakreswar (Transmission)	1488.04

Bandel	116.90
Santaldih	51.16
Total	16777.59

5.3.7 Accurate amount of chargeable depreciation can only be worked out with reference of proper classification of fixed assets and record of individual item in Asset Register of the Utility. The computation made by us may have variance with the computation to be done at the level of the Utility. We, therefore, direct WBPDCCL to submit a proper computation of depreciation as per the principle and methodology specified by the CERC along with their next tariff petition. Any deviation on this account will be adjusted with the Revenue Requirement of the next tariff period.

5.4 Reasonable Return:

5.4.1 In terms of Item No. 2 in Schedule – 3 to the Tariff Regulation notified by the Commission, the rate of Reasonable Return would be higher of the following three alternatives:

- i) 5% above the ruling RBI rate,
- ii) 3% above the PLR of the State Bank of India,
- iii) 3% above the average PLR of any other three approved Nationalised Banks.

Ruling RBI rate is 6% and 5% above that comes to 11%. PLR of the State Bank of India was 10.25% on 1st November 2004 and 3% above that comes to 13.25%. The average PLR of the Indian Overseas Bank, Allahabad Bank and Indian Bank was 11.00%. Adding 3% to that PLR, WBPDCCL claimed 14% return on the Equity Capital employed at their different power stations. It submitted the ruling PLR confirmation certificates from the referred banking authorities. The issued and subscribed equity capital at different power stations has been shown as under:

Power Station	Rs. in Lakhs
Kolaghat	83329.41
Bakreswar	35460.00
Bandel	5664.58
Santaldih	7827.68

The matters relating to the determination of the purchase considerations of Bandel and Santaldih power stations and the extent of equity investments thereon had been pending so long. It has now been revealed from the submission of WBPDCCL that a proposal currently under consideration of the State Government suggests that the value of the Net Fixed Assets including the value of capital works-in-progress of these two thermal power stations as on 01.04.2001 as per the Books of WBSEB may be treated as the purchase consideration and can be considered as Capital employed by the Government of West Bengal in the form of paid up equity for taking over the aforesaid thermal power stations to WBPDCCL by converting equivalent amount of State Government loan to WBPDCCL into equity. WBPDCCL submitted along with their petition a copy of the letter No. SP(MSC)-203/05 dated 14th January 2005 from the Government of West Bengal in this regard. Accordingly, the Commission is allowing Reasonable Returns on the Equity Capitals as under:

Power Station	Rs. in Lakhs
Kolaghat	11666.12
Bakreswar	4964.40
Bandel	793.04
Santaldih	1095.88
Total	18519.44

5.4.2 The Tariff Regulations of the Commission does not mention "free reserve" as an element for allowing returns. But as per the concerned Regulations of the CERC, the investment of internal resources creating out of free reserve of the generating company, if any, for funding the projects should also be reckoned as paid up capital for the purpose of computing return on equity. Though WBPDCCL has not claimed any return on the deployment of its free reserve in any of their presently operating power stations, the Commission has considered this aspect of the matter. An amount of

Rs. 13557.00 lakhs had been shown as free reserve in the consolidated audited balance sheet of the company as at 31st March 2004. But, nothing has been stated about where this amount of free reserve is deployed. WBPDCCL has a number of capital construction projects in hand. New generating units are being set up at Bakreswar and Santaldih Power Stations. They have also taken up the construction of a Greenfield power station at Sagardighi. Unless these free reserves are actually employed in building up and / or expansion of assets pertaining to those units for which tariff is being determined, such free reserves will not qualify to be counted as paid up capital for this purpose. We, therefore, decide that the free reserves shown in the consolidated audited balance sheet of the company for 2003 – 2004 shall not be taken into account for the purpose of determination of the rate base, for the present. This is naturally a provisional arrangement only and is subject to adjustment in due course. The tariff petitioner is directed to submit, along with its annual audited accounts for 2005 – 2006, all the relevant documentary evidence, which will reveal the true nature of employment of the free reserves under consideration, along with the next tariff petition to enable the Commission to take a final view on this matter.

5.5 Financing Charges:

5.5.1 Finance charges claimed by WBPDCCL for its different power Stations are as under:

	Rs. in Lakhs	
Kolaghat :		
For 2005-2006	8843.57	
For Arrears relating to earlier years	3730.47	12574.04
Bakreswar :		
For 2005-2006	8557.90	
For Arrears relating to earlier years	132.00	8689.90
Bandel :		
For 2005-2006	1062.85	
For Arrears relating to earlier years	132.00	1194.85
Santaldih :		
For 2005-2006	1274.81	
For Arrears relating to earlier years	159.00	1433.81
Total		23892.60

5.5.2 At the outset, it must be made clear that earlier years' tariff petitions of WBPDCCL were finalized on the basis of the submissions made by it in those tariff petitioners. Those tariff petitions of earlier years do not contain any claim, including any claim concerning borrowing of working capital, which had not been settled on merit by the Commission in the concerned tariff orders. Moreover, earlier years' power tariff was fixed on the policies and considerations different from the Tariff Regulations now notified by the Commission. We feel that there is no scope now to re-open the earlier years' tariff order. We are not, therefore, allowing the claims for the recovery of said earlier years' shortfall in the interest claims for any of their power stations.

5.5.3 Major parts of the outstanding borrowing of WBPDCCL in Capital accounts as well as for working capitals are from the Government of West Bengal. The rates of interest of these loans vary from 12.5% to 15.75% (excluding loans for Bakreswar Thermal Power Station Units No. I, II & III, for which the rate of interest is 2%). In its earlier Tariff Orders, the Commission commented that such rates of interest are on the higher side compared to the current lending rates. WBPDCCL has now submitted a copy of the letter No. SP (MISC)-204(3)/05 dated 14th January 2005 from the Department of Power, Government of West Bengal along with their Tariff Petition. It has been noted therein that the matter relating to reduction in the rates of interest is under active consideration of the State Government and efforts are being made to lower down the rate of interest to 8.5% (excluding for Bakreswar TPS, Unit No. I, II & III but including Bakreswar Transmission system). WBPDCCL has claimed interest charges accordingly at the anticipated reduced rate on the borrowing from the State Government. The total interest charges for the year 2005 – 2006 in respect of Kolaghat and Bakreswar works out to Rs. 8843.57 lakhs and Rs. 8557.90 lakhs respectively, and we accept the same. But, we do not agree with their computation

of interest charges on State Government Loans for Bandel & Santaldih. As per our computation, the allowable interest charges for Bandel & Santaldih come as under:

	Rs. in Lakhs
Bandel :	
Total State Govt. Loan	12500.00
Less : Amount convertible to Equity (Vide para 5.4)	5664.58
Balance loan after conversion	6835.2
Interest @8.5% on Balance Loan for one year	581.01
Santaldih :	
Total State Govt. Loan	15000.00
Less : Amount convertible to Equity(Vide para 5.4)	7827.68
Balance loan after conversion	7172.32
Interest @8.5% on Balance Loan for one year	609.65

5.5.4 Finally, the interest and finance charges we allow for different power stations are as under:

Power Station	Rs. in Lakhs
Kolaghat	8843.57
Bakreswar	8557.90
Bandel	581.01
Santaldih	609.65
Total	18592.13

5.6 Income from other Non-Tariff Sources:

Total income from other non-tariff sources at different power stations, as projected by WBPDC, are agreed by us as under:

Power Station	Rs. in Lakhs
Kolaghat	205.00
Bakreswar	3610.00
Bandel	103.50
Santaldih	52.00
Total	3970.50

5.7 Based on the analysis made by us and decisions recorded in chapter 3 and in this chapter, a summarised Revenue Requirement Statement separately for each of the WBPDC's stations is given in Chapter 8.

CHAPTER – 6 RECOVERY OF FIXED CHARGES RELATING TO TRANSMISSION SYSTEM

6.1 To facilitate evacuation of power from Bakreswar Thermal Power Station, WBPDC constructed a transmission system facility with the loan assistance from JBIC, Japan, along with the construction of the Generating Units. It was mutually agreed between West Bengal State Electricity Board and WBPDC that as the loan for construction of the Transmission System had been given to WBPDC, the assets created out of the loans should to remain with WBPDC till the loan was repaid. However, the Transmission system would be operated and maintained by WBSEB at their cost.

6.2 WBPDC has submitted a separate petition asking for determination of tariff for the recovery

of the fixed charges relating to the transmission line consisting of (i) interest on loan, (ii) depreciation and (iii) returns. Based on their earlier petitions, the Commission earlier determined such separate rates for the concerned Transmission System for the years 2002 – 2003, 2003 – 2004 and 2004 - 2005 and passed separate orders in this respect. As defined by Sub-clause 16 of Clause 2 of the Electricity Act, 2003, Bakreswar Transmission System is a "dedicated transmission line" of the Bakreswar Power Station. The Commission, therefore, now decides to allow WBPDCCL to recover approved fixed charges relating to this Transmission Line along with the Power Tariff of Bakreswar Power Station instead of issuing separate Orders for that.

6.3 WBPDCCL has claimed an amount of Rs. 5443.73 Lakhs towards recovery of fixed charges relating to the referred dedicated transmission line for the year 2005 – 2006. The total amount claimed comprises the following elements of cost and return:

	Rs. in Lakhs
i) Financing	2895.72
ii) Depreciation	1872.87
iii) Return @3% on Net Opening Fixed Assets Value	675.17
Total	5443.76

The net Energy available for transmission has been considered to be 3421.242 Million Units and accordingly, the average recoverable fixed charges per unit have been claimed as 15.91 paise.

6.4 The claims of WBPDCCL are being taken up for each of the above three elements one by one.

(a) Financing Charges:

As will be found from the submission of WBPDCCL, total construction cost of the Transmission Line Project come to Rs. 19970.47 lakhs and the entire finance came from the Government of West Bengal in the form of loan bearing interest @ 14.5% out of JBIC, Japan funding which carried only 2% interest. Similar financing pattern was also followed for Generation Station Project. To keep the power Tariff of Bakreswar at a reasonable level, WBPDCCL took up the matter with the Government and got 30% of the loan to Generation Project converted to Equity and 70% to loan bearing interest @ 2%. But the matter relating to Transmission Line Project was not taken up with Government towards giving it a similar treatment. We urge WBPDCCL now to take up the matter with the Government for converting 30% of the loans taken for the Transmission Line Project into Equity and 70% at loan bearing interest @ 2%. This point needs a favourable consideration by the State Government specially because the Transmission Line will remain underutilized till the 4th and 5th Units of the Bakreswar Power Station become operative. We are allowing interest on 70% of the stated loan amount @ 2% and allowable financing charges, which will come as under:

	Amount in Lakhs
State Amount of Loan	19970.47
70% thereof	13979.33
Interest on 70% of the Loan @2%	279.59

(b) Depreciation:

As shown in para 5.3.5 of Chapter 5, the chargeable depreciation on Transmission Line comes to Rs. 1488.04 lakhs.

(c) Return:

As mentioned above, 30% of the Capital cost of the Transmission Line is considered as Equity. We shall allow return @ 14% on 30% of the amount of the project cost and such return comes to Rs. 829.96 lakhs.

6.5 The total Fixed charges we allow for the referred dedicated Transmission Line, thus, comes as under

	Rs. in Lakhs
i) Financing	279.59
ii) Depreciation	1488.04

iii) Return @3% on Net Opening Fixed Assets Value	829.96
Total	2597.59

6.6 As shown in the computation given in para 3.2, the sent out Energy from Bakreswar Power Station is 3745.88 Million Units. The per unit rate of recovery of fixed charges towards Transmission Line therefore comes to 6.93 paise.

CHAPTER – 7 SPECIAL APPROPRIATION

7.1 In consideration of the Tariff Petition furnished by the West Bengal Power Development Corporation Limited vide Cases No. TP – 6 / 00-01 for the financial year 2000 - 2001, TP – 6 / 01-02 for the financial year 2001 – 2002, TP – 5 / 02-03 for the financial year 2002 – 2003 and TP – 9 / 02-03 for the financial year 2003 – 2004, the Commission considered Special Appropriation towards fixing of the power tariff for Bakreswar Thermal Power Station of West Bengal Power Development Corporation Limited.

7.2 Against the tariff petition submitted by WBPDCCL for their Bakreswar Thermal Power Station for 2000 – 2001 and 2001 – 2002, the Commission ordered a tariff for infirm and firm power related to that period provisionally. It may be recalled that a techno-economic clearance and sanction of Central Electricity Authority was a statutory requirement for any power project under the provisions of the then Electricity (Supply) Act, 1948. The WBPDCCL could not submit the said clearance and / or sanction along with their Tariff Petition at that time. Pending the production of CEA's clearance, the Commission allowed 80% fixed costs as claimed by WBPDCCL subject to adjustment of some clerical and apparent errors of the Orders for the year 2000 – 2001 and 2001 – 2002. The Commission made it clear in its Order that a detailed scrutiny of WBPDCCL's claim of fixed costs would be made after the submission of CEA's concurrence to the project costs.

7.3 In the year 2002 – 2003, WBPDCCL again filed its petition for fixing the power tariff for Bakreswar Thermal Power Station for the year 2002 – 2003 without any accompanying concurrence of CEA regarding project costs. The Commission allowed the claim to the extent of 90% of such total fixed costs in the Revenue Requirement and withheld the balance of 10% to be released on production of CEA's concurrence.

7.4 WBPDCCL vide their Office Memorandum No. WBPDCCL/WBERC-5/04/1519 dated 22nd March 2004, submitted a copy of the letter No. 2/WB/3/91-PAC/9101-10 of CEA according approval to the final completed cost of Bakreswar Thermal Power Station (3 x 210 MW). The completion cost of the referred power station as reported by WBPDCCL in their petitions and as approved by the CEA were found not much in variance.

7.5 In view of the above, the Commission has now decided to give effect to those pending fixed costs relating to Bakreswar Thermal Power Station for the years 2000 – 2001, 2001 – 2002, and 2002 – 2003 in the Revenue Requirement, withheld earlier, based on the claim furnished by WBPDCCL after a detailed scrutiny of the same by the Commission.

7.6 Scrutiny of projected fixed cost under different heads for 2000- 01

A detailed scrutiny of the fixed cost claimed by the WBPDCCL under different heads of accounts for 2000-01 has now been done on the basis of documents on record, i.e. the original petition and submission of additional information/clarifications as sought by the Commission during hearing held on 15/01/2002. The findings of such scrutiny and analysis are as under: -

i) Employees' cost:

WBPDCCL claims Rs. 60.53 lakhs towards Employees' cost and the same was admitted by the Commission. The projected expenditure appears to be justified in view of the fact that only the 1st unit of the Power Station was put to commercial operation only for four months during the year.

ii) Operation and Maintenance:

The amount of Rs. 43.01 lakhs claimed by WBPDCCL towards operation and maintenance had also been found justified and admitted by the Commission.

iii) Administration & Establishment Charges:

WBPDCCL claimed Rs. 263.45 lakhs towards administration and establishment expenses. The key constituents of this head were said to be vehicle hire charges, security expenses, insurance expenses and rent, rates and taxes. As pointed out earlier, only one out of the three generating units had been in commercial operation for four months.

The amount claimed to be charged to the Revenue Account of the year seemed very much on the higher side. During the public hearing of the Tariff Petition for the concerned year WBPDCCL was asked to justify the claim and to submit a detailed head wise break-up of expenditures incurred in Bakreswar Power Station on this account and the basis of allocation of such expenses to Revenue Accounts. WBPDCCL submitted their replies on 15/01/2002. Pending final scrutiny of the claims made in Tariff Petition and additional information/clarifications submitted subsequently, the Commission provisionally admitted Rs. 9.27 lakhs only on this score to be included in the Revenue Requirement. On subsequent scrutiny of the additional information submitted by WBPDCCL it has been seen that total Administration and general Expenses (including insurance charges) incurred in Bakreswar Power Station was Rs. 1016.16 lakhs and 25.93% of such total expenses had been charged to Revenue Account. Out of the total expenditure of Rs. 1016.16 lakhs, Rs. 510.45 lakhs pertained to Bank charges. It had not been clarified how Bank charges came for such a big amount (more than 50% of total expenses) and how that had been treated as administration expenses- part of which was considered to be allocated to Revenue Account. The Commission is not convinced that any part of the Payment of such a big amount towards Bank charges can be charged to Revenue Account particularly when only one unit of the Power Station had been in commercial operation only for four months during the financial year 2000-01. The total expenditure under this score excluding the Bank charges came to Rs. 505.72 lakhs. Going by the ratio of allocation of such total expenses between capital and Revenue Accounts as assessed by WBPDCCL, we admit Rs 131.13 lakhs only for inclusion in the Revenue Requirement for the concerned year.

iv) Interest & Finance Charges:

WBPDCCL claimed Rs. 350.11 lakhs towards interest chargeable to Revenue Accounts of the year 2000-01. Considering 70% of the finances received from the Government of West Bengal against both OECF and non-OECF funding as loan @ 2% interest. In reply to queries raised during public hearing, they submitted a copy of the letter in this regard from the Government of West Bengal and the detailed working out of the interest chargeable on such total loan of Rs. 165477.00 lakhs. As per detailed working out submitted by them, the amount of interest chargeable to Revenue Accounts for the year 2000-01 came to Rs. 350.11 lakhs and the Commission admitted the same.

v) Reasonable Returns:

WBPDCCL claimed Rs. 1916.95 lakhs as Reasonable Return proportionately for the commercial period of one unit of the generating station for approximately 4 months. Their claim was stated to be based on return @16% on the equity capital of Rs. 70919.00 lakhs. No detailed working out of the amount of return claimed had been provided. The Commission in its earlier order dated 12/07/2001 in regard to Tariff for Kolaghat Power station of WBPDCCL decided to allow 12% return on capital base as would be arrived at in the method provided in the Sixth Schedule to Electricity (Supply) Act 1948. The reasons for such decision had been explained in para 8.7 to para 8.10 of the referred order. In case of Bakreswar Power station also, the Commission will follow the same principle for allowing returns. In the absence of proper data and as only one out of 3 generating units had been put to commercial operation for part of the year, the capital base for allowing return is being worked out by us as under: -

	Rs. in Lakhs
a) Value of fixed assets capitalized upto 31/03/2001 (As per submission)	147872.66
Less cost of Transmission system (including substations) included in above amount	24302.69
	123569.97
b) Working Capital 1/12 of the fuel cost allowed	705.35
Average cash and bank balance (as provided)	41.92

Consumable stores (Considered 10% of R&M cost)	4.30	751.57
	Total	124321.54
Less Loan (70% of cost of Assets capitalized)		86498.98
Net Capital base		37822.56
Return @12% p.a. for 4 months on Net Capital Base		1512.90

From the analysis of the different elements of fixed cost for the year 2000-01 as done above, a statement is drawn showing the fixed cost claimed under different heads, claims provisionally considered earlier and the claims as now ascertained is given as under:

ADMISSION OF FIXED COST FOR THE YEAR 2000-01.

Sl. No.	Heads of Account	Amount Claimed	Amount Provisionally considered earlier	Amount finally admitted
			Rs. in Lakhs	
1.	Employees Cost	60.53	60.53	60.53
2.	Operation & Maintenance	43.01	43.01	43.01
3.	Admn & General Charges	263.45	9.27	131.13
4.	Interest & Finance Charges	350.11	350.11	350.11
5.	Reasonable Return	1916.95	1916.95	1512.90
6.	Total (1 to 5)	2634.05	2379.87 Restricted to 80% = 1903.90	2097.68

Balance amount of fixed cost now to be admitted (2097.68– 1903.90) = Rs. 193.78 lakhs

7.7 Analysis of Fixed cost claimed for 2001-02

A detailed scrutiny of the fixed cost claimed by WBPDCCL under different heads of accounts for 2001-02 has now been done on the basis of documents on record, i.e. the original petition and submission of additional information/clarifications as sought by the Commission during public hearing held on 15/01/2002. The findings of such scrutiny and analysis are as under: -

i) Employees' cost:

WBPDCCL claimed Rs. 1000.00lakhs towards employees' cost and the same amount was considered provisionally earlier. It appeared from the additional information submitted by WBPDCCL that the employees' cost including contribution to Provident Fund etc. charged to Capital Account during 2000-01 came to Rs. 522.45 lakhs and the same charged to revenue Account as per submission was Rs. 60.53 lakhs. Hence, total Employees' cost at Bakreswar Power Station was Rs. 582.98 lakhs. Adding average 6% increase over the previous year's expenditure, we allow Rs. 617.96 lakhs, say 618.00 for the year 2001-02.

ii) Operation & Maintenance Expenses:

WBPDCCL claimed Rs. 3500.00 lakhs for Operation and Maintenance expenses excluding insurance charges, which they claimed under the head Administration and Establishment charges. The amount claimed was stated to be as per norms applicable for independent power projects as announced by the Government of India. What normative percentage was considered and on what basis total capital cost of the project had been calculated, however, was not made clear. The norms set by the government for allowing O & M charges include all sorts of expenses other than

on fuel, interest and depreciation. What WBPDCCL claimed under this head was exclusively for operation and maintenance as employees' cost, administration and establishment charges they claimed separately. Moreover, the maintenance need in a newly set generating station is minimum. As per the data submitted by WBPDCCL in replies to the queries raised during the public hearing, the actual expenses incurred towards repairs and maintenance during the first half of the year 2001-02 was only Rs. 350.48 lakhs. Going by this trend of expenses, we allow Rs. 700 lakhs for the year 2001-02 excluding for cost of consumable stores. As two out of the three units of the generating station had been in operation for full year and another unit for half year, we allow another 200.00 lakhs towards consumable stores. The amount being allowed by us, thus, comes to Rs. 900.00 lakhs.

iii) Administration & General Charges:

The Administration and General Establishment charge was projected to be Rs. 500.00 lakhs. The key constituents of this head were stated to be vehicle hire charges, security expenses, insurance expenses and rent rates & taxes. The projected total expenditure on this score is admitted as reasonable in view of the fact that all the three units of the power station had been in operation during the year.

iv) Fuel Related Cost:

WBPDCCL claimed Rs. 200.00 lakhs as fuel related cost. We admit the same including the expenses for ash handling and ash disposal.

v) Interest & Finance Charges:

Interest and Finance charges claimed by WBPDCCL was for Rs. 3109.54 lakhs. They were asked to provide detail workings in support of their claim and the same had been provided by them as addition information/clarifications (vide Annexure - 6 of their replies queries raised during the public hearing). Pending the detail examination of their submission on amount of Rs.2581.00 lakhs were provisionally considered by the Commission on these accounts. From a detailed examination of the computation submitted, it transpires that total finance received by WBPDCCL for Bakreswar Power plant upto 31st March 2001 from the Govt. of West Bengal was Rs. 256216.37 lakhs (of which Rs. 209716.37 against OECF funding). Out of such total finance from the state government, an amount Rs. 70919.00 lakhs was considered as Equity. The balance amount of Rs. 185297.37 lakhs had been considered as loan, bearing an interest @ 2% p.a. and accordingly the interest payable came to Rs. 3705.95 lakhs. Interest chargeable to capital account had been considered Rs. 596.41 lakhs and the balance Rs. 3109.54 become chargeable to Revenue Account. We now admit the same.

vi) Depreciation:

The chargeable depreciation worked out by WBPDCCL on original cost of fixed assets capitalized upto the end of year 2000 - 01 at the rates as notified by the Central Government under the provision of Electricity (Supply) Act 1948 came to Rs 9710.20 lakhs. Pending detailed scrutiny of the computation, an amount of Rs.8614.16 lakhs was provisionally allowed by the Commission in its earlier order. It transpires that the amount claimed by WBPDCCL includes depreciation worked out on cost of Transmission system (including Transforms and sub-stations) and such amount of depreciation came to Rs. 1520.73 lakhs. This amount of depreciation is not chargeable to generation account for which the petition relates to. We, therefore, disallow this amount of depreciation and finally, the chargeable depreciation comes to Rs. 8189.47 lakhs.

vii) Reasonable Return:

WBPDCCL claimed Rs. 11347.04 lakhs as return worked out at the rate of 16% on the Equity capital of 70919.00 lakhs. Commission's decision in regard to norm for allowing return to WBPDCCL @ 12% on the capital base has been made clear earlier. In the absence of required data, the capital base is worked out by us as under.

	Rs. in Lakhs
1. Original cost of Assets capitalized upto the end of 2001-02 (as per submission)	295445.72

Less : Original cost of Assets relating to Transmission system included in above amount		24302.69
		271143.03
2. Working capital allowed		
a) 1/12 th of Fuel cost for the year	2006.92	
b) Consumable stores (Approximate cost of one years' consumption)	200.00	
c) Cash and Bank balance (as projected by WBPDCCL)	50.00	2256.92
1. Gross capital Base (1+2)		273399.95
2. Less : I) Outstanding loan in capital A/Cs (As provided)	185292.37	
II) Accumulated Depreciation Amount provided in 2001-02	8189.47	193481.84
Net Capital Base at year end		79918.11

Return for full year @ 12% on Rs. 79918.11 lakhs comes to Rs. 9590.17 lakhs. One of the 3 generating units was put on commercial generation approximately at the middle of the year. We, therefore, reduce the amount of Rs. 9590.17 by one sixth of it and the allowable amount of return comes to Rs. 7991.81 lakhs.

From the analysis of the different elements of fixed for the year 2001-02 as has been done above, a statement showing the fixed cost claimed by WBPDCCL, fixed cost provisionally considered earlier and the admissible claims ascertained now is drawn as under: -

ADMISSION OF FIXED COST FOR THE YEAR 2001-02

Sl. No.	Heads of Account	Amount Claimed	Amount Provisionally considered earlier	Amount as per analysis
1.	Employees Cost	1000.00	1000.00	648.00
2.	Operation & Maintenance	3500.00	3500.00	900.00
3.	Admn & General Expenses	500.00	500.00	500.00
4.	Fuel Related Cost	200.00	200.00	200.00
5.	Interest & Finance Charges	3109.54	2581.00	3109.54
6.	Depreciation...	9710.20	8614.16	8189.47
7.	Reasonable Return	11347.04	9455.87	7991.81
	Total	29366.78	25851.03 Restricted to 80% 20680.82	21508.81

Balance amount of fixed cost now to be admitted Rs. (21508.81 – 20680.82) lakhs = 827.99

7.8 Admission of Fixed Cost for the year 2002 – 2003:

The total allowable fixed cost for Bakreswar Power Station for the year 2002 – 2003 was admitted by the Commission for Rs. 26345.65 lakhs out of which Rs. 23711.09 lakhs were allowed to be included in the Revenue Requirement withholding the balance amount of Rs. 2634.56 lakhs. The Commission now decides to release the withheld amount of Rs. 2634.56 lakhs of fixed cost.

7.9 In view of the analysis / scrutiny done in the earlier paragraphs, the Special Appropriation, decided to be allowed to West Bengal Power Development Corporation Limited in their Revenue Requirement for fixing the power Tariff for the year 2005 – 2006, is summarised as under:

SUMMARY OF FIXED COST FINALLY ADMITTED

Year	Amount Claimed	Amount finally admitted after Scrutiny	Amount Provisionally Considered (Restricted to 80%)	Amount of Appropriation
2000-2001	2634.05	2097.68	1903.90	193.78
2001-2002	29366.78	21508.81	20680.82	827.99
2002-2003	26545.65	26345.65	23711.09	2634.56
Total	58546.48	49952.14	46296.61	3656.33

CHAPTER - 8
SUMMERISED STATEMENT OF
REVENUE REQUIREMENTS

8.1 We are now summerising the Revenue Requirements separately for each of the operating power stations of West Bengal Power Development Corporation Limited and arriving at the average rate of supply as under:

STATEMENT OF REVENUE REQUIREMENT (KOLAGHAT) :

Sl. No.	Particulars	As Projected by DPSC Limited	As Admitted by Commission
A. ENERGY GENERATION (MU):			
1.	Generation (MU)	6732.94	7560.76
2.	Auxiliary Consumption (MU)	706.97	793.88
3.	Energy Sent Out	6025.97	6766.88
B. REVENUE REQUIREMENT (RS. IN LAKHS) :			
4.	Fuel Cost	78388.95	78042.19
5.	Employees' Cost	3464.58	3274.04
6.	Ash Handling & other Fuelrelated Cost	3100.00	1730.51
7.	Repairs & Maintenance	7451.02	6843.04
8.	Administration & General Expenditure :		
	(a) Rent, Rates & Taxes	70.88	70.88
	(b) Legal & Professional Charges	26.25	26.25
	(c) Audit Fees	2.00	2.00
	(d) Others	693.00	548.62
9.	Financing Charges	12574.04	8843.57
10.	Depreciations	8215.28	5847.51
11.	Reasonable Returns	11666.12	11666.12
12.	Special Appropriations	--	--
13.	Total Revenue Requirements	125652.12	116894.73
14.	Other Income	205.00	205.00
15.	Net Revenue Requirement (13-14)	125447.12	116689.73
C. AVERAGE COST OF SUPPLY (PAISE/KWH)			
16.	Fuel Cost	130.08	115.33
17.	Fixed Charges	78.10	57.11

Total	208.18	172.44
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STATEMENT OF REVENUE REQUIREMENT (BAKRESWAR) :

Sl. No.	Particulars	As Projected by DPSC Limited	As Admitted by Commission
A. ENERGY GENERATION (MU):			
1.	Generation (MU)	3780.38	4139.10
2.	Auxiliary Consumption (MU)	359.14	393.22
3.	Energy Sent Out	3421.24	3745.88
B. REVENUE REQUIREMENT (RS. IN LAKHS) :			
4.	Fuel Cost	38200.91	41676.72
5.	Employees' Cost	1063.30	1063.30
6.	Ash Handling & other Fuelrelated Cost	411.39	307.84
7.	Repairs & Maintenance	3180.90	2284.31
	Administration & General Expenditure :		
	(a) Rent, Rates & Taxes	2.00	22.00
8.	(b) Legal & Professional Charges	30.00	30.00
	(c) Audit Fees	1.00	1.00
	(d) Others	330.00	330.00
9.	Financing Charges	8689.90	8557.90
10.	Depreciations	12999.31	9273.98
11.	Reasonable Returns	4964.40	4964.40
12.	Special Appropriations	--	3656.33
13.	Total Revenue Requirements	69893.10	72167.78
14.	Other Income	3610.00	3610.00
15.	Net Revenue Requirement (13-14)	66283.10	68557.78
	Recovery of Fixed Charges relating to Dedicated Transmission Systems :		
16.	a) Finance Charges	2895.72	279.59
	b) Depreciation	1872.87	1488.04
	c) Return	675.17	829.96
17.	Total Recoverable Charges (12+13)	71726.86	71155.37
C. AVERAGE COST OF SUPPLY (PAISE/KWH)			
18.	Fuel Cost	111.66	111.26
19.	Fixed Charges	97.99	78.70
	Total	209.65	189.96

STATEMENT OF REVENUE REQUIREMENT (BANDEL) :

Sl. No.	Particulars	As Projected by DPSC Limited	As Admitted by Commission
A. ENERGY GENERATION (MU):			

1.	Generation (MU)	1798.16	1798.16
2.	Auxiliary Consumption (MU)	193.11	193.12
3.	Energy Sent Out	1605.05	1605.04
B. REVENUE REQUIREMENT (RS. IN LAKHS) :			
4.	Fuel Cost	22462.77	21736.01
5.	Employees' Cost	2654.82	2602.61
6.	Ash Handling & other Fuelrelated Cost	750.00	632.53
7.	Repairs & Maintenance	4634.48	3830.23
	Administration & General Expenditure :		
	(a) Rent, Rates & Taxes	57.75	57.75
8.	(b) Legal & Professional Charges	4.73	4.73
	(c) Audit Fees	0.93	0.93
	(d) Others	202.13	202.13
9.	Financing Charges	1194.84	581.01
10.	Depreciations	990.70	116.90
11.	Reasonable Returns	793.04	793.04
12.	Special Appropriations	--	--
13.	Total Revenue Requirements	33746.29	30557.87
14.	Other Income	103.50	103.50
15.	Net Revenue Requirement (13-14)	33642.79	30454.37
C. AVERAGE COST OF SUPPLY (PAISE/KWH)			
16.	Fuel Cost	139.96	135.42
17.	Fixed Charges	69.67	54.32
	Total	209.61	189.74

STATEMENT OF REVENUE REQUIREMENT (SANTALDIH) :

Sl. No.	Particulars	As Projected by DPSC Limited	As Admitted by Commission
A. ENERGY GENERATION (MU):			
1.	Generation (MU)	1261.44	1261.44
2.	Auxiliary Consumption (MU)	138.82	138.76
3.	Energy Sent Out	1122.62	1122.68
B. REVENUE REQUIREMENT (RS. IN LAKHS) :			
4.	Fuel Cost	19416.33	15113.53
5.	Employees' Cost	2152.65	2046.10
6.	Ash Handling & other Fuelrelated Cost	150.00	90.43
7.	Repairs & Maintenance	2783.18	1772.91
8.	Administration & General Expenditure :		
	(a) Rent, Rates & Taxes	6.83	6.83
	(b) Legal & Professional Charges	13.72	13.72
	(c) Audit Fees	0.88	0.88

	(d) Others	341.81	312.65
9.	Financing Charges	1433.81	609.65
10.	Depreciations	621.50	51.16
11.	Reasonable Returns	1095.88	1095.88
12.	Special Appropriations	--	--
13.	Total Revenue Requirements	28016.59	21113.74
14.	Other Income	52.00	52.00
15.	Net Revenue Requirement (13-14)	27964.59	21061.74
C. AVERAGE COST OF SUPPLY (PAISE/KWH)			
16.	Fuel Cost	172.87	134.62
17.	Fixed Charges	76.23	52.99
	Total	249.10	187.61

CHAPTER - 9 TARIFF ORDER

9.1 Based on the analysis and the decisions recorded in earlier chapters, we order as under.

9.2 The average cost of supply of power from the different power stations of the West Bengal Power Development Corporation Limited (WBPDC) shall be as follows:

Power Station	Paize / Kwh.
Kolaghat	172.44
Bakreswar	189.96
Bandel	189.74
Santaldih	187.61

9.3 Above tariff shall be applicable for power supply from 1st April 2005 and shall remain in force for a period of one year unless amended or revoked or extended beyond the said period of one year.

9.4 The Commission has fixed the tariffs under this order in terms of provisions of Section 64(3) (a) read with Section 62(1) of the Electricity Act, 2003 and keeping in view the provisions of other relevant Sections of the Electricity Act, 2003.

9.5 The fixed charges, i.e., the Net Revenue Requirement minus Fuel Cost as shown in the Statement of Revenue Requirement in earlier Chapter, shall be recovered in 12 monthly equal instalments. The energy charges will be charged monthly separately based on the energy drawal. The fixed cost to be recovered shall be adjustable if the approved Plant Load Factors (PLFs) are not achieved due to the reasons attributable to the generating company. However, the PLF for Kolaghat may be adjusted downward provided the Bakreswar PLF is increased by twice of such lower adjustment. Also inter plant adjustment of generation between Bandel and Santaldih is also allowed. The adjustment for recovery of fixed cost based on PLF achieved or adjusted as stated above, if any, shall be done on yearly basis at the end of the year.

9.6 The fuel cost of each power station will be subject to adjustment periodically as per the Fuel Cost Adjustment (FCA) formula given at para 4.5 of this Order. It is, however, made clear that for carrying out such adjustment, only the basic fuel cost plus applicable taxes and levies plus railway freight or road transportation cost, wherever required, will be considered.

9.7 WBPDC will present to the Commission a gist of this order along with the names of at least three leading dailies (at least one of which will be in English and the rests in Bengali) within two working days from the date of receipt of this order for approval of the Commission and on receipt of the approval shall publish the approved gist in those newspapers within five days from the date of receipt of the approval of the Commission.

9.8 The Commission proposes to give certain directives to WBPDCCL in respect of tariff and tariff related subjects. They are as follow:

9.8.1 In terms of the provisions of the recently declared National Electricity Policy, availability based tariff is to be introduced at the State level within a year. West Bengal Power Development Corporation Ltd., a generating company at the State level and other licensees are directed to submit a report within 3 months how ABT in respect of bulk sale to the licensee / licensees should be introduced. This report taking into consideration the commercial and operational aspects of ABT and participation of WBPDCCL as a State level generating company would also form a part of next tariff revision petition.

9.8.2 WBPDCCL as a State level generating company shall also give its opinion in regard to the introduction of differential rates of fixed charges for peak and off peak hours for better management of load. This opinion along with justifications and suggestions shall be intimated to the Commission by June 2005.

9.8.3 Action towards conservation of energy by adopting energy efficient process and extraction of energy from waste heat shall be implemented with high priority.

9.8.4 Periodic energy audits shall be undertaken by the WBPDCCL in all their power plants and shall send a status report on this matter by end of October 2005 and that report should form a part of next tariff revision petition.

9.8.5 WBPDCCL shall organize awareness programme among its working personnel in regard to the Electricity Act 2003 and Regulations thereunder since prepared by the Commission. The awareness programme shall also include the responsibility of the organization towards grid discipline, availability based tariff, economic operation of power plants and merit order dispatch.

9.8.6 Full compliance with prescribed environmental norms and standard must be achieved in operations of all generating plants. Setting up of coal washeries should be encouraged and suitable steps should be taken so that utilization of fly ash is ensured as per environmental guidelines.

Sd/- 29.03.2005

**PRITITOSH RAY
GHOSH
MEMBER**

DATE: 29.03.2005

Sd/- 29.03.2005

**S. N.
(TECHNICAL)
CHAIRPERSON**

[Back to list of Petitions](#)