ORDER OF DPL FOR THE YEAR 2000-2001 & 2001-2002

ORDER

O R D E R

OF

WEST BENGAL ELECTRICITY REGULATORY COMMISSION

In Case No. T.P. 4 of 2000 - 01

And

Case No. T.P. 5 of 2001 - 02

IN RE THE TARIFF APPLICATIONS OF DURGAPUR PROJECTS LTD.FOR THE YEARS 2000 - 01 AND 2001 - 02 UNDER SECTION 22(1) OF THE ERC ACT, 1998.

Present: Justice (Retd.) S.K. Phaujdar, Chairperson.
Shri R.R. Ganguly, Member (Technical).
Shri A.K. Jain, Member (Finance & Accounts).

For the petitioners :
Shri A.K.Ghosh, Managing Director,
Durgapur Projects Ltd. (DPL).

Objectors who had joined the hearing:
Shri A.K. Chanda, for WBSEB.
Shri K. Talukdar for Corporate Ispat Alloys.
Shri A.K. Srivastava for Durgapur Industrial Power Consumer's Association.
Dr. S.C. Bhattacharya for the WBSEB.
Shri K.P. Roy for SPS Metal Cast and Alloys.
Shri K. Gupta, Advocate, for Sobha Ispat.
Dishergarh Power Supply Company Limited.
Corporate Ispat Alloys.
Calcutta Electric Supply Company.
Jai Balaji Spunge Pvt. Ltd.
Investment Credit and Rating Agency(ICRA).

Objectors who had filed objections :
Adhunik Corporation (P.) Ltd.
Durgapur Chemicals Ltd.
West Bengal State Electricity Board,
Durgapur Industrial Power Consumers' Association.
Dube and Company for Sobha Ispat Alloys Ltd.
Corporate Ispat Alloys Ltd.
SPS Metal Cast and Alloys Ltd.

Also heard :
Administrative Staff College of India,
Consultants for the Commission.

Dated
The 21st September, 2001.

CHAPTER - 1 : THE COMMISSION.

1.1 The West Bengal State Electricity Regulatory Commission has been formed under Section 17 of the Electricity Regulatory Commission Act, 1998 (Act 14 of 1998) in the year 1999. After crossing the initial difficulties, the Commission framed its Regulations, the State framed Rules for it and the Commission became fully functional from the second half of the year 2000.

1.2 The Commission is now constituted by the Chairperson Justice (Retd.) S.K. Phaujdar, Shri R.R. Ganguly, Member (Technical), and Shri A.K. Jain, Member (Finance & Accounts).

1.3 In terms of its Conduct of Business Regulations and Guidelines made thereunder, the Commission called upon the utilities within its jurisdiction to submit their tariff revision petitions for the years 2000-01 and 2001-02 and in response to the same, the Durgapur Projects Ltd. came up with two petitions for these two years which were admitted and registered as petition no.T.P.4/00-01 and petition no. T.P. 5/01-02.

1.4 Filing of these two petitions was duly notified in prominent newspapers of Kolkata calling upon all concerned to file objections against the proposed revision of tariff. Under the regulations interested parties were afforded opportunities to inspect the petitions and take copy thereof.

1.5 Under the relevant regulations, the Commission had appointed Administrative Staff College of India (ASCI) at Hyderabad as Consultants to analyse, scrutinize and verify the petition for 2000-01 and the objections that were filed in time and the report of the ASCI was also kept open for inspection and copies and parties were given liberty to file objections against the report.

1.6 Hearing of these two petitions was taken up together for the sake of early disposal and for avoiding unnecessary exercise on same or similar matters at dispute.

1.7 Not only the petitioner and the objectors who had chosen to file objections in writing, hearing was allowed to all who proposed to join and due information was given through publication in prominent newspapers of Kolkata. Hearing commenced on 22.5.2001 and concluded on the next day. Additional informations as required by the Commission and the Consultants were subsequently given and the last information/document was received on July 2nd, 2001.

CHAPTER 2 : CASE OF THE DURGAPUR PROJECTS LTD.

2.1 Claim for the year 2000 -01.

2.1.1 According to the petition in question, the DPL is sanction holder under Section-28 of the Indian Electricity Act, 1910. The sanction was granted by the GOWB on 28.8.1964. After meeting the need of the consumers in the area for which sanction was given the DPL is to provide the surplus power to the WBSEB.

2.1.2 It was contended by DPL that their Tariff was last revised with effect from May, 1999, and since then the tariff remained unchanged although costs have increased substantially during this period.

2.1.3 The DPL proposed a hike in Tariff by about 28% and gave a break-up of the total revenue requirement as per following table -
The total revenue requirement under the various heads is as follows:

	FY 2000 -01 (Rs. Lakhs)	% of
Cost of generation (fuel.)	6269.22	47.35
Stores	360.00	2.72
Utilities: Water	284.05	2.15
Purchase of Power	0.00	0.00
Employees' cost	1457.97	11.01
Ash disposal	8.00	0.06
Repairs & Maintenance	411.00	3.10

Miscellaneous Expenditure written off	146.00	1.10
Administrative & General Expenses	1925.55	14.54
Auditors fee	0.10	0.00
Rent, rates and taxes	0.73	0.01
Insurance	50.00	0.38
Guarantee fees	25.00	0.19
Management expenses (Directors fees 56%)	1.80	0.01
Other expenses	45.00	0.34
Depreciation	667.56	5.04
Interest	978.39	7.39
TOTAL EXPENSES	12630.37	95.40
Reasonable rate of return (based on Schedule VI principles of ESA 1948)	609.20	4.60
TOTAL REVENUE REQUIREMENT	13239.57	100.00

The expected revenue from the current tariffs and the proposed tariffs are as follows:

	FY 2000 -01 (Rs. In lakhs.)
1 Total Revenue requirement	13239.57
2 Government subsidy	0.00
3 Revenue from other income	488.88
4 Net Revenue requirement (1-2-3)	12750.69
5 Rebate availed by the consumers (cash)	88.41
6 Revenue required from sale of power (4+5)	12839.10
7 Net Revenue from the existing tariffs	9970.80
8 Revenue from proposed tariff increase (4 -7)	2779.89
9 % increase in tariffs sought (8/7)	27.88

2.1.4 They indicated that they had based their calculations on the principles enshrined in Schedule VI to the 1948 Act. They claimed that they had attempted to reduce cross subsidy and to rationalize the tariff structure. They also emphasized their efforts to reduce T and D loss.

2.1.5 They sought to reduce the gap between fixed costs, fixed/demand charges and to introduce the concept of fixed charges to certain categories of consumers. They also proposed to withdraw the Annual Guaranteed Minimum Energy Consumption Charge (AMGC) which is existing for 11 KV supply. They also proposed to withdraw minimum charge for those consumers for whom fixed charge was sought to be introduced. Rebate for prompt payment was sought to be uniform. All industrial consumers taking 11 KV supply were to be brought under same.

2.1.6 They prayed for condonation of the omissions or shortcomings in submissions of data and for allowing the rate claimed by them and also prayed for an interim hike by 10% as an interim measure.

2.2 Claim for the year 2001 - 02.

2.2.1 With an introduction as was made for the previous year, the DPL claimed a hike by 13% from their rates suggested for 2000-01. The following table would give the break-up of their claim for 2001-02.

The total revenue requirement under the various head is as follows:

	FY 2000 -01 (Rs. Lakhs)	% of
Cost of generation (fuel.)	15233.50	53%
Stores	707.63	2%
Utilities: Water	584.85	2%
Purchase of Power	0.00	0.00
Employees' cost	1603.77	6%
Ash disposal	20.87	0%
Repairs & Maintenance	571.06	2%
Miscellaneous Expenditure written off	93.33	0%
Administrative & General Expenses	2118.11	7%
Auditors fee	0.10	0%

Rent, rates and taxes	0.88	0%
Insurance	80.00	0%
Guarantee fees	35.00	0%
Management expenses (Directors fees 56%)	2.00	0%
Other expenses	60.75	0%
Depreciation	2932.71	10%
Interest	4130.12	14%
TOTAL EXPENSES	28174.68	98%
Reasonable rate of return (based on Schedule VI principles of ESA 1948)	452.72	2%
TOTAL REVENUE REQUIREMENT	28629.40	100.00

The expected revenue from the current tariffs and the proposed tariffs are as follows:

	FY 2000 -01 (Rs. In lakhs.)
1 Total Revenue requirement	28629.4
2 Government subsidy	0.0
3 Revenue from other income	307.9
4 Net Revenue requirement (1-2-3)	28321.5
5 Rebate availed by the consumers (cash)	114.1
6 Revenue required from sale of power (4+5)	28435.6
7 Net Revenue from the existing tariffs	25064.0
8 Revenue from proposed tariff increase (4 -7)	3257.5
9 % increase in tariffs sought (8/7)	13%

2.2.2 In this proposal they sought to introduce a cost based tariff for sale of power to WBSEB in line with the terms of a PPA to be entered into with the WBSEB. They retained their proposals made for 2000-01 as indicated in para 2.1.5 above.

2.2.3 They desired approval of the fuel surcharge formula currently followed and based their calculations as per the guidelines of the Power Department dt. 7.5.1997 and 30.11.1998.

2.2.4 They prayed for acceptance of their tariff proposal, for determining tariff for supply to WBSEB as per PPA to be approved, for acceptance of FSC formula and for an interim increase as the Commission may deem fit.

CHAPTER 3: OBJECTIONS IN WRITING (FY 2000-01).

3.1 Objections by W.B.S.E.B.

It is the case of the WBSEB that they had been buying power from DPL at 132/220 KV as also 33 KV and had been a major buyer from DPL.

3.1.1 Although there was no formal PPA between them, the terms and conditions of supply and chargeable Tariff was determined by an order of the Government in the Power Deptt. The DPL proposed to enhance the basic tariff by 23% although they should have got only the sent out generation cost plus reasonable return. For 132 KV supply, the tariff could be only 170 paisa/KWH instead of 190p. as claimed and for 33 KV, it should have been 172p./KWH instead of 209p. They further contended that energy charge may not be enhanced from the existing level as power from WBPDCL is cheaper.

3.1.2 The WBSEB also contended that the DPL had not calculated the fuel costs on the basis of normative value of Heat Rate, (auxiliary) fuel consumption and other normative figures. The FSC should be recovered on normative parameters basis.

3.1.3 The objections raised by WBSEB have been dealt with while dealing with the relevant issues and as per the provisions of the ERC Act.

3.1.4 The WBSEB ventilated their grievance stating that while other industries enjoyed concessional tariff to the extent of 48%, the WBSEB have to bear the cost.

3.2 Objections by Durgapur Industrial Power Consumers' Association

3.2.1 This objector is a registered Consumers' Association and claims to represent the consumers of power from DPL. A preliminary objection was taken by it to say that the Commission had not made regulations as per Section 29 of the ERC Act, and as such, the very admission of the tariff petitions was mis-conceived and premature. It is felt by the Commission that this objection is frivolous as there is a set of regulations in the CBR (as amended) as required by Section 29 and as such this objection needs no further mention or consideration.

3.2.2 The Association has also raised another point to say that the documents disclosed by DPL were insufficient and there was no procedure established for notice to produce, and as such, the proceeding before the Commission was ultravires the scheme and theme of the ERC Act. This objection too is unfounded as the ERC Act itself, in Section 12 read with 23, gives to the Commission the powers of a Civil Court for discovery and production of documents. DPL has submitted document from time to time except for the documents/information required which have been dealt with separately in this order. Being the first year of the present regulatory framework in the state, the Commission has given appropriate directions whenever required and has accepted the request of the DPL for condoning shortcomings in submission of information/data for this year and the next year.

3.2.3 The Association took another preliminary objection for shortage of time to file objection. It is admitted in the objection petition itself that notification calling for objections was published on 9.1.2001 and the last date for filing objection was 12.2.2001. It was quite a long time for the Assn. to prepare its objection, and more so, when the Commission had given it every opportunity to inspect any record and take copy thereof.

3.2.4 The Association also raised factual objections touching what they called "inefficiency" of the DPL regarding plant availability, plant load factor, auxiliary consumption and system loss etc. On plant availability, the Association referred to an order of the CERC whereby availability based tariff was prescribed. With that prescription and with a low availability of DPL at 25% only as projected for 2000-01, the recovery of fixed charge could be only 25 x 100/80 = 31.25% whereas the DPL was charging 75% of contract demand as fixed charge which is proposed to be increased to 85%. The association also objected stating that the WBSEB does not recover this from its biggest consumer, the WBSEB.

3.2.5 The projected PLF of DPL for 2000-01 is 17% and the Association relied on a notification of GOI dt. 30.3.1992 laying down the norms for determination of tariff which permitted full recovery of fixed charge at a PLF of 68.5%. With PLF of 17% the DPL could have realized 25% of the fixed charge.

3.2.6 For auxiliary consumption, the DPL projected the figure at 14.20% of the total generation whereas norm fixed by the GOI permitted only 9.5%. This, as per the Association, resulted in 4.7% hike in Tariff.

3.2.7 On system loss (Transmission and Distribution loss), it was projected at 22.7% and the Assn. referred to the petition of the DPL itself whereby it was accepted that the traditional range of T & D loss was 3 to 9% only. If T & D loss is reduced to 9% only, the tariff shall be reduced by 13.7%. Points were also raised on inadequate metering also questioning the very assessment of system loss in the absence of metering.

3.2.8 Most of the industries, as per this objector, were situated within a 3 km radius from the Power Station of DPL and they were subscribing 11KV supply. Metering, Billing and Payment were regular. These industries accounted for 20% of the total sale of DPL power. For supply to the industries in such a small span could not have give rise to a T & D loss of 22.7%.

3.2.9 It was alleged that no system loss was assessed for supply of power to WBSEB and the actual system loss suffered there was being transposed to the 11 KV consumers (the industries). The Association analyzed the data given by the DPL and assessed the T & D loss at 15.42% only. In no case, according to this objector, the non-technical loss could be attributed to these industries.

3.2.10 The Association also raised objection regarding fuel costs questioning the figures given for heat rate, specific consumption of coal and calorific value thereof and quality of coal. The projected heat rate of the plant was stated to be unusually high by 31%. The coal consumption according to this association should be .60kg/kcl instead of the figure projected based on gross calorific value of coal, required heat rate and per tonne cost of coal.

3.2.11 On oil consumption, it was stated that no reason was specified for increased projection of specific oil consumption from the previous year. The norm was only 3.5 ml/kwh and the figure projected by DPL was 71.4% above the norm.

3.2.12 Objections were raised regarding necessity of upgradation of all units, the projected expenses for Renovation, Upgradation and Modernisation, operation costs also and non-achievement of advantages against such earlier expenditure on renovation and modernisation.

3.2.13 Objections were raised regarding unbundling of costs, basis of allocation of costs on other activities of DPL, difference in quantity of sale rate adopted by DPL and WBSEB, cross-subsidisation etc. The association demanded that tariff is to be reduced.

3.3 Objections by others.

3.3.1 Objections were raised by Sova Ispat Alloys Ltd., Adhunik Corporation (P) Ltd., Corporate Ispat Alloys Ltd., SPS Metal Cast and Alloys Ltd. almost on the points elaborated in the last sub-chapter who also raised points on applicability of tariff from prospective date, 60days notice before variation laying down of norms under ERC Act, allowing prudent costs based on normative parameters and they also demanded that tariff needs to be reduced. Durgapur Chemicals Ltd.(DCL) highlights their grievance against the proposed hike in tariff as, according to them, cost of electricity was a major component of pricing their product which had to face stiff international competition and any further rise in cost of electricity would ruinous for them.

3.3.2 The objections spoken of in paragraphs 3.2.4 to 3.3.1 have to be dealt with separately in the relevant chapters.

3.4 Reply of the DPL against these objections.

3.4.1 On the objections by DCL, it was stated by the DPL that DCL had been allowed a concessional tariff by the State Got. and in an attempt to rationalize the tariff and for showing no preference to any particular consumer, the present tariff structure had been suggested and more so, when the DPL does not get any subsidy from the Government.

3.4.2 On availability factor for the plant it was stated by the DPL that most of its units had completed more than 30 years of operation and aging was the main reason for low availability factor. R & M operation were on, and after their completion, AF would rise to 80%. It was stated that Availability Based Tariff was applicable to central generating companies and was not made applicable to DPL. It was stated that AF of the utilities cannot be co-related to the recovery of fixed charges through Contract Demand (CD). For local load, DPL ensures 100% availability to the consumers and accounting for the necessary shut down period, AF would be in excess of 85%.

3.4.3 It was stated by the DPL that their fixed charge was not only on account of generation cost, but also of supply and distribution cost. For DPL, therefore, direct linkage was not appropriate. They had been realising only 19% of the fixed costs through imposition of demand charge, while ideally the fixed cost incurred by the consumers should be recovered through imposition of appropriate fixed/demand charge.

3.4.4 On PLF also, they came with an application that due to aging of the units, the PLF was low and it was being attempted to be improved through renovation and modernization. The aging and consequent low AF and PLF accounted for high auxiliary consumption.

3.4.5 On T & D loss, it was stated by the DPL that energy sold to WBSEB at 220/132 KV and 33 KV was nearly at the busbar itself and loss was negligible. There was no misrepresentation in projecting the T & D loss. They gave a chart showing 22.7% loss in the local grid.

3.4.6 On heat rate of plants and specific coal consumption, the DPL came up with a plea that the actuals for the past five years have been considered for this year also. But the improved heat rate and specially coal consumption were reported with R & M programme execution. For oil, the DPL conceded that with R & M secondary fuel consumption would come down to 3 to 4 ml per unit.

3.4.7 It was stated that to compensate the low rate tariff for supply to the WBSEB, the DPL had to seek cross subsidies from the industries only and they were planning to enter into a PPA with WBSEB.

3.5 Objections and replies during hearing.

3.5.1 Only those who had filed written objections came forward to make submission during public hearing. They highlighted the points taken in writing and DPL also responded to those points.

3.5.2 In addition to the legal objections indicated in paragraphs 3.2 and 3.3 under this chapter, certain more points were raised during arguments on the question of retrospective fixation of tariff for the year 2000-01 and on the question of lack of notice of 60 days as required in clause 3 of schedule VI.

3.5.3 Along with the other two points, we may also consider a question if there could be an enhancement of tariff for more than once in a financial year.

3.5.4 Schedule VI to the ES Act, 1948 has been referred to in Section 57 of the Act. This section 57 directs that licencees are to realize charges of electricity from the consumers subject to the provisions of Schedule VI. Under the first proviso, to clause I of Schedule VI the periodicity of any revision is to be one year and not any period shorter than one year. The language used in the proviso runs as follows: PROVIDED THAT SUCH CHARGES SHALL NOT BE ENHANCED MORE THAN ONCE IN ANY YEAR OF ACCOUNT. Under the law it is for the licensee to enhance tariff, under clause I in such a manner that its clear profit IN ANY YEAR OF ACCOUNT does not exceed the amount of reasonable return. The licencee is thus entitled to readjust his tariff FOR EVERY YEAR OF ACCOUNT provided his clear profit does not exceed the reasonable return. The first proviso is a limitation of this power of enhancement of tariff and this limitation accordingly must be read harmoniously with the basic provisions of clause I. Keeping in mind the background in which the tariff petition for 2000-01 has been delayed and looking to the relevant provision in section 57 and clause I of Schedule VI we are to give a meaningful interpretation to the words IN ANY YEAR OF ACCOUNT which must be read as FOR ANY YEAR OF ACCOUNT. Under this interpretation we feel that revision in tariff may be allowed ONLY ONCE for any year of account and it is not important if on the date of order for division for any particular year of account, the year has actually passed.

3.5.5 On the question if tariff could be revised retrospectively, the objection is that tariff for FY 2000-01 cannot be fixed now. As interpreted in the last paragraph, tariff for 2000-01 may be determined even after passage of the year otherwise a valuable right given to the licensee shall be denied. But in determining the tariff for 2000-01 we cannot make it effective from any date prior to 1.4.2000, the first date of the financial year or year of account 2000-01. We are also to act upon the parameters existing in that FY only in this sense certainly tariff is to be fixed only prospectively. Once we fix the tariff for the year 2000-01 there is no bar of realization of the dues (or refund of excess of realization) during a period beyond the limits of the concerned financial year. While the law permits the licencee to revise its tariff once in a financial year the procedure does not permit him to do it at his sweet will. The licencee is to come to the regulators who in their term must go through a procedure of transparent hearing and a process for determination of tariff for any FY may not be completed in that FY itself. If we take up a narrow interpretation of the term retrospective then the right of the licensee may be defeated by a delayed proceeding and also by an appeal thereafter. That could never be taken to be the intention of the legislators. Even for the tariff petition for 2001-02, revision cannot be made on 1.4.2001 itself and if we give only a restricted meaning to the words prospective and retrospective, revised tariff could be effective only for the months remaining after the date of order. We hold that this Commission can determine tariff for the year 2000-01 even after the year has passed but that is to be done only the parameters existing in that FY. This tariff may be given effect to after the passage of the year but never from a date prior to the first date of the financial year.

3.5.6 The third proviso to clause I of the Schedule VI says that the licencee shall not enhance the charge of supply of electricity until after the expiry of notice in writing of not less than 60 days of his intention to enhance the charges given by him to the State Government and to the Board. This proviso is to be read along with section 57 and 57A of the ES Act which spoke of the involvement of the State Government in the process of Tariff fixation/ revision. This responsibility now rests with the commission after the commission has become functional under the ERC Act 1998. The State has no role to play now except for dictating the policies in public interest and also to take the responsibilities of payment to the utilities when it requires that certain subsidy is to be given to any particular sector. The Board has also no role to play in tariff fixation. Section 52 of the ERC Act gives an overriding effect of the Act over other provisions in other Acts in cases of inconsistency. Section 29(6) of the ERC Act provides that after the enactment of the ERC Act no rating committee shall be constituted and it is for this Commission now to secure that the licencee comply with the provisions of the licence regarding the charges for electricity. More over under section 30 the Commission is entitled to deviate from the rigours of section 29(2)(a) after giving reasons. In our view the clause for notice to State Government and the Board is now NON EST with the change in the law and even if any interpretation is given in favour of such notice it would be only an empty formality as the State Government or the Board could not have done anything even with notice to them. We therefore deviate from the requirement of such notice as that would be an unnecessary

exercise involving parties who are neither necessary nor proper. This can be seen from another angle as well. The purpose of any notice under the law is to give to the noticees an advance information of any proposed action which as a legal bearing. If that purpose is served, law does not insist on any particular form of notice. The tariff revision petition was filed before this commission and the filing was duly notified in prominent Newspapers published from and read in the State. This must be regarded as sufficient notice not only to the State Government or the Board but also to everybody interested in the matter. The Board in fact had taken part in the proceeding. This objection has not been taken by the Board or the State. The person who is not entitled to any notice under the law may not raise an objection for absence of notice. The prayer for revision may not be defeated for absence of notice of sixty days.

3.5.7 Another objection was raised on the proposed tariff structure with cross subsidy on the ground that CROSS SUBSIDY was not contemplated in the ES Act or ERC Act. The existing tariff structures of many Utilities however indicate that certain classes of consumers are charged less than the average price of electricity based on revenue requirement and net sale while some other classes are to make good the loss by paying more than the average price. This, in the power sector parlance, known as cross subsidy. In fact it exists and we may try to find the legal basis thereof.

3.5.8 Under the Electricity (Supply) Act different provisions are there for different utilities to fix their tariff. Section 43A speaks of Terms and Conditions and Tariff for sale of electricity by a generating company. Section 49 speaks of provisions for sale of electricity by Board to persons other than licencees. Section 57 deals with licencees charge to consumers and mentions schedule VI for guidelines. Section 59 covers general principles of Boards finance and adjustment of tariff.

3.5.9 Even for the Board, as per Section 49 the Board is obliged to make uniform tariffs. Board has been given the liberty, under clause (3) of this section to fix different tariffs for supply of electricity to a non licencee, if it is considered necessary and expedient, having regard to

i) geographical position of an area
ii) nature of supply
iii) purpose of supply
iv) any other relevant factor
But no undue preference was to be shown to any person.

3.5.10 It is therefore clear that the concept of differentiation in Tariff is not foreign to the Electricity Supply Act 1948 and the basis thereof may be any one of the grounds mentioned in the last paragraph. Section 57A is silent on this point and schedule VI gives the financial Principles and their application. But there is no specific bar in these provisions for differential tariff for different classes of consumers.

3.5.11 The ERC Act, as indicated above, supercedes any other provision of law that is inconsistent with it, It requires the Commission to determine tariff in accordance with the Regulations made by it and in that matter shall be guided by sections 46, 57, 57A and Schedule VI. It is clearly mentioned in section 29(3) of the ERC Act that in determining tariff the commission may differentiate according to the consumers load factor, power factor, total consumption of energy during any specified period or the time at which supply is required or
the geographical position of an area nature of supply, purpose of supply. Barring these provisions there is no scope of showing any preference to any consumer/class of consumers. Thus there is, even in the new Act, a scope of differential rates of tariff.

3.5.12 Cross subsidy, although against the market economy, is a long existing practice and may not be wiped out in a single year. There must however be an attempt on the part of the Commission to phase out cross subsidy to see that distribution and supply is made on commercial principles and at the same time the socio economic back ground of the consumers may not be lost sight of.

3.5.13 We have already covered the objection regarding absence of notice of 60 days. This has another facet. The condition of notice has been incorporated in the agreement between the utility and the consumer. A question has been raised if the Commission by its order can over ride the clauses agreed upon by the parties. It is felt that the present question may not disturb us at all. The legal requirement is of 60 days notice to the state and the Board and if at all there is any agreement for a notice upon the consumer also before enhancement of tariff, in our view the purpose has been served as the intention of enhancement was duly notified in major newspapers in Calcutta after the tariff revision petition was filed before this Commission. The purpose of any notice is to give an advance information to the concerned person of any intended act or omission which has a

legal bearing. Seen from this light the publication in the newspaper was sufficient and no particular form of notice is thought necessary.

3.5.14 An objection was raised on the ground that the last revision was made on 1.5.99 and whether another revision may be given effect from 1.4.2000 i.e. within 11 months of the last revision. We have held that revision may be made for every accounting year not more than once. The revision dated 1.5.99 could not have been for a period beyond 31.3.2000 as that financial year (accounting year) ended with 31.3.2000 making it open for the utility to pray and for the Commission to order for revision of tariff for the FY 2000-01. This objection is thus overruled.

3.5.15 It was contended that the following charges cannot be realized by a licencee under the provisions of the ES Act, 1948:
Demand charges, Fixed charges, Minimum demand charges, Consumer charge, fuel adjustment charge and Power purchase adjustment charges.

3.5.16 Minimum charge is one which the consumer agrees to pay to the supplier even if no energy is consumed and once the charge of energy consumed crosses that minimum mark, the actual charges are only levied. This is really a guarantee on the part of the consumer to consume a minimum level of energy. There is no illegality in levying this minimum charge and tariff is not related to this minimum charge. It is a sum mutually agreed upon by the parties. This concept is spoken of in Clause I of Schedule VI in the last proviso.

3.5.17 Demand charge/fixed charge are two expressions of the same concept. The concept is of a two-part tariff system. Under this system a consumer is liable to pay a demand charge on the KVA/KW supply and energy charge for the energy consumed to cover the various costs of supply. Demand charge should normally reflect the fixed costs of the utility. This concept of a two-part tariff system is a progressive one and is accepted universally. In our view there is no illegality in levying a demand charge/fixed charge.

3.5.18 Consumer charge is levied for the services given to the consumers in connection with meter reading, bill processing, collection etc. This is an accepted element of utility's tariff everywhere and if it is levied in lieu of meter rent, the commission finds no fault in such a realization as, in addition to power supply, the utility is also required to attend to the complaints of the consumers, keep a repair machinery in readiness, get the meters read at fixed intervals and to reach the bills to each individual consumer at such intervals. All these works are consumer related beyond mere supply of power and have no bearing with the energy consumed. The commission is of the view that a consumer charge if claimed and if appropriate may not be denied to the utility. However, as all the above consumer related expenses are already included in various cost elements considered for computing the utility's revenue requirement, the benefit due to income from consumer charge is taken away by deducting the same from the annual revenue requirement in the form of "other income". In the instant case, however, we have not levied any consumer charge.

3.5.19 Fuel and power purchase adjustment charges are proposed to be levied for interim enhancement of price of fuel and power purchase in the period intervening to tariff orders. The case was on this point that were placed before us relate to the state Electricity Boards. Section 49 of the Electricity (Supply) Act, 1948 does not specifically speak of fuel surcharge. It does not speak against FSC as well. Schedule VI clause XVI(2) defines clear profit and sub-clause (b) thereof requires consideration of expenditure properly incurred on generation and purchase of energy for calculation of clear profit. We are of the view that this sub-clause must cover in its sweep any fuel and power purchase cost variation after the fixation of tariff has on these two items the utility has no control. Reasonable return is related to capital base and accordingly an increase in fuel and power purchase cost shall not affect the reasonable return. Clear profit should be such that it may not exceed the reasonable return (plus 20% thereof as per the second proviso to clause I of schedule VI). If cost of fuel and power purchase go up and costs on other head do not vary, the clear profit will decrease. If the enhanced price for fuel and power purchase is compensated by fuel and power purchase surcharge the clear profit will remain at the original old level. Thus there will be no disbalance in profit and reasonable return, provided other costs remain the same. Under the true interpretations of the provisions the utility can be allowed to earn clear profit even after enhanced cost incurred on fuel and power purchase till it reaches the limit of reasonable return. We are thus of the view that fuel and power purchase enhancement cost will be admissible to the utility with the only rider that taking variations in all costs in account the clear profit of the utility in a year shall not exceed the reasonable return. Another question that will be raised is the frequency of fuel and power purchase cost adjustment. Should it be done quarterly or six monthly or only once in a year? Charges for sale of electricity are not to be enhanced more than once in any year. While fixing the tariff the commission gives a direction for fuel and power purchase cost adjustment. Thus a potential increase/decrease is indicated only ONCE for every year. What is to be paid for as FPPCA is clearly stipulated in the tariff order, thus there is no enhancement under the

law. The apparent increase/decrease in the charges for sale of electricity is built-in in the tariff order. This is really a deferred payment to compensate the utility for the enhanced price paid for fuel and purchase of power or for proper adjustment in case of fall of price of fuel and power. Under this view, a six-monthly FPPCA fixation is not illegal. Moreover, fuel and power purchase adjustment is an accepted element of utility's tariff everywhere.

CHAPTER 4 : OBJECTIONS IN WRITING FOR 2001- 02.

4.1 Objections by W.B.S.E.B.

4.1.1 The objections for this year are on the same line with those for the previous year and the percentage of increase the rate of rise per unit were challenged and it was stated that unless the rate is reduced on realistic basis, the WBSEB may be forced to displace its power purchase from DPL and would go for cheaper price.

4.1.2 Similar objections as were there for 2000-01 were taken on calculation of fuel costs on the basis of heat rate auxiliary consumption and other normative figures.

4.2 Objections by Durgapur Industrial Power Consumers' Association.

4.2.1 The objections raised by this Association were in line with the objections raised for 2000-01 barring some difference in the figures. They also pointed out that most of the industries in the command zone of DPL are steel related ones and the main factor of this industrial growth was low power cost. The industries were power intensive and therefore tariff sensitive. the steel industry was passing through recession and financial crisis and were unable to bear any further financial burden.

4.3 Reply by DPL.

4.3.1 The DPL came up with similar replies as for the year 2000-01.

CHAPTER 5 : ANALYSIS BY ASCI AND OBJECTIONS THERETO FOR 2000-01 ONLY.

5. Analysis of the Consultants.

5.1 The Consultants opined that tariff was to be determined in terms of Section 29 of the ERC Act read with Schedule VI and Sections 46, 57 and 57A of the 1948 Acts also on the principles set forth in the CBR. In their opinion, the DPL being a sanction holder, were to be covered by these provisions.

5.1.2 According to ASCI, the reasonable return should be calculated by applying the standard rate to the capital base at the end of the year, together with one half of one percent on any loans advanced by the Board and loans borrowed from organizations and institutions approved by the State Government.

5.1.3 According to their analysis and verification, the projected sale figure was an acceptable one. On T & D loss in HV/LV system the ASCI was of the view that the projected loss at 25.8% was too high and suggested a target of 18% for FY 2001-02 with a direction of loss reduction by 2% per year until it reaches 10%. On the projected generation of 575 MU, the ASCI had seen the actuals for 11 months and opined that the gross generation would be 560 MU and net 494 MU.

5.1.4 Item wise expenditure was also analysed by the ASCI and on their analysis they suggested a sum of Rs.12199.63 lakhs against the projected of Rs.12750.69 lakhs towards revenue requirement. The reasonable return was assessed at Rs.256.38 lakhs against the projected sum of Rs.609.20 lakhs.

5.2 Response of DPL on the analysis by ASCI.

5.2.1 On deviation of generation cost, the DPL prayed for not reducing the same and the same prayer was there for employees cost, administration costs and other expenses.

5.2.2 On T & D loss, it was stated that system loss was primarily a socio-economic problem comprising of theft, meter tampering etc. Vigilance was being tightened and a steep cut on this head would not be practical.

5.2.3 On number of employees, the DPL stated that although it seemed higher when compared with WBSEB, the expenses were much lower. The establishment and administration cost of DPL was lower than All India Average.

CHAPTER 6: POINTS FOR CONSIDERATION

6.1 Sale and Generation.

To determine the normative generation, it is the usual practice to proceed from the projected/actual sale for the year under consideration keeping in mind the admissible rate of auxiliary consumption and transmission and distribution losses. However in the instant case whatever surplus power is available from the generating plant of the DPL, after meeting the DPL's internal demand of HV/LV retail consumers, will be sold to WBSEB. This was also accepted by WBSEB during hearing although they had shown in their petition a purchase target of about 450 MU only. During arguments, SEB considered that subject to the DPL power being cheaper they would purchase the whole surplus. Under this circumstances we may not limit DPL's generation to a normative figure for tariff purpose.

6.2 T and D loss.

Transmission and Distribution loss is caused due to technical and non-technical reasons and the Commission is to decide what percentage of the energy brought to the bus is to accounted for as T and D loss and only then the normative energy sale to the consumers may be fixed for the purpose of fixing the price of power per unit.

6.3 Other items.

Once the above two points are addressed, the Commission shall assess the capital base, expenditure properly incurred, reasonable return, revenue requirement and finally the average cost of power per unit and only thereafter a tariff structure could be indicated. In directing a tariff structure the Commission will also deal with fixed charge and variable charge. The Commission will also give necessary direction to the Utility regarding mode of realization/refund in terms of the tariff structure that is fixed by it. The Commission will also set out the norms for different parameters and indicate the time within which the desired norms are to be achieved.

6.4 Capital Base.

It is to be assessed as per the accounting rule and upon the capital base the permissible reasonable return is to be calculated in terms of Schedule VI of the ES Act, 1948.

6.5 Expenditure.

Expenditure will be calculated on two broad heads (i) Fixed costs and (ii) variable costs.

6.6 Fixed costs.

Under this head the parameters are (a) interest on loan capital and finance charges, (b) depreciation, (c) employees cost, (d) repair and maintenance cost (e) administration and general expenses (f) other expenses including water charge, fuel related costs etc. Most of the above costs can be taken as fixed at present.

6.7 Variable costs.

For the DPL the parameters for the expenditure under this head are (a) cost of coal and (b) cost of oil, both as per normative parameters.

6.8 Directions.

Once the above points are addressed, the Commission is to determine the tariff and if necessary direct cross subsidy. The Commission is also to issue directions regarding mode of realization/refund after tariff is fixed.

6.9 Fuel surcharge formula.

For increase in fuel cost in between the effective dates of revision of tariff a formula is to be set out for adjustment of variation in fuel cost and the Commission will also give direction how the variation would be

realized/adjusted.

CHAPTER 7: SALE, GENERATION AND T & D LOSS FOR THE YEAR 2000-01.

7.1 The Durgapur Projects Ltd. (DPL) is a generating unit and as a sanction holder it supplies power to different consumers at EHV, HV and LV.

7.2 As per information furnished by the DPL and as discussed in chapter 6, point 6.1, their surplus power after meeting the internal demand from their bus for HV and LV system is sold to the WBSEB. Thus there is no cap on sale and hence we may not limit the generation to a normative figure and we are to accept the generation as projected by the DPL. It is true that objections were there from different objectors on the low generation for the year 2000-01. The DPL in their paper submitted on 30.5.2001 indicated that most of their units had completed more than 30 years of operation and due to ageing the stations have been reporting lower availability for generation. Under such a background had initiated renovation and modernization programme to restore plant availability and also for extension of the life of the plant. They expected that in the next year the plant availability would reach 80%. In their written notes supplementing the oral arguments these facts were reflected for the year that is over we may not question the projected figures of generation.

7.3 On T and D loss it is the case of the DPL that bulk of the system loss is non- technical in nature and this is due to the socio economic features underlying the area. Objectors however took an objection to the projected high percentage of T & D loss and asserted that the 11KV consumers (i.e. Industries) could not be loaded with such high percentage of losses and, for them, the loss could not be more than 3 to 4%. Admittedly there was no energy audit and no adequate metering was available in the system and as such assessment of system loss has no rational basis. Until the Commission adopts the cost of supply as the basis for determining utility's tariff, the effect of system loss in fact goes to every class of consumers and there may not be an approach of considering different percentages of system loss in determining the tariff for different consumers. However assessment of loss at different voltage levels is considered essential for progressive approach to the concept of "cost of supply" for determining tariff in future.

7.4 The Commission is to see if the projected loss due to technical and/or non-technical reasons could be accepted or if any portion thereof could have been avoided by efficient vigilance and competent administration. Technical loss is caused due to natural laws of physics and may at best be limited to the quantum as per accepted norms. Non-technical loss is caused mainly due to pilferage, meter tampering and also for absence of proper metering. All these causes are avoidable. Pilferage by hooking or otherwise is no doubt a law and order problem which may not be combated by the Utility alone without active assistance from the local administration. But meter tampering may be stopped and proper metering may be enforced by the Utility through its own framework and violators could be booked under the prevailing legislations. Even for pilferage, it can be brought down by effective vigilance. This being the first exercise by this regulatory regime we may concede 20% T and D loss in HV and LV system instead of 22.7% as claimed by the DPL. This loss when calculated over the whole system (EHV, HV and LV) comes to about 13%. We direct that the utility shall make every endeavour to bring this T & D loss down to 18% in 2001-02 in the HV and LV system and in course of next five years this loss is to be brought down to 10% only.

7.5 The gross and net generation of the DPL for the year 2000-01 have been projected as 575 MU & 494 MU respectively showing the auxiliary consumption at about 14%. Apart from being an old plant of 30 to 40 years vintage, the units were under renovation and modernization during 2000-01. Under these circumstances, the above level of generation from the plant though a low one is accepted along with the projected rate of auxiliary consumption and this was precisely the recommendation by the Consultants also. The Commission however is of the view that higher generation from the plant is expected during 2001-02 after completion of the R & M works. DPL has also indicated in their petition that the available surplus power after meeting the internal retail demand will be sold to WBSEB. Based on the above generation, the energy supply plan including bulk supply to the WBSEB for the year 2000-01, is given below considering the normative T & D losses in HV and LV system as 20%.

1. Gross Generation	: 575 MU.
2. Auxiliary Consumption	: 81 MU.
3. Net ex-bus generation	: 494 MU.
4. Energy requirement for retail sales & inter-plant	: 322.96 MU
transfer including normative T & D losses in the HV/LV	
system	: 258.37 MU

Retail sales for 2000-01	: 64.59 MU
Associated T& D losses (Normative loss@20%)	322.96 MU
5. Available surplus for bulk sale to WBSEB (3-4)	: 171.04 MU
6. Total Sales (Normative)	:258.37+171.04 = 429.41 MU.
7. Overall normative T & D losses of the system	: 13.07%

CHAPTER - 8 : FIXED COSTS FOR FY 2000-01.

8.1 Interest and finance charges.
On this head, the DPL have claimed expenditure to the tune of Rs.978.39 lakhs for the year 2000-01. Our Consultants had checked some of the loans and found them in order. According to the details given to our Consultants the interest charges worked out to Rs.965.12 lakhs only and the guarantee fee was assessed at Rs.25 lakhs. We accept these findings of our Consultants and estimate the cost under this head at Rs. 990.12 lakhs only.

8.2 Depreciations.
For the year under review depreciation to the tune of Rs.667.56 lakhs has been claimed by the DPL on the gross fixed assets of Rs.16542.59 lakhs. Calculations have been made in straight-line method at a rate fixed by the GOI. Our Consultants have made verifications with reference to GOI order stipulating the rates of depreciation. The Consultants have opined that the DPL had made calculations on a rate applicable prior to 1.4.1994 and not the rate prescribed on and from 1.4.94. At the intervention of our Consultants the DPL had furnished a revised calculation under which the depreciation works out at Rs.979.80 lakhs. The sum arrived at by the Consultants includes a depreciation of Rs. 97.62 lakhs at a rate of 7.88% on original capital cost of Rs.1238.81 lakhs charged on earlier renovation works rendered redundant as per report of CAG. Accordingly the depreciation for the financial year 2000-01 is to be reduced by the above sum of Rs. 97.62 lakhs and the final figure under this head comes to Rs. 882.18 lakhs.

8.3 Employees cost.
An objection was taken on the ground that the DPL was overstaffed and the DPL had come up with a response that despite the larger number of staff the per mkwh was lower than other utilities. An analysis by our Consultants indicate that the above assertion was correct. That chart on the next page may give a comparative picture for 1999-2000.

Sl. No.	Utility	No. of employees per 1000 consumers	No. of employees per MKWH
1.	MSEB	9.27	2.11
2.	APSEB	7.17	2.70
3.	GEB	7.65	1.53
4.	KEB	5.11	2.01
5.	AEC	4.56	1.64
6.	DPL	20.37 (only distribution related)	3.14 (only gen) 0.57 (for sale incl. WBSEB. 1.95 (for sale without WBSEB)

The total number of employees is 1625 out of which 1248 are for generation and 377 for distribution. Number of consumers is 18541 and the gross percentage of employees per thousand consumers comes to a little less than 90 and with an energy sale of 661 MU and generating capacity of 387 MW, the number of employees per M KWH comes to 1.89 solely for generation and 2.46 overall (generation, transmission and distribution). Considering the above figures and the comparatively smaller operational area of the DPL we must say that it is over-staffed. As 2000-01 has already passed and a third of 2001-02 has also elapsed, we may allow reasonable expenses on the existing staff WITH A CLEAR DIRECTION THAT DPL MUST TRY TO DOWNSIZE ITS STAFF STRENGTH TO BRING IT AT PAR WITH OTHER UTILITIES LOOKING TO THE NUMBER OF EMPLOYEES PER M KWH and it should be achieved within next five years.

8.4 The DPL claimed Rs. 1457.97 lakhs towards employees cost on an assumption of average 10% hike over the cost under this head in the previous year. This amount includes Rs. 25.22 lakhs towards interest on arrear salary. Our Consultants have recommended deduction of this later sum and acceptance of the rest Rs. 1432.76 lakhs. While we agree with the recommendation in so far exclusion of the interest of the arrear salary, we may not agree to the average rate of increase as demanded by DPL and as recommended by the Consultants. Rate of increase at 10% in the average is high in the opinion of this Commission. The rate of increase in the previous years under this head was higher due to impact of pay-revision effected during those years. Now that the pay scales have been stabilized, the average hike in annual payment towards salary etc. would be around 7%. This was the rate of increase in the years 1996-97 and 1997-98, prior to the pay revision effect. This is revealed from the audited account for the concerned years. Accordingly the Commission is of the view that only a 7% hike could be given over the cost under this head during 1999-2000. The calculations have been given below:-

	Rs. in lakhs
Employees cost for 1999-2000	1325.43
Less interest on arrear salary	22.93
	1302.50
Add 7% average hike	91.18
Amount allowed for the year 2000-01 as Employees cost	1393.68

8.5 Repair and maintenance cost.

On this score, a claim has been advanced for Rs.411 lakhs for this year as against Rs.411.50 lakhs in 1998-99 and Rs.341.61 lakhs in 1999-2000. The escalation from last year is attributed to R & M work taken up. The R & M costs account for only 2.48% of gross fixed assets as analysed by our Consultants and we agree with their view and accept this costs as projected.

8.6 Administration and general expenses.
The claim of the DPL on this account is Rs.1925.55 lakhs as against sums of Rs.1839.92 lakhs and Rs.1854.31 lakhs in past two years. Our Consultants have analysed the matter and have recommended an 8% hike from last years' expenses on account of inflation, minus the interest on arrears of salary. On a further scrutiny of the accounts of DPL it is seen that 56.17% of expenses of service department and 17% of that in the central workshop were apportioned to the power plant. The following table gives the apportionment during 1999-2000.

I t e m s	Service	Rs. in lakhs Central Workshop	Total
Salary	1491.50	25.01	1516.51
Interest on arrear salary	24.17	0.41	24.58
Repairs and Maintenance	53.17		53.17
Interest	13.92	0.06	13.98
Miscellaneous expenses (net of income)	131.60	6.41	138.01
Depreciation	13.93		13.93
	1728.29	31.89	1760.18

From the above actual amount of cost apportioned by the service department and central workshop, the interest on arrear salary cannot be allowed on the tariff. Moreover the allocated depreciation cost is also to be disallowed under this head as the same has been claimed by DPL under a separate depreciation head. Excluding these two amounts the actual expenditure in 1999-2000 comes to Rs. 1721.67 lakhs which includes Rs. 1516.21 lakhs towards employees cost. Conceding a 7% hike towards employees cost, we restrict the other costs at the level of the financial year 1999-2000 as most of the units in the power station had been under RUM and LEP during this year. Under such calculations the administrative costs come as under:

	Rs. in lakhs
Actual allocated expenditure in 1999-2000	1760.18
Less interest on arrear salary (Rs.24.58 lakhs) and depreciation (Rs. 13.93 lakhs)	38.51

	1721.67
Permitted hike by 7% over the employees cost of Rs. 1516.51 lakhs	106.16
Total	1827.83

We allow only this sum towards administration and general expenses.

8.7 Other expenses.

In addition to the heads already discussed, the DPL has put forward other claims. Our Consultants have given reasons why demurrage charge should be disallowed and we agree that this could have been avoided by properly planning the unloading. We accept the view of the Consultants and fix the other expenses at Rs.32.10 lakhs as against a claim of Rs. 45 lakhs. We also allow Rs.146 lakhs towards intangible assets written off. Accepting the views of our Consultants, we also accept the expenses for consumable stores and ash handling at Rs.240.43 lakhs (Rs.235.00 lakhs+ Rs.5.43 lakhs); Rs.0.73 lakhs for rent rates and taxes, Rs.47 lakhs towards insurance, Rs.1.80 lakhs for management expenses and Rs.0.10 lakhs for audit fee. No special appropriation has been claimed by the DPL for this year. No separate claim was advanced for fuel related costs. We also allow a sum of Rs. 284.05 lakhs towards water charges as claimed by DPL and as recommended by Consultants for 200-01.

CHAPTER 9: FUEL COST

9.1 For calculation of fuel cost, normally the figures of heat rate of the plant, secondary oil consumption, GCV of coal and oil, transit loss of coal, if any, and price of coal and oil are necessary. In view of uncertainty/ in consistency in the quality of coal supplied to a station from different collieries linked to the station, weighment accuracy etc. the coal consumed in a generating station is generally worked back based on the average heat rate of the plant, secondary fuel consumption and weighted average calorific value of coal and oil received at the station.

9.2 The DPL however, in their petition have not indicated the GCV of coal and oil received at the station. They have instead projected the specific coal consumption and oil consumption at 0. 75kg/kwh and 6ml/kwh respectively. The consultants had compared the figures of specific coal consumption for the past few years and have recommended 0.72 kg/kwh as specific coal consumption. We accept this recommendation. The specific oil consumption as projected or as recommended by the Consultants although appears to be high as against the all India norm of 3.5 ml/kwh. However in this connection the opinion of the Consultants and the circumstances under which the recommendation has been made is quite relevant. It appears that the specific oil consumption as projected by DPL is 6.0 ml/kwh as against 4.9 ml/kwh during the previous year. It is a fact that during 2000-01 most of the units were taken for renovation and modernisation and even thereafter they were in the process of stabilization and oil consumption under such a circumstance was to be high as per opinion of the Consultants. We find that this approach is quite pragmatic. We accept the recommendation of the Consultants and assess the specific oil consumption for the present year at 5.0 ml/kwh which is very near the figure of 1999-2000. We make it clear however that this consideration has been given for the instant year only and according to their own version they renovated units would fully work in the year 2001-02 and for that year the specific oil consumption could be taken at the all India norm of 3.5 ml/kwh only.

9.3 As there is no weighing facility for the coal received at DPL end, the specific consumption of coal appears to have been estimated on the basis of coal received as per railway despatch documents and the loss in transit, is not known. The estimated sp. Coal consumption is, therefore, inclusive of transit loss, if any. In the absence of any information about GCV of coal and oil we may, as indicated above, start from the specific consumption of coal and oil and keep in mind the weighted average price of coal and oil, for calculation of fuel cost.

9.4 Price of coal and oil: Weighted average price of coal as per analysis of the consultants works out to Rs.1348 per MT. and that of oil is Rs.13212 per kilo litre, In the absence of any controversy on this score we accept these figures.

9.5 Accordingly we may indicate in the following table the details of the fuel cost for the year 2000-01.

1. Gross Generation	575 MU
2. Specific oil consumption	5 ml/kwh
3. Oil consumed in kilo litre(1X 2)	2875
4. Price of oil	Rs.13212 per kilo litre.
5. Cost towards oil (3 X 4)	Rs. 380.00 lakhs (rounded)
6. Specific consumption of coal	0.72kg/kwh
7. Total amount of coal required in MT(1 X 6)	414000
8. Average price of coal	Rs. 1348 per MT
9. Cost of coal (7 X 8)	Rs. 5581 lakhs (rounded)
10. Total fuel cost	Rs. 5961 lakhs

CHAPTER 10 : CAPTAL BASE

10.1 Original cost of fixed assets.

On this head the following table compiled by ASCI gives an idea of the cost of capital assets item wise for last three years -

(Rs. lakhs)

I t e m	1998-99	1999-2000	2000-01
Generation	12072.34	12074.03	14151.03
Distribution High Voltage	676.41	676.41	676.41
Distribution Low Voltage	2332.50	2335.48	2335.48
Public lighting	410.91	410.06	416.06
General Equipment	1037.53	1040.69	1040.70
T O T A L	16529.71	16542.68	18619.68

The above projected sum of Rs. 18619.68 lakhs includes the value of assets capitalized during the year in question for an amount of Rs. 2077.00 lakhs. The Consultants agreed to such addition but the projected figure of Rs. 18619.65 lakhs is subject to an adjustment. It comes out from the comments of CAG in the report under section 619(4) of the Companies Act, 1956 on the accounts of DPL for the year ending on March 31st, 2000 that Rs. 623.41 lakhs (depreciated value) worth of cost incurred on renovation and modernization of power plant was rendered redundant due to taking up of new modernisation scheme. The net capital expenditure as projected must therefore be reduced to that extent. Accordingly we assess the original cost of fixed assets at Rs. 18619.68 lakhs minus Rs. 623.41 lakhs, equal to Rs. 17996.27 lakhs.

10.2 Consumer contribution has been projected at Rs.740 lakhs during the previous year for being deducted from the original cost of fixed assets and the Consultants have accepted this projection. But it appears from the audited accounts of DPL that they received a grant of Rs. 77.00 lakhs for rural electrification up to 31.3.2000. This amount has been received for creation of fixed assets and is also to be considered as a contribution and the total contribution therefore comes to Rs. 817.00 lakhs for the purpose of deduction from the original cost of fixed assets.

10.3 Cost of intangible assets.

On this head, the projected figure is Rs.318.74 lakhs at the beginning of the year while a sum of Rs.146 lakhs is proposed to be written off during the current year. The balance sum of Rs.172.74 lakhs is accepted as the cost on this score.

10.4 Cost of Capital Work in progress.

On this aspect, the figures as per filing are as follows:
As on 1st April, 2000 Rs.12,286.97 lakhs
As on 31st March, 2001 Rs.26,509.34 lakhs
Difference Rs.14,222.37 lakhs

It is gathered that a sum of Rs.2077 lakhs has been transferred from Work in Progress (WIP) to Fixed Assets during the current year as explained in the first paragraph of this chapter. Thus, the capital investment to Rs.16299.37 lakhs (14222.37 plus 2077) during the year. The Consultants have examined the aspect of capital expenditure during the year from the point of view of sources of finance for incurring capital expenditure.

According to them the capital expenditure during the year should be restricted to the difference between the opening and closing balance of outstanding loans. In our view however this approach is not correct and we feel that the Consultants have not taken the loan refunded during the year by the utility from their revenue accounts. The loan accounts of the utility as per our in house analysis of the data provided by the DPL and collected by the Consultants come as under:-

Sources	Outstanding as on 31.03.2000	Repayment during 2000-01	Additional Loan drawn	Outstanding as on 31.03.2001
C.E.A.	1181.00			1181.00
BONDS	3516.40	317.80		3198.60
P.F.C.				
No.5040005	597.92	79.92		518.00
No.5040007	68.90	16.02	125.10	177.98
No.5040008	7143.00		13182.22	20325.22
Govt. of W. Bengal	5997.80		1954.13	7951.93
	18505.02	413.74	15261.45	33352.73

As it comes out of above, the additional amount of loan drawn by the utility during 2000-01 for financing capital addition is Rs. 15261.45 lakhs. If the capital expenditure is restricted to this amount the cost of capital work-in-progress can be assessed as under:-

Rs. in lakhs

Opening Balance	12286.97
Addition during the year	15261.45
	27548.42
Less: Capitalised in 2000-01	2077.00
Balance as on 31.03.2001	25471.42

10.5 Investment on R & M and LEP work.

It is gathered that the DPL had taken up major R & M and LEP work on five of six generating units (2 X 30 MW, 2 X 70 MW, 1 X 77 MW) at a cost of Rs.363.40 crs. This has been done to raise the station availability to more than 80 per cent. The work are expected to be completed by the first half of 2001-02 and once completed the following benefits may be ensured as per table below -

Sl No	Expected Project Benefit	Current Status MW	After R & M & LEP (MW)	Expected gain
1	Upgradation	2X30 2X70	2X30 3X77	5%
2	Coal consumption (kg/kwh)	0.75	0.635	15.3
3	Oil Consumption (ml/kwh)	4.75	3.5	56%
4	Availability factor	30%	80%	166%
5	Heat rate (K.cal/kwh)	3292	2902	11.84
6	Auxiliary consumption %	12.6	9.5	24.6
7	PLF %	30.0	68.5	274
8	Average Generation (MU)	767.81	1746	127.4%
9	Extension life	Already served 20 years Further full life		

The above work had been taken up for creating additional generation to meet the growing demand of the customers and to provide the excess generation to WBSEB. There is, however, an objection on the prudence of this exercise as the demand of DPL consumers is only 72 MW and its unit six with a capacity of 110 MW was adequate to meet the demand of the consumers. The objectors were of the view that this investment was not

necessary and would result in additional burden on the consumers which could have been avoided. Our consultants have found that the surplus generation of DPL goes to WBSEB and in 1999-2000 DPL sold 64% of its generation to WBSEB. After the R & M performance of the station is expected to improve and with more generation the per unit costs would come down. We do agree with the view of ASCI that renovation and modernisation of old units is far more economical than setting up new units. We feel that the investment is justified and would only observe that DPL should ensure supply of excess power to WBSEB through an agreement with them.

10.6 Working capital.

As per projection by the DPL their working capital is Rs.4944.25 lakhs, out of which Rs.4943.61 lakhs account for the average cost of stores (one-twelfth) materials and supplies including fuel in hand while the rest Rs.0.64 lakhs were cash in hand. In this respect we have to refer to Part XVII (e) of Schedule VI which provides for

i) one twelfth of the sum of the book cost of stores, materials and supplies including fuel at hand at the end of each month of the year of account and

ii) one twelfth of the sum of cash and bank balance (whether credit or debt) and call and short term deposits at the end of each month of the year of account not exceeding in the aggregate and amount equal to one quarter of the specified expenditure.

The un-audited accounts of the FY 1999-2000 the fuel (coal and oil) and stores materials were as follows -

Fuel and oil	Rs.2578.02 lakhs
Stores materials and supplies	Rs.1481.48 lakhs
T o t a l	Rs.4059.50 lakhs

In their filing DPL stated that the break up of fuel in hand and other consumable stores are not available at the end of each month and hence average could not be worked out for the month end. Therefore, the year end figure have been considered as representative for the average of monthly stock held. In regard to cash and bank balance that those were not maintained separately for the power plant. We hereby direct the DPL to make necessary amends and to improve their accounting system so far the power plants and power distribution systems are concerned so that they may be able to project their working capital need in future strictly in accordance with the provisions of the sixth schedule.

In the absence of proper database projection ASCI recommended acceptance of four weeks' fuel cost and 10% escalation over the last year's actual value of other stores in hand at the end of the year. According to ASCI the projection for average cash in hand did not represent the real state of affairs and they assessed the average monthly expenditure as Rs. 327.97 lakhs which they have recommended for inclusion in the working capital as cash in hand. While we agree in the absence of the proper data to allow four weeks' fuel cost under the head working capital we are of the view that a 10% escalation on the other leg of working capital (stores materials) may not be proper. We maintain the cost under this sub head at the level of the previous year as most of the units were under RUM and LEP during the year under consideration and there was no reason for escalation of consumption of stores for normal operation and maintenance. We assess the working capital for 2000-01 as per the following:-

(Rs. in lakhs.)

One-twelfth of fuel cost	496.75
Other stores (as per closing balance of 1999-2000)	1481.48
Cash and Bank balance (as recommended by ASCI)	327.97
	2306.20

We allow the above sum against a projected claim of Rs. 4059.50 lakhs.

10.7 Accumulated depreciation

This, at the end of the year, works out at Rs 10978.37 lakhs as per the following details -

Accumulated Depreciation at the beginning of the year 2000 - 01	Rs. 9998.57 lakhs

Depreciation for the year 2000 -01 Rs. 979.80 lakhs

Total Rs.10978.37 lakhs

But the depreciation for the current year is to be reduced by Rs. 97.62 lakhs at a rate of 7.88% on original capital cost of Rs. 1238.81 lakhs charged on earlier renovation works rendered redundant as per report of CAG. Accordingly the acceptable amount under this head works out at Rs.(10978.37-97.62)=Rs.10880.75 lakhs.

10.8 Loans

The DPL has furnished to the ASCI the latest figures concerning outstanding loan at the end of the year and the following sum is attributable as loan to power plant -

Sl No.	Source	Amount in lakhs. Rs.
1.	C E A	1181.00
2.	Bonds	3198.60
3.	P F C	21021.20
4.	Government of West Bengal	7951.93
5.	T O T A L	33352.73

It was gathered by our Consultants that loans at the beginning of the year were Rs.18505.02 lakhs and additional net sums borrowed during the year for R & M work amounted to Rs.14847.71 lakhs. We accept the sum of Rs.33352.73 lakhs on this head.

10.9 Security deposit.

We accept the projected sum of Rs.172 lakhs as security deposit from consumers during 2000 - 01.

10.10 We may give the capital base in the following tabular form -

Sl No	Items of Capital Base	As per filing Rs. in lakhs	As per ASCI Rs. in lakhs	As per Commission Rs. in lakhs
1	Positive Side Original cost of fixed assets	18619.68	18619.68	18619.68
	Less Consumers contribution	740.00	740.00	817.00
		17879.68	17879.68	17802.68
2	Cost of Intangible Assets (Net) Deferred Revenue Expenditure	172.74	172.74	172.74
3	Original Cost of CapitalWork in progress	26509.34	25056.79	25471.42
4	Working capital i) Average cost of Stores (one twelfth) materials and supplies including fuel in hand at the end of each month of the year of accounts.	4943.61	2055.42	1978.23
	ii) Average cash-in-hand/ cash at bank	0.64	327.97	327.97
5	Total of items 1 to 4 Negative Side	49506.01	45492.60	45753.04
6	i) Accumulated depreciation at the beginning of the year	10978.37	10978.37	10880.75
	ii) Amount of Intangible assets written off		93.33	
	iii) Amount of any loan advanced by the Board			
	iv) Loan from Government/ Institution	33352.73	33352.73	33352.73

	v) Amount of Security Deposit of consumers held in cash (Advance from consumers)	172.00	172.00	172.00
	vi) Tariff & Dividend(control reserve)			
	vii) Development Rebate reserve			
	viii)Rebate to consumers account			
7	Total of sub-items(i) to (viii) of item 6	44503.10	44596.43	44405.48
8	Value of redundant capital expenditure			623.41
9	Grand Total on the Negative side	44503.10	44596.43	45028.89
10	Capital Base item (5) less item (9)	5002.91	896.17	724.15

10.11 Reasonable return for the year 2000 -01.

The following table gives the computation of reasonable return as per schedule-VI of the 1948 Act -

Slabs	Rate	Capital base for 2000-01.Rs. lakhs	Reasonable return for 2000 - 01.Rs. lakhs
i) 2% for investment made	2%+8%		
made up to 15.10.1991	= 10%	724.15	72.42
ii) Reserve Bank rate at the beginning of the year plus 5% for investment made	5%+8%		
and from 16.10.91 till 31.3.99	= 13%		
iii) Difference between 16% and Reserve Bank rate ceiling at the beginning of the year for investment	8%+8%		
made thereafter	= 16%		
T O T A L			72.42
Add ½ of 1% for loans borrowed from organizations and institutions approved by the State Government. (loan of Rs.33352.73 lakhs)			166.76
Add ½% of 1% on debentures issued by the utility -- --			
TOTAL REASONABLE RETURN			239.18

10.12 The revenue requirement is the sum of all expenses and reasonable return minus the non-tariff income.

10.13 Other Revenue (Non-tariff income).

Other income mainly covers income from selling steam generated from the power plant, meter rental, testing fees, penalty for late payment and the hike. Other income for the year 2000 -01 is projected in the table below -

I t e m	1998-99	1999-2000	2000-01
		(All in rupees lakhs)	
Sale of steam	123.95	121.18	89.38
Meter testing charge	0.12	0.45	0.50
Delayed payment surcharge	45.87	974.84	359.00
Others	69.92	36.06	40.00

T O T A L	238.86	1132.53	488.88

We accept this projected sum of other income for the year 2000 - 01 as the income in 1999 - 2000 was abnormally high due to inclusion of past arrears and under other heads.

We give below our calculations for revenue requirement on the basis of the above data along with a comparison with the projections by DPL and recommendations by ASCI.

Sl No.	Expenditure Head	As proposed by DPL	As recommended by ASCI	As allowed by Commission
1.	Purchase of power			
2	(i)Generation cost (fuel)	6269.11	5961.00	5961.00
	(ii) water charges	284.05	284.00	284.05
3.	Employees Cost	1457.97	1432.76	1393.68
4.	Administration and General expenses	1925.55	1856.17	1827.83
5.	Other expenses	45.00	32.10	32.10
6.	Write off of Intangible assets.	146.00	146.00	146.00
7	Repairs and Maintenance cost	411.00	411.00	411.00
8.	Consumable stores	360.10	235.00	235.00
9.	Ash handling	8.00	8.00	5.43
10.	Rent, rate and taxes	0.73	0.73	0.73
11.	Insurance	50.00	47.00	47.00
12.	Management expenses	1.80	1.80	1.80
13.	Audit fee	0.10	0.10	0.10
14.	Depreciation	667.56	979.80	882.18
15.	Interest and Finance charges	1003.39	990.12	990.12
	TOTAL EXPENSES (1 to 15)	12630.36	12385.58	12218.02
16	Special appropriation for Contingency reserve		46.55	
17.	Reasonable return	609.20	256.38	239.18
	T O T A L	13239.56	12688.51	12457.20
18.	Less Non-tariff income	488.88	488.88	488.88
19.	Revenue required	12750.68	12199.63	11968.32

10.14 The calculations in the last paragraph give us an idea of the total revenue requirement. This must be tested against the efficiency of the utility under the normative parameters.

It is noted from the tariff petition for the year 2000-01 that out of the six units of DPL five numbers were low performing vintage units with a total capacity of 277MW. These five were taken down for renovation and life extension programme (RUM and LEP) during the year under review as per recommendation of the CEA and as approved by the Government of West Bengal. The renovation work of the units is expected to be completed by the first quarter of 2001-02 as confirmed by DPL. Although these units were mostly not in operation during the FY 01, we allow DPL to recover a minimum costs for the above units to meet their capital expenses towards labour cost, interest on capital, depreciation etc. However, we limit such recovery to 50% of the fixed costs of the units in line with the recommendation in K.P. Rao Committee report regarding realization of minimum fixed costs for units having PLF between 0 to 50%.

As regards unit no. 6 having a capacity of 110MW, the Commission has taken note of the situation that being the only available unit in the station it had to run continuously during FY 01 to meet the consumers' demand as a result of which preventive maintenance at the desired level could not be carried out on the unit under planned shut down programme. This had obviously increased the frequency of forced shut down of the unit due to break down resulting in low PLF of the unit (44.21%). In view of running of the unit under the above exceptional circumstances we allow DPL to recover full fixed cost of the sixth unit at actual level of PLF instead of the normative 68.5% only for the year 2000-01.

The weighted average admissible recovery of fixed cost of the generating plant for the FY 01, therefore, works out to 64.21% as shown below: -

$$\text{Weighted average admissible recovery} = \frac{50\% \times 277\text{MW} + 100\% \times 110\text{MW}}{387\ \text{MW}}$$

$$= 64.21\%.$$

10.15 As per filing and as per assessment by the Commission the fixed costs can be calculated as the difference between the total expenses and the fuel cost and this works out at Rs. 6257.02 lakhs. This fixed cost may again be apportioned for 2 major sections namely fixed cost for generation and that for transmission and distribution. For the last mentioned item the projection is for Rs. 924.96 lakhs. Accordingly the fixed cost for generation comes out to Rs. 5332.06 lakhs. As observed above we have allowed recovery of 64.21% of the fixed cost of the generating plant. This works out to Rs. 5332.06 lakhs X 0.6421 = Rs. 3423.72 lakhs. Together with this we may add full recovery of fixed cost for transmission and distribution amounting to Rs. 924.96 lakhs and the reasonable return that we have worked out (Rs. 239.18 lakhs). Accordingly the gross revenue that may be permitted to be collected is as under: -

	Rs. in lakhs
Recoverable fuel cost	5961.00
Recoverable fixed cost towards generation	3423.72
Recoverable fixed cost towards T & D	924.96
Reasonable return	239.18
Total	10548.86
Less non-tariff income	488.88
Net revenue to be recovered from consumers	10059.98 rounded Rs.10060.00 lakhs

10.16 The average tariff for FY 2000-01 works out as follows:-

Net revenue allowed	Rs. 10060.00 lakhs.
Estimated sale (normative)	429.41 MU.
Average tariff	234 paise/ unit.

10.17 As the year is already over no separate tariff structure is required to be formulated for individual categories of consumers based on the average tariff determined above. However, we direct that payment of percentage of average cost of electricity by different categories of consumes shall remain at the existing level for the FY 2000-01. The utility shall calculate the difference in revenue between the sum allowed in this order for FY 2000-01 and the sum actually realized/realizable from the consumers for that year. Any over realization or shortfall in realization is to be adjusted by refund or recovery to or from the consumers on such percentage of average cost the consumer was being charged on 31.3.2000. The refund/realization is to be made during the fiscal in equal monthly installments.

CHAPTER 11: REVENUE REQUIREMENT FOR THE YEAR 2001 - 02.

11.1 In Chapter 6 of this order we had indicated the points for consideration and we had answered the points for the financial year 2000 - 01. The same approach would be taken for the financial year 2001 - 02 also.

11.2 Sale, Generation and T & D loss.

We had indicated in chapter 7 of this order, our approach towards the present heads with reference to the year 2000-01. We may reiterate for 2001-02 also that DPL is a generating unit and is also a sanction holder for supply of power at EHV, HV and LV. It may also be stated again that the DPL supplies their surplus power to WBSEB after meeting the internal demand. On T & D loss we have clearly indicated in chapter 7 that the projected loss was too high. For the past year we had considered 20% T & D loss on HV and LV supply and in that itself we had limited the loss for the current year to 18% of the HV and LV supply.

11.3 The DPL had taken up renovation and modernization programme and according to them the R & M programme was expected to be completed in the first quarter of the current year (2001-02). Accordingly DPL

has projected a higher gross generation of 1500 MU for this year and also indicated in their tariff petition that the estimated bulk sale to WBSEB was linked to their generation programme, as the available surplus power after meeting the internal retail demand was to be sold to WBSEB.

11.4 Based on the above generation, the energy supply plan including bulk supply to WBSEB for the year 2001-02 is given below considering the normative auxiliary consumption as 9.5% and T & D loss in the HV and LV system as 18%.

1. Gross generation	1500 MU
2. Auxiliary consumption (@ 9.5%)	142.5 MU
3. Net ex-bus generation	1357.50 MU
4. Energy required for projected retail sales and inter plant transfer including normative T & D Loss in HV/LV system	508.85 MU
Projected retail sale	417.26 MU
Associated T & D loss (Normative T & D loss 18%)	91.59 MU
5 Estimated surplus for bulk sale to WBSEB (3 - 4)	848.65 MU
6 Total projected sale	417.26 + 848.65 = 1265.91 MU.
7 Overall normative T & D loss of the system	6.75%

CHAPTER 12: FIXED COSTS

12.1 Interest and finance charges.

The DPL had put forward a claim of expenditure to the tune of Rs.4165.12 lakhs on this head for the concerned year. This estimate was made on an assumption of balance outstanding loan of Rs.40784.63 lakhs at the beginning of the year. But the actual outstanding balance of loan on the same date was Rs.33352.73 lakhs as reported by the Consultants. On the basis of the statement of loan submitted by DPL showing additional borrowing, repayment schedule and average rate of interest payable to different sources the interest and finance charges for the year 2001-02 works out to Rs. 3686.74 lakhs out of which Rs.327.01 lakhs are to be capitalized and balance Rs.3359.73 lakhs will be charged on revenue account. Adding a guarantee fee of Rs. 35 lakhs, the total chargeable to revenue account will be Rs. 3394.73 lakhs and we allow only this sum under the present head for the year 2001-02.

12.2 Depreciation.

The claim by the DPL on this score is Rs.2932.71 lakhs which is abnormally high. Depreciation of fixed assets allowed for the previous year was Rs. 882.18 lakhs. DPL capitalized assets of Rs. 2077 lakhs in 2000-01 for which charging of depreciation will start from the year 2001-02. Although the total sum of assets capitalized in 2000-01 has been given the details are lacking. Under these circumstances allow 7.84% depreciation on the aforesaid sum of Rs. 2077.00 lakhs. The amount allowed under this head comes as under.

Item	Rs. in lakhs
Annual depreciation on existing assets	882.18
Add : Depreciation on assets capitalized in 2000-01 @ 7.84% on Rs. 2077 lakhs	162.84
Total Depreciation allowed for the year 2001-02	1045.02

12.3 Employees cost.

We have indicated in a tabular form in para .8.3 of this order as to how the DPL was apparently over-staffed - we have given proper directions to the DPL in that paragraph of this order. We had accepted for 2000-01 a hike by 7% from the preceding year. DPL projected a sum of Rs. 1603.77 lakhs towards employees cost assuming a 10% increase over their previous years' projection of Rs. 1457.97 lakhs. The Commission had allowed Rs. 1393.68 lakhs for the previous year. Adding 7% thereof towards the probable increase the sum comes to Rs.1393.68 + Rs.97.56 lakhs = Rs. 1491.24 lakhs.

12.4 Repair and maintenance cost.

The projected expenditure is Rs 571.06 lakhs on this score. The detailed estimates for the expenses under this head have not, however been put forward. The Commission has directed the DPL to arrange for planned preventive maintenance for unit 6 after stabilisation of the renovated units. The repair and maintenance cost for 5 renovated units shall be in the minimum and the major portion of R & M costs would go towards maintenance of unit no 6 which may in this year require a greater repair and maintenance than the last year. Under this circumstances the Commission allows a 10% hike in R & M cost over the cost of the last year and the total comes to Rs. 411 lakhs + Rs.41.10 lakhs = Rs. 452.10 lakhs. This rise has been given in consideration of the necessity of the maintenance as also inflation that have occurred in the past year.

12.5 Administrative and General expenses.

Claim on this score for this year is Rs 2118.11 lakhs. The expenses under this head are the allocation of expenses for service department and central workshop. The major part of such an allocation is on account of employees cost. With an average 7% increase over the previous years admitted expenses of Rs.1827.83 lakhs the sum of expenses under this head for the year 2001-02 comes to Rs. 1955.78 lakhs.

12.6 Other expenses.

On this score, we are not allowing demurrage charges. We allow Rs. 93.33 lakhs towards miscellaneous expenses written off. We allow a sum of Rs. 33.71 lakhs towards other expenses. We also allow as expenses for consumable stores and ash handling a sum of Rs. 613.04 lakhs and Rs. 14.17 lakhs respectively; for rent, rates and taxes Rs. 0.88 lakhs; for insurance Rs. 47.00 lakhs, for management expenses Rs. 2.00 lakhs and for audit fee Rs. 0.10 lakhs. No special appropriation has been claimed by the DPL for this year, nor is there any separate claim for fuel related cost. We allow a sum of Rs. 584.85 lakhs towards water charges as claimed.

CHAPTER 13: FUEL COST

13.1 In view of uncertainty/ inconsistency in the quality of coal supplied to a station from different collieries linked to the station, weighment accuracy etc. the coal consumed by a generating station is generally worked back based on the average heat rate of the plant, secondary fuel consumption and weighted average calorific value of coal and oil received at the station.

13.2 The DPL however, in their petition have not indicated the GCV of coal and oil
received at the station. They have instead projected the specific coal consumption and oil consumption at 0.65kg/kwh and 4ml/kwh respectively, during FY 02 assuming use of superior quality of 'C' grade coal for boilers of unit nos. 1 to 5 after renovation. As there is no weighing facility for coal received at DPL end and the above specific consumption of coal has been estimated on the basis of coal received as per railway despatch documents, the figures include transit loss of coal also, if any.

13.3 In our view however, the specific oil consumption as projected is high as against the all India norm of 3.5 ml/kwh only. While discussing this aspect for the year 2000-01 we have in chapter 9 of this order recommended specific oil consumption for the present year at 3.5 ml/kwh. We shall go by this norm.

13.4 As regards specific coal consumption, in the absence of any information about the GCV of fuels fed in the boilers, if we work back coal consumption of DPL plant on the basis of GCV of 'C' grade coal and normative parameters of heat rate and secondary oil consumption as 2650 kcal/kwh and 3.5 ml/kwh respectively, the figure works out to lower than the projected figure 0.65 kg/kwh. This higher coal consumption rate may be mainly due to "Grade Slippage" (supply of coal of much lower heat content than declared by the coal companies in the bills) which is a common problem plaguing all utilities in India and transit loss of coal, about which no specific mention has been made in the petition.

13.5 We therefore, accept the specific coal consumption as 0.65 kg/kwh as projected by DPL for this year. With the aforesaid figures of specific coal consumption and specific oil consumption we may proceed to work out the fuel cost of generation for the year 2001-02. Under this approach heat rate may not be a determining factor in the absence of GCV of coal and oil but for future reference we indicate the norms that we may require the DPL to follow.

Heat rate of the plant 2650 kcal/kwh

Specific oil consumption 3.5 ml/kwh
Auxiliary consumption 9.5%

We also give a direction to the DPL to submit to the Commission the details regarding the estimated "grade slippage" and loss of coal in transit, if any, along with the action plan proposed to tackle these problems in their petition for FY 2002-03. The DPL is further to install without delay suitable weighing machines for measurement of coal received at the station.

13.6 Price of coal and oil: Weighted average price of coal as per analyses of the consultants worked out to Rs.1348 per MT and that of oil at Rs.13217 per kilo litre for the year 2000-01. The projected prices for coal and oil for the present year are Rs.1471 per MT and Rs.15254 per kilo litre respectively. The coal proposed to be consumed after renovation is of 'C' grade (superior quality) for units 1 to 5 and by use of such coal a better specific coal consumption is sought to be achieved. The price of grade 'C' coal is higher than the quality used in past. As such we accept the price of coal as projected for the station. For the price of oil for FY 2001-02 the projected figure is Rs. 15254 per kl. This sum was Rs. 13212 per kl for the last year and keeping in view the rise in oil price during the intervening period we accept the price as projected (Rs.15254 per kl).

13.7 Accordingly we may give in the following table the details of the fuel cost for FY 02.

1. Gross generation	1500.00 MU
2. Specific oil consumption	3.5 ml/kwh
3. Oil consumed in kl.(1X 2)	5250
4. Price of oil	Rs15254.00 per kilo lt
5. Cost towards oil (3X4)	Rs. 800.84 lakhs
6. Specific consumption of coal	0.65 kg/kwh
7. Total amount of coal required (1X6)	975000 MT
8. Average price of coal	Rs 1471 per MT
9. Cost of coal (7x8)	Rs 14342.25 lakhs
10. Total fuel cost (5+9)	Rs.15143.09 lakhs

CHAPTER 14: CAPITAL BASE FOR THE YEAR 2001 - 02.

14.1 Original cost of fixed assets.

In Chapter 10, the figures compiled by ASCI for three years up to 2000-01 have been given for the costs of capital assets item-wise. We may not reiterate the same and we may start from the closing figures for 2000-01 as the opening figure for 2001-02, which is Rs. 18619.68 lakhs. There is no indication in the DPL's petition of any asset addition during this year. They also do not speak of retirement of any asset during the year. The DPL has also not indicated the portion of the value of capital work in progress will be capitalized during this year. We have indicated in the opening line of this paragraph that we have accepted the opening balance at Rs. 18619.68 lakhs as the original cost of fixed assets. This will not affect the calculation of net capital base as both fixed assets and capital work in progress are considered at par for allowing the reasonable return.

14.2 Consumer contribution has been projected at Rs.740.00 lakhs during the previous year. This is accepted. We are to add with it a sum of Rs. 77.00 lakhs on account of a grant received by the DPL from the state of West Bengal for rural electrification. The sum under this head therefore totals to Rs. 817.00 lakhs.

14.3 Cost of intangible assets (net).

Intangible assets of DPL are in the form of deferred revenue expenses. The balance, as per projection of DPL, under this head at the end of 2000-01 was Rs. 172.74 lakhs. Out of this sum DPL projected to write off Rs. 93.33 lakhs. The net balance at the end of the present year will thus be Rs. 79.41 lakhs.

14.4 Cost of work in progress

DPL has not stated how much of the value of capital work in progress would be transferred by them as fixed assets. The amount to be spend by them for different capital works including RUM and LEP has not been stated. In the absence of these particulars the fresh borrowings and the part of interest on borrowed fund to be

capitalized are considered as value addition to their capital work in progress. The figures arrived at are as under:

Particulars	As allowed by the Commission (Rs. lakhs)
1. Work in progress at the beginning of the year 2001-02	25471.42
2. Add (i) Capital expenditure during 2001-02(borrowing)	8673.00
(ii) Interest to be capitalizedduring 2001-02	327.01
3. T o t a l	34471.43
4. Less capitalization during this yearNet Total	34471.43

14.5 Investment in R & M and LEP work.

As indicated in chapter 10 above, the DPL has taken up major R & M and LEP work on five of their six generating units at a cost of Rs.363.40 crores. It was done to raise the station availability to more than 80% and the work was expected to be completed by the first half of 2001-02 and the expected benefits as projected by DPL was also indicated in chapter 10 of this year. The projected R & M and LEP work investment for this year is Rs 86.73 crores. However this amount has been included in cost of work in progress as per item no 2 in the table in the last paragraph and need not be taken twice over under this head. We are of the view that renovation and modernisation of the old units is far more economical than setting up of the new units and accordingly, we accept the projected R & M and LEP work cost with the aforesaid observation and would also observe that the DPL should ensure supply of excess power to WBSEB though an agreement with them.

14.6 Working capital.

The projected sum is Rs.4944.25 lakhs for the year 2001-02, and on the same arguments as were advanced in chapter 10; we assess the working capital at Rs.3014.74 lakhs as per the table in the next paragraph.

14.7 The following table gives our in-house calculation on the lines indicated above:

Sl. No	I t e m s.	Rs. (In lakhs)
1	1. i) one twelfth of the value of consumption of fuel	1133.26
2	2. Stores materials (value of closing stock as on 31.3.2000)	1481.48
3	Cash/Bank balance in hand	400.00
4	Total working capital	3014.74

14.8 Accumulated depreciation.

This, at the end of the year, works out at Rs.11925.77 lakhs as per following details:

Accumulated depreciation at the beginning of

Accumulated depreciation at the beginning of the year 2001-02	Rs.10880.75 lakhs
Add: Depreciation for the year 2001-02	Rs. 1045.02 lakhs
Total	Rs.11925.77 lakhs

14.9 Loans

The figures worked out by this office in this regard are as follows:

Sl. No.	Source	Rs. In lakhs.
1	C E A	1181.00
2	Bonds	3198.60
3	P F C	23357.13
4	Government of W. Bengal	13451.93

5	T o t a l	41188.66

We accept the sum of Rs. 41188.66 lakhs as loans.

14.10 Security Deposit.

The projected sum is Rs. 172.00 lakhs for 2001-02. We find that the total no. of consumers in 2000-01 was 19564 and the total security deposit from them was Rs. 172.00 lakhs. As per projection by the DPL, the number of consumers at the end of 2001-02 would rise to 20233. There must be a proportionate increase in the security deposit and we estimate this sum at Rs. 177.88 lakhs.

14.11 Value of redundant capital expenditure

In terms of our finding on this head for the year 2000-01 we assess the value of redundant capital expenditure at Rs. 623.41 lakhs which has been included in the cost of fixed assets and which is to be deducted there from for calculation of the net capital base.

14.12 We may give the capital base in the following tabular form:

Sl No.	Items of Capital Base. Positive Side	(Rs. in lakhs)	As accepted by the Commission
1	Original cost of fixed asse	18619.68	
	Less Consumers contribution	817.00	17802.68
2	Cost of Intangible Assets (Net) Deferred Revenue Expenditure		79.41
3	Original Cost of Capital Work in progress		34471.43
4	Working capital		
	i) Average cost of Stores		2614.74
	ii) Average cash-in-hand/ cash at bank		400.00
5	Total of items 1 to 4		55368.26
	Negative Side		
6	i) Accumulated depreciation at the beginning of the year		11925.77
	ii) Amount of Intangible assets written off		
	iii) Amount of any loan advanced by the Board		
	iv) Loan from Government/ Institutio		41188.66
	v) Amount of Security Deposit of consumers held in cash (Advance from consumers)		177.88
	vi) Tariff & Dividend(control reserve)		
	vii) Development Rebate reserve		
	viii)Rebate to consumers account		
7	Value of redundant capital expenditure		623.41
8	Grand total on Negative side		53915.72
9	Capital Base item (5) less item (8		1452.54

14.13 Reasonable return for the year 2001 - 02.

The following table gives the computation of reasonable return as per Schedule-VI of the Electricity Supply Act, 1948.

Slabs	Rate	Capital base for 2001-02.Rs.	Reasonable return for 2001 - 02.Rs.

		lakhs	lakhs
i) 2% for investment made made up to 5.10.1991	2%+8% = 10%	974.90	97.49
ii) Reserve Bank rate at the beginning of the year plus 5% for investment made and from 16.10.91 till 31.3.99	5%+8% = 13%	Balance 477.64	62.10
iii) Difference between 16% and Reserve Bank rate ceiling at the beginning of the year for investment made thereafter	8%+8% = 16%		
T O T A L		1452.54	159.59
Add ½ of 1% for loans borrowed from organizations and institutions approved by the State Government.			205.94
Add ½ of 1% on deben-tures issued by the utility --			
T O T A L			
Reasonable return			365.53

14.14 The revenue required is the sum of all expenses and reasonable return minus the non-tariff income.

14.15 Other revenue.

	(Rs. in lakhs)
I t em.	2001-02
Sale of stea	158.00
Meter Testing charges	0.50
Delayed Payment surcharge	60.00
Others	89.40
T O T A L	307.90

We accept the above sum on other income for this year which is precisely the sum projected by the DPL.

14.16 We give below our calculations for revenue requirement on the basis of above data along with a comparison with the projection by DPL for this year.

Sl No.	Expenditure head	Rs in lakhs As proposed by D.P.L	Rs. in lakhs As allowed by the Commission
1	1. Purchase of power		
2	2. Generation cost		
	i) Fuel	15233.23	15143.09
	ii) Water charges	584.85	584.85
3	Employees cost	1603.77	1491.24
4	Administration and General expenses	2118.11	1955.78
5	Other expenses	60.75	33.71
6	.Write off of intangible	93.33	93.33

	assets		
7	Repairs and Maintenance cost	571.06	452.10
8	Consumable stores	707.90	613.04
9	Ash handling	20.87	14.17
10	Rent, rate and taxes	0.88	0.88
11	Insurance	80.00	47.00
12	Management expenses	2.00	2.00
13	Audit fee	0.10	0.10
14	Depreciation	2932.71	1045.02
15	Interest and finance charges	4165.12	3394.73
TOTAL EXPENSES		28174.68	24871.04
16	Special appropriation Contingency Reserve.		
17	Reasonable return	454.72	365.53
T O T A L			
18	Less Non-tariff income.	307.90	307.90
19	Revenue required.	28321.50	24928.67

14.17 The calculations in the last paragraph give us an idea of the total revenue requirement. This must be tested against the efficiency of the utility under the normative parameters.

For the year 2001-02 DPL, in their petition, have projected an estimated generation of 1050MU during the 9 months of FY 02 from the five units which are expected to come back into operation from the second quarter of FY 02 after completion of LEP and RUM programme. The above projected generation from the units represents 55% PLF which is considered satisfactory for the five units under stabilization after a major renovation work. We, therefore, allow DPL to recover full fixed cost of these units at actual level of PLF of 55% instead of the normative 68.5% only for FY 2001-02. We however clearly indicate that from the next year onwards the normative PLF for full fixed cost realization shall be fixed at 68.5%.

With gradual stabilization of the above five units the stress on the only other running unit no. 6 due to continuous operation, is likely to be relieved gradually and this unit is also expected to perform better during the present year under due care and maintenance. The projected PLF of 46.70% of this sixth unit for FY 02 is therefore considered low. Accordingly we fix a higher norm of 55% PLF for this unit also for the purpose of recovery of full fixed cost during the current year. We give a clear directive to the DPL to take all necessary actions for planned preventive maintenance of this sixth unit so that it performs not below the normative PLF of 68.5% from the next year onwards.

The weighted average admissible recovery of fixed cost of the generating plant for FY 02, therefore, works out to 95.86% as per calculations given below: -

a. For unit no. 1 to 5(291MW) at 55% PLF: 100% fixed cost admissible
b. For unit no. 6 (110MW) at 46.70% : 46.7/55X100= 84.91% fixed cost admissible.

$$\text{Weighted average admissible recovery} = \frac{100 \times 291\text{MW} + 84.91 \times 110\text{MW}}{401\ \text{MW}} = 95.86\ \%$$

14.18 As per filing and as per assessment by the Commission the fixed costs can be calculated as the difference between the total expenses and the fuel cost and this works out at Rs. 9727.95 lakhs. This fixed cost may again be apportioned for 2 major sections namely fixed cost for generation and that for transmission and distribution. For the last mentioned item the projection is for Rs. 1051.98 lakhs. Accordingly the fixed cost for generation works out to Rs. 8675.97 lakhs. As observed above we have allowed recovery of 95.86% of the fixed cost of the generating plant. This works out to Rs. 8316.78 lakhs. Together with this we may add full recovery of fixed cost

for transmission and distribution amounting to Rs.1051.98 lakhs and the reasonable return that we have worked out (Rs.365.53 lakhs). Accordingly the gross revenue that may be permitted to be collected is as under: -

	Rs. in lakhs
Recoverable fuel cost	15143.09
Recoverable fixed cost towards generation	8316.78
Recoverable fixed cost towards T & D	1051.98
Reasonable return	365.53
Total	24877.38
Less non-tariff income	307.90
Net revenue to be recovered from consumers	24569.48 rounded off to Rs.24570.00 lakhs.

14.19 On the aforesaid revenue requirement, the average cost of supply for 2001-02 works out to 194.09 p. per KWH as per following calculations:

Net revenue to be realized from consumers: Rs. 24570.00 lakhs.
Normative sale for average cost of supply : 1265.91 MU.
Average cost : 194.09 p. per KWH.

CHAPTER 15: TARIFF STRUCTURE FOR 2001 - 02.

15.1 Principles of Tariff Structure.

15.2 The concept of 'two-part tariff' is followed by the utilities for pricing of supply of electricity. Under this two-part tariff systems, a consumer is liable to pay a demand charge on KVA/KV supply and also the energy charge for the energy consumed to cover the various costs of supply like purchase of power, cost of generation and cost of transmission & distribution. The demand charge should normally be proportional to the fixed costs of the utility.

15.3 For efficient and economic use of electricity, the Commission intends to shift progressively towards the 'two-part Tariff' system (demand charge and energy charge) for all consumers. Keeping this in view, a fixed charge has been introduced for L.T industrial, domestic & commercial consumers who are having energy charge only at present. This fixed charge should normally be proportional to the contract demand/connected load of the consumers. Being the first year, this charge, has been kept at a nominal value to allow the consumers to get used to the concept of fixed charge which has been related to graded energy consumption to reflect connected load. Meanwhile, DPL is directed to furnish the details about the connected load/maximum demand of the consumers belonging to the aforesaid category of consumers.

15.4 We are of the view that there should not be any artificial classification between two consumers taking power at the same voltage but we do not propose to bring any abrupt change in the existing classification as a measure of prudence and we would like to maintain for the present the existing classes and the special classes of consumers. It is made clear that in their next tariff petition, the utility will be free to come up with suggestions on reducing or restructuring the consumer classes so that the matter may be decided upon after open hearing and after considering the views of all classes of consumers. We find that in the existing system there are certain differences in the rates even in between the consumers enjoying supply under similar conditions. Some of them get a relief at the cost of some others. We are alive of the power situation in West Bengal and the hardship faced by the industries in paying for electricity at a rate much higher than the average rate only to subsidize cheaper supply to certain other classes of consumers. While it is considered proper to allow certain concession to be given to the lifeline consumers, such concession should remain to them only. For the others there should be an attempt to come to a rate near the average tariff. For industries electricity is one of the major factors of expenditure and that tells upon the costs of their products. They are to face hard competition from foreign products as a result of globalization and it must be seen that for a forbidding price of electricity, industries may not be compelled to move away from West Bengal. If that is allowed to be done, the employment position and economy of the State would be shattered.

15.5 Spirit of the ERC Act, 1998 is also to achieve the uniformity in tariff based on cost of supply. It would have been ideal to use "cost of supply" to each category of consumers to estimate cross subsidy. But this exercise is not feasible at present until the utility comes up with a details study of cost of supply at different voltages. However as the current tariff structure of DPL is far from rational, we have tried to so adjust the tariff that

consumers paying much less than average of electricity should move towards paying a higher share of average cost without encountering an excessive tariff shock. We would like to bring about the change slowly but steadily keeping in mind that no consumer gets power at a rate lower than the marginal cost of supply.

15.6 Upon this considerations we set up the following tariff structure as a first step towards rationalization of tariff on commercial basis to give a signal to the consumers that they are to pay for the benefit they enjoy and also to give a signal to the utility that they have the duty to supply power to the consumers consistently maintaining the quality of supply. We also give a signal to the utility that they are to curtail their cost and improve efficiency. Our order is to give a signal to everybody in power sector that for bringing back West Bengal in its coveted place in its industrial map of the country, which would ultimately have a positive effect in the employment position in the state, the industries must be relieved of the unusual load of cross subsidy. In formulating the tariff we have kept in mind that it should progressively reflect the average cost of supply at an adequate and improving level of efficiency.

15.7 Tariff structure.

The salient features of the tariff structure & its associated conditions are outlined below:

15.8.1 As explained earlier, the tariff has been so adjusted that the consumers paying considerably less than the average cost of electricity move gradually towards paying a higher share of the average cost without being exposed to excessive tariff shocks.

15.8.2 The concept of 'fixed charge' has been introduced for L.T. Domestic, Commercial and Industrial consumers, currently having only variable charges. Being the first year this charge has been levied at nominal rates to allow the consumers to get used to the concept of 'fixed charge' & has been related to graded energy consumption which represents connected load. This will be increased gradually in future to reflect the demand related fixed cost of the utility associated with the supply.

15.8.3 An increase of 5% has been made in 'demand charge' for H.T. consumers to gradually narrow down the existing huge gap between recovery of fixed cost through demand charges & actual fixed cost incurred by the utility. The increase is being made at a slower pace keeping in view the impact of this on low load factor consumers.

15.8.4 The utility should make endeavour to introduce TOD tariff to all HT Industrial consumers by installing TOD meters so that it can be used as a tool to signal efficiency in 'Demand Side Management'.

15.8.5 The definition of 'billing demand' has been rationalised for H.T. bulk supply for both TOD & non-TOD tariff consumers. The utility shall also ensure that the provisions in their power supply agreement with the consumers, regarding enhancement/lowering of Contract Demand, are such that the consumers do not feel the necessity of contracting for demand at a higher level than their planned requirement, which has direct bearing on utility's tariff.

15.8.6 The existing high level of concession on energy charges allowed by DPL under bilateral agreement to the industrial consumers availing TOD tariff starting from Load Factor as low as 25%, is not considered rational. This was also objected to by the WBSEB representatives during hearing. The incentive scheme has, therefore, been rationalised. The rationalised scheme will be applicable to new consumers opting for TOD tariff & for all other consumers after the present agreement regarding concessional tariff expires.

15.8.7 At present the tariff for 'inter plant transfer' does not include any Fuel Surcharge as a special treatment. The energy drawal being quite substantial & utilised for other business units of the company this special treatment at the cost of other consumers is not considered reasonable. The 'inter plant transfer' has, therefore, been treated at par with the H.T. industrial consumers. However, the 'demand charge' is not being introduced for this power at present as proposed by DPL.

15.8.8 The tariff for bulk supply to WBSEB at 132/33/11kv which constitutes about 67% of total sales of DPL, is considered a 'special tariff' as the supply is meant for resale to WBSEB's retail consumers who mostly belong to subsidised categories. The tariff has been fixed on 'energy charge' basis only as proposed by DPL. However, DPL is in the process of finalising agreement with WBSEB regarding recovery of fixed cost based on normative generation.

15.9 The tariff schedule for the year 2001-2002 and associated major conditions/charges are given below:-

15.9.1 **I. HV bulk supply (11kv) for demand of 50kva & above.**

	Existing	Approved.
.i. Industrial -Rate A(1a). Demand charge (Rs/kva/month) :	180.00	190.00
(Energy charge(p/kwh) :	270.00	253.00
FCA(p/kwh) (provisional) :	49.00	Merged
ii. Industrial-Rate A(1b).Demand charge (Rs/kva/month) :	180.00	190.00
Energy charge (p/kwh) :	125.00	143.00
FCA (p/kwh) : (provisional)	49.00	Merged
iii. Industrial-Rate B(1a)-TOD tariff (with or without concession)		
Demand charge (Rs/kva/month) :	180.00	190.00
Energy charge(p/kwh) 6am-5pm :	270.00	245.00
5pm-11pm :	378.00	345.00
11pm-6am :	162.00	145.00
FCA (p/kwh) (provisional):	49.00	Merged
iv. Public Utilities-Rate A(2).		
Demand charge (Rs/kva/month) :	180.00	190.00
Energy charge (p/kwh) :	130.00	141.00
FCA (p/kwh)(provisional) :	49.00	Merged
v. Non-Industrial/non-domestic-RateA(3).		
Demand charge (Rs/kva/month) :	180.00	190.00
Energy charge (p/kwh) :	280.00	251.00
FCA (p/kwh) (provisional):	49.00	Merged
vi. Cold Storage & Dairies with Chilling plant-Rate A(4).		
Demand charge (Rs/kva/month) :	180.00	190.00
Energy charge (p/kwh) :	130.00	190.00
FCA (p/kwh) (provisional):	49.00	Merged

15.9.2 **II. LV & MV supply for demand below 50kva.**

i. Industrial /Irrigation pump load-Rate C(1).	Demand charge (Rs/kva/month)		Energy charge (p/kwh)	
	Existing	Approved	Existing	Approved
First 500 units :	10	20	178	215
Next 1500 units :	10	20	338	330
Next 1500 units :	10	20	371	335
above 3500 units : (all units)	10	20	330	315
FCA (p/kwh) (provisional) :			49	Merged

	Existing	Approved
ii. Public Utilities-RateC(2).		
Demand charge (Rs/kva/month) :		5.00
Energy charge(p/kwh) :	145.00	191.00
FCA(p/kwh) (provisional) :	: 49.00	Merged

iii. Domestic-Rate C(3).	Fixed charge (Rs/consumer/month)		Energy charge (p/kwh)	
	Existing	Approved	Existing	Approved
First 25 units :		5	93	115
Next 25 units :		10	119	140
Next 50 units :		15	164	170
Next 50 units :		20	202	205

Next 150 units :	25	214	220
Next 50 units :	30	510	450
Next 150 units :	40	610	535
Above 500 units (all units):	60	341	325
FCA (p/kwh)(provisional) :		49	Merged

iv. Commercial-Rate C(4).	Fixed charge (Rs/consumer/month)		Energy charge (p/kwh)	
	Existing	Approved	Existing	Approved
First 60 units :		10	176	210
Next 40 units :		15	310	330
Next 50 units :		25	334	350
Next 150 units :		40	382	360
Next 200 units :		60	490	455
Above 500 units(all units):		80	390	360
FCA (p/kwh)(provisional) :			49	Merged

v. Temporary Supply-RateD(1).	Existing		Approved	
	Energy charge (p/kwh)	FCA	Energy charge (p/kwh)	FCA (p/kwh)
a. Domestic(LT) :	321.00	49.00	370.00	
b. Commercial(LT) :	373.00	49.00	420.00	Merged
c. Non-industrial(LT) :	345.00	49.00	395.00	

	Existing	Approved
vi. Single Point Co-operative-Rate D(2).		
Demand charge (Rs/kva/month) :		5.00
Energy charge (p/kwh) :	135.00	188.00
FCA(p/kwh) (provisional) :	49.00	Merged
vii. Bulk colony supply-Rate D(3).		
Demand charge (Rs/kva/month) :		10
Energy charge (p/kwh) :	250.00	255.00
FCA(p/kwh) (provisional) :	49.00	Merged

15.9.3 **III. WBSEB Bulk Supply.**

	Existing		Approved	
	Energy charge (p/kwh)	FCA	Energy charge (p/kwh)	FCA (p/kwh)
132 kv supply :	122.00	40.00	170.00	
33 kv supply :	130.00	44.00	175.00	Merged
11 kv supply :	130.00	44.00	178.00	

15.9.4 **IV. Inter Plant Transfer(IPT).**

	Existing	Approved

Energy charge(p/kwh) :	200.00	225.00
FCA (p/kwh) :		Merged

15.10 **General.**

15.10.1 i. **Fuel Cost variation:**
The above tariff is subject to adjustment of the variations in fuel costs for all categories of consumers as per formula given in the order.

15.10.2 ii. **TOD tariff.**

From	To	Energy charge
6 A.M.	5 P.M.	Normal rate
5 P.M.	11 P.M.	140% of Normal rate
11 P.M.	6 A.M.	60% of Normal rate

15.10.3 iii. **Power Factor Rebate/Surcharge.**
(for H.T. bulk consumers).

Rebate : @ 0.5% on energy charge for every 1% increase in the P.F above 90% subject to a ceiling of 2.5%.

Surcharge: @ 0.5% on energy charge for every 1% fall in the P.F below 85% subject to a ceiling of 2.5%.
There will be no rebate/surcharge for P.F between 85% & 90%.

15.10.4 iv. Billing Demand.

For TOD tariff: The Demand charge for any month shall be based on maximum demand recorded during normal & peak period (6A.M.-11P.M.) or 75% of maximum demand of preceding 12 months or 50% of Contract Demand whichever is the highest. In case maximum demand during off-peak period exceeds the chargeable demand based on maximum demand during normal & peak period, the excess demand shall be charged on a pro-rata basis for the off-peak period only at the normal demand charge rate.

For non-TOD tariff: The Demand charge for any month shall be based on maximum demand recorded during the month or 75% of maximum demand of preceding 12 months or 50% of Contract Demand whichever is the highest.

Penal charge for overdrawal: In the event of drawal of power by any bulk consumer exceeding its Contract Demand, the demand charge for the excess drawal beyond the contract demand shall be 1.5 times the normal rate.

15.10.5 v. Minimum charge: Consequent upon introduction of 'fixed charges' for the
LT Domestic, Commercial & Industrial consumers the minimum charge for these consumers has been withdrawn.

15.10.6 vi. Load Factor Rebate: The HT Industrial consumers who opt for TOD tariff
shall be eligible for load factor rebate in case their monthly average load factor exceed 55%. A rebate of 35% on energy charge shall be admissible to the consumers having load factor above 55%.

15.10.7 vii. Late Payment Surcharge: The Late Payment Surcharge for payment of
bills by consumers after due date of payment shall be at revised rate of 1.25% per month in place of existing 2% per month.

15.10.8 viii. Miscellaneous Charges:

a. All existing charges relating to Tariff Meters like, meter rental, meter testing, meter replacement etc. shall continue.

b. The charges for testing of installations, disconnection/reconnection, fuse call services etc. shall remain unchanged.

All other rates, charges, conditions not covered under this tariff schedule may continue.

15.11 Expected Revenue for the full year (2001-2002) at the approved tariff.

Category of consumers	Sales (MU)	Demand/Fixed charge per month	Energy Charge (p/kwh)	Over-all rate (p/kwh)	FCA (p/kwh)	Expected gross revenueRs(L)
I. HV bulk supply for demand of 50 kva & above						
i. Industrial-Rate A(1a)	31.00	Rs190/kva	253.00	388.00		1202.80
ii. Industrial Rate A(1b)	32.00	-do-	143.00	194.00		620.80
iii. Industrial Rate B(1a)-TOD						
a. Without concession	37.51	-do-	TOD Rates	330.00		1237.50
b. With concession	239.10	-do-	-do-	221.00 (net)		5287.00
iv. Public utilities RateA(2)	2.50	-do-	141.00	242.00		60.50
v. Non-Industrial/non-domestic-RateA(3)	1.50	-do-	251.00	330.00		49.50
II. LV & MV supply for demand below 50 kva						
i. Industrial/ Irrigation pump load-Rate C(1)	3.50	Rs20.00/kva	Slab wise rates	301.00		105.50
ii. Public utilities-RateC(2)	2.50	Rs5.00/kva	191.00	194.00		48.50
iii. Domestic Rate C(3)	26.00	Slab-wise fixed charges	Slab-wise rates	194.00		504.50
iv. Commercial Rate C(4)	2.76	-do-	-do-	301.00		83.00
v. Single Point cooperative-Rate D(2)	2.60	Rs5.00/kva	188.00	190.00		49.40
vi. Bulk colony supply-RateD(3)	6.30	Rs10.00/kva	255.00	262.00		165.00
III. WBSEB Bulk supply	848.65	Voltage level-wise rates	171.00 (rounded off)			14480.00
IV. Inter Plant Transfer(IPT)	30.00		225.00	225.00		675.00
Grand Total	1265.91					24569.00

15.12 Impact of approved tariff vis-à-vis existing tariff on projected sales for FY 02.

Category of consumers	As per existing tariff		As per approved tariff		Increase(+)/ decre-ase(-) from existing tariff (%)
	Overall rate (p/kwh)	% of avg. cost	Overall rate (p/kwh)	% of avg. cost	
I.HV bulk supply for demand of 50kva & above					
i. Industrial-Rate A(1a)	551.00	271	388.00	200	(-) 30.00
ii. Industrial-Rate A(1b)	223.00	110	194.00	100	(-) 13.00
iii. Industrial-Rate B(1a) - TOD					
a. Without concession	398.00	196	330.00	170	(-) 17.00
b. With concession	253.00	125	221.00	114	(-) 13.00
iv. Public utilities-Rate A(2)	276.00	136	242.00	125	(-) 12.00
v. Non-industrial/ non-domestic-Rate A(3)	407.00	200	330.00	170	(-) 19.00
II.LV& MV supply for					

demand below 50 kva.					
i.Industrial/Irrigation pump load-RateC(1)	343.00	169	301.00	155	(-) 12.00
ii.Public Utilities - Rate C(2)	196.00	97	194.00	100	(-) 1.00
iii. Domestic - RateC(3)	219.00	108	194.00	100	(-) 11.00
iv. Commercial - Rate C(4)	344.00	169	301.00	155	(-) 12.00
v. Single point cooperative -Rate D(2)	185.00	91	190.00	98	(+) 3.00
vi. Bulk colony supply-Rate D(3)	298.00	147	262.00	135	(-) 12.00
III. WBSEB Bulk supply	164.00	81	171.00	88	(+) 4.00
IV. Inter Plant Transfer (IPT)	200.00	99	225.00	116	(+)12.00
Average Rate	203.00	100	194.00	100	(-) 4.40

15.13 The above tariff structure shall be effective from 1.4.2001. For this financial year also six months have already passed. We direct that realization as per the present tariff structure for the past period be made from the consumers through the current bills. Any difference between the actual recovery and the permitted rate of tariff is to be adjusted in the remaining months of this financial year in equal monthly installments showing the adjustment figure (increase or decrease) in a separate entry in the bill for information of the consumer. In addition to the tariff fixed as above the utility shall be entitled to realize fuel and power purchase cost adjustment as per the formula indicated in the next chapter.

CHAPTER 16: FUEL COST ADJUSTMENT FORMULA (FCA)

16.1 In addition to the tariff fixed above the utility will further be entitled to adjust the sum towards fuel surcharge, as the variations in the cost of fuel are not under the control of utility. It is the norm in the power sector to take into account the estimated expenditure on fuel, based on the cost prevailing at the beginning of the year for determination of tariff and to provide for adjustment for any variation in fuel costs in the intervening period by a fuel cost adjustment formula (FCA). We have given our reasons in the earlier chapters of this order for admitting FCA. The applicable formula is given below:

16.2 The following formula would be applicable for FCA per unit of energy sold during the adjustment period.

$$\text{FCA (p/kwh)} : \quad \frac{FC - CD - CR \pm A}{G \times (1 - L)} \times 100$$

FC (Rs.) : Fuel cost of generation as per Normative parameters fixed by the Commission and /or on actual basis (in absence of any norm) for actual level of sales during the adjustment period.

CD (Rs.) : Cost disallowed by the Commission as having been incurred in breach of its economic generation, or of order/ direction of the Commission, if any, or for any other reason during the adjustment period.

CR (Rs.) : Fuel cost already realized through basic tariff and associated FCA charge during the relevant adjustment period.

A (Rs.) : Adjustment, if any, to be made in the current period to account for any excess/shortfall in recovery of fuel cost in the past adjustment periods.

G (kwh) : Total energy sent out from utility's generating stations during the adjustment period based on normative or actual auxiliary consumption whichever is less, corresponding to actual level of sales.

L (%) : Normative T & D loss fixed by the Commission.

16.3 The adjustment period shall be every six months. But in our order we had indicated that as we had accepted the actuals for the year 2000-01 for prices of fuel, we do not allow any increase towards cost of fuel for FY 01. For 2001-02, however, realization may be made on the basis of the above formula. The dates of adjustment would be 30.9.2001 and 31.3.2002 and any proposal for adjustment shall be subject to approval of the Commission and it should be reflected in the consumers' bill in a separate entry for their information. The normative parameters fixed by the Commission and the costs taken have been appropriately dealt with in this order. At the end of each adjustment period the DPL shall calculate the FCA as per approved formula and based on approved parameters, costs and consumption. The complete details along with the cost data, quantitative details and the relevant information / documents, duly certified for the September revision and duly audited for the whole year for the March revision, shall be submitted to the Commission for its approval.

Sd/- 21.9.2001 (R. R. Ganguly) Member (Tech.) **Sd/- 21.9.2001 (S.K. Phaujdar) Chairperson**

Note of dissent of Member (F&A) on the next pages.

G (kwh) : Total energy sent out from utility's generating stations during the adjustment period based on normative or actual auxiliary consumption whichever is less, corresponding to actual level of sales.

L (%) : Normative T & D loss fixed by the Commission.

16.3 The adjustment period shall be every six months. But in our order we had indicated that as we had accepted the actuals for the year 2000-01 for prices of fuel, we do not allow any increase towards cost of fuel for FY 01. For 2001-02, however, realization may be made on the basis of the above formula. The dates of adjustment would be 30.9.2001 and 31.3.2002 and any proposal for adjustment shall be subject to approval of the Commission and it should be reflected in the consumers' bill in a separate entry for their information. The normative parameters fixed by the Commission and the costs taken have been appropriately dealt with in this order. At the end of each adjustment period the DPL shall calculate the FCA as per approved formula and based on approved parameters, costs and consumption. The complete details along with the cost data, quantitative details and the relevant information / documents, duly certified for the September revision and duly audited for the whole year for the March revision, shall be submitted to the Commission for its approval.

Sd/- 21.9.2001
(R. R. Ganguly)
Member (Tech.)

Sd/- 21.9.2001
(S.K. Phaujdar)
Chairperson

Note of dissent of Member (F&A) on the next pages.

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