CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram

1. **Shri K.N.Sinha , Member**
2. **Shri Bhanu Bhushan, Member**

Petition No. 110/2002

In the matter of

Petition for approval of tariff for 315 MVA, 400/220 kV ICT-IV at Ballabhgarh in Northern Region for the period from 1.7.2002 to 31.03.2004**.**

And in the matter of

Power Grid Corporation of India Ltd. **….Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
2. Himachal Pradesh State Electricity Board, Shimla
3. Punjab State Electricity Board, Patiala
4. Haryana Vidyut Prasaran Nigam Ltd, Panchkula
5. Power Development Department, Govt. of J&K, Srinagar
6. Uttar Pradesh Power Corporation Ltd., Lucknow
7. Delhi Vidyut Board, New Delhi
8. Chief Engineer, Chandigarh Administration, Chandigarh
9. Uttranchal Power Corporation Ltd, Dehradun **….Respondents**

The following were present:

1. Shri U.C. Misra, Director (Pers), PGCIL
2. Shri Umesh Chandra, ED (Comml), PGCIL
3. Shri D.D. Dhayaseelan, DGM, PGCIL
4. Shri P.C. Pankaj, AGM (Comml), PGCIL
5. Shri U.K. Tyagi, DGM, PGCIL
6. Shri C. Kannan, CM (Fin), PGCIL
7. Shri G.M. Agarwal SE(LSP), RVPN
8. Shri A.K. Tandon, EE, UPPCL
9. Shri V.K. Gupta, Consultant, PSEB
10. Shri R.K. Arora, XEN, HVPN

ORDER
(DATE OF HEARING: 1.4.2004)

In this petition, the petitioner, Power Grid Corporation of India Ltd has sought approval for tariff for 315 MVA, 400/220 kV ICT-IV at Ballabhgarh in Northern Region for the period from 1.7.2002 to 31.03.2004 (hereinafter referred to as “the transmission assets”). The tariff is regulated based on terms and conditions of tariff contained in the Commission's notification dated 26.3.2001, (hereinafter referred to as "the notification dated 26.3.2001").

2. The investment approval for the transmission assets was accorded by Board of Directors of the petitioner company as per Memorandum dated 15.12.1999 at an estimated cost of Rs. 1068.00 lakh, including IDC of Rs. 86.00 lakh.

3. The asset has been declared under commercial operation w.e.f. 1.7.2002. The estimated completion cost of this asset is stated to be Rs. 590.00 lakh.

4. The petitioner has sought approval for transmission charges (based on cost of Rs.595.74 lakh) as under:

(Rs. in lakh)

Transmission Tariff	**2002-2003 (9 months)**	**2003-2004**
Interest on Loan	27.36	36.45
Interest on Working Capital	1.95	2.79
Depreciation	15.11	21.00
Advance against Depreciation	0.00	0.00
Return on Equity	22.65	33.96
O & M Expenses	22.29	31.50
Total	**89.37**	**125.71**

5. The details furnished by the petitioner in support of its claim for Interest on Working Capital are as extracted below:

(Rs. in lakh)

	2002-2003	**2003-2004**
Spares	1.33	1.81
O & M expenses	2.48	2.63
Receivables	19.86	20.95
Total	23.66	25.39
Rate of Interest	11.00%	11.00%
Interest	**2.60**	**2.79**
***Pro rata* Interest**	**1.95**	

6. In addition, the petitioner has prayed for approval of other charges like Income Tax, incentive, Development Surcharge, late payment surcharge, other statutory taxes, levies, cess, filing fee, etc in terms of the notification dated 26.3.2001.

CAPITAL COST

7. As laid down in the notification dated 26.3.2001, the project cost, which includes capitalised initial spares for the first 5 years of operation, as approved by CEA or an appropriate independent agency, other than Board of Directors of the generating company, as the case may be, shall be the basis for computation of tariff. The notification dated 26.3.2001 further provides that the actual capital expenditure incurred on completion of the project shall be the criterion for the fixation of tariff. Where the actual expenditure exceeds the approved project cost the expenditure as approved by the CEA or an appropriate independent agency, as the case may be, shall be deemed to be the actual capital expenditure for the purpose of determining the tariff, provided that excess expenditure is not attributable to the 'Transmission Utility' or its suppliers or contractors and provided further that where a transmission services agreement entered into between the Transmission Utility and the beneficiary provides a ceiling on capital expenditure, the capital expenditure shall not exceed such ceiling.

8. As per the auditor’s certificate dated 22.9.2004 furnished by the petitioner, the actual cost as on the date of commercial operation is Rs. 547.99 lakh which includes initial spares for Rs.21.36 lakh, though the estimated completion cost is stated to be Rs.589.74 lakh.

9. It was noted that the approval of tariff involved replacement of some old equipment. The Commission vide order dated 4.6.2003 had directed the petitioner to place on record the complete facts relating to depreciated cost of the equipment, its scrap value as also the possibility of its use on any other line, so that a view could be taken on the issue of credit to be given for the old equipment. The petitioner was further directed to explain the factors considered at the time of planning the transmission projects as it was found that in the present case the equipment installed originally had to be replaced to meet the changed circumstances.

10. The petitioner has, vide affidavit dated 25.3.2004 submitted the following details in respect of replaced equipment:

Equipment

245 kB CT	: 9 Nos.
245 kV Isolator	: 3 Nos.
198 kV LA	: 9 Nos.

11. The petitioner has stated that out of the replaced equipments 9 No. of CTs have been diverted to Eastern Region and the rest of the equipment would be used in Eastern/North Eastern Region where there is low short circuit level.

Depreciated Cost

Gross Block of assets	: Rs 33,66,107/-
ERV from 1988-89 to 2001-02	: Rs 19,06,627/-
Total Cost	: Rs 52,72,734/-
Cumulative depreciation	: Rs 39,78,688/-
Depreciated Cost	: Rs 12,94,046/-

12. RVPNL has submitted that credit be given for the depreciated cost of the equipment, since otherwise the respondents will be burdened twice.

13. In our opinion, the original cost of the replaced equipment should be deducted from the gross block of the project of which these replaced equipment formed part. The petitioner is, therefore, directed to decapitalise the value of such assets in the project of which replaced assets formed part. Since the new equipment installed by the petitioner (in place of the replaced equipment) forms part of the instant project, this cost shall form part of the project cost for tariff determination.

14. As per the investment approval dated 15.12.1999, the transmission assets were scheduled for commissioning by December 2001. However, these assets have been declared under commercial operation w.e.f 1.7.2002. Thus, there has been a time over-run of about 6 months.

15. The petitioner has furnished detailed explanation with regard to time over-run. It has been stated that the contract for extension project was awarded to BSES Ltd., who in turn placed an order on BHEL for supply of transformer as other existing transformers at Ballabhgarh are also of BHEL make. This necessitated change in the layout of tertiary winding terminal and radiator bank of the new transformer to match with the existing transformers causing a delay of 40 days. It is stated that BHEL faced imported material (continuously transposed cable) constraints due to spurt in orders from Europe and USA. This has resulted in a further delay of 75 days. The above delays caused rescheduling of all other activities causing a further delay in commissioning by another 35 days.

16. The petitioner cannot absolve itself of the responsibility for delay because of the actions of contractors/sub-contractors as supervision, monitoring and corrective action could be taken by the petitioner as part of the managerial function. Delay in the supply from BHEL due to spurt in the orders from foreign countries also falls in the above category. Similarly, change in the layout to match with the existing transformers should have been envisaged at the design stage itself. Thus, it can be safely concluded that the delay in commissioning cannot be said to be beyond the control of the petitioner or its contractors, suppliers or agents. Therefore, *pro rata* reduction in IDC due to the delay of 6 months in the commissioning has been considered.

17. The total period of construction is 30 months, which includes delay of 6 months. Total IDC as per auditor's certificate dated 22.9.2004 is Rs 21.10 lakh. Therefore, IDC *pro rata* to delay period of 6 months is Rs 4.22 lakh (= 21.1 x 6/30).

18. The petitioner has informed that liquidated damages amounting to Rs. 86779/- have been imposed for delay in completion of work by M/s BSES Ltd. Since IDC *pro rata* to the period of delay has been reduced from the gross block for reason of delay, the liquidated damages have not been adjusted in the gross block.

19. In view of the reasons explained above, the gross block on the date of commercial operation has been arrived at as under:

Gross block on the date of commercial operation as per auditor's certificate	= Rs. 547.99 lakh
Pro rata reduction for delay in construction	= Rs. 4.22 lakh
Net cost to be considered for tariff calculations	= Rs. 543.77 lakh

ADDITIONAL CAPITALISATION

20. The notification dated 26.3.2001 provides that tariff revisions during the tariff period on account of capital expenditure within the approved project cost incurred during the tariff period may be entertained by the Commission only if such expenditure exceeds 20% of the approved cost. In all cases, where such expenditure is less than 20%, tariff revision shall be considered in the next tariff period.

21. The petitioner has claimed additional capital expenditure on works for the period after 1.7.2002. However, as the amount of additional capitalisation claimed does not exceed 20% of the approved capital cost, additional capitalisation has not been considered.

SOURCES OF FINANCING. DEBT – EQUITY RATIO

22. As per Para 4.3 of the notification dated 26.3.2001, capital expenditure of the transmission system shall be financed as per approved financial package set out in the techno-economic clearance of CEA or as approved by an appropriate independent agency, as the case may be.

23. The petitioner has claimed tariff by taking debt and equity in the ratio of 67.70:32.30 on actual basis. The investment approval was accorded by the Board of Directors without specifying the exact debt-equity ratio. The actual debt-equity ratio with reference to capital cost of Rs.547.99 lakh as claimed by the petitioner has been considered. Accordingly, an amount of Rs. 175.63 lakh has been considered towards

equity and an amount of Rs. 368.14 lakh on account of loan against the gross block of Rs. 543.77 lakh considered presently.

INTEREST ON LOAN

24. As provided in the notification dated 26.3.2001, interest on loan capital is to be computed on the outstanding loans, duly taking into account the schedule of repayment, as per financial package approved by CEA or any independent agency.

25. In the calculation, the interest on loan has been worked by considering the gross amount of loan, repayment for the year 2002-03 and 2003-04 and rate of interest etc. as per the loan details for the assets commissioned after 31.3.2002 submitted by the petitioner vide affidavit dated 16.2.2005.

26. On the basis of the details of loan, repayments and rate of interest, etc on record, interest on loan has been worked out as under, based on gross block of Rs. 543.77 lakh:

(Rs. in lakh)

	2002-03	**2003-04**
Gross Loan -Opening	368.14	368.14
Cumulative Repayment up to the previous Year	0.00	0.00
Net Loan-Opening	368.14	368.14
Repayment during the year	0.00	0.00
Net Loan-Closing	368.14	368.14
Interest	**27.15**	**36.17**

27. The necessary details in support of interest on loan are extracted below:

(Rs. in lakh)

Details of Loan	2002-03	2003-04
No. of days in the Year	365	366
Bond-X		
Gross Loan -Opening	69.46	69.46
Cumulative Repayment up to Previous Year	0.00	0.00
Net Loan-Opening	69.46	69.46
Repayment during the year	0.00	0.00
Net Loan-Closing	69.46	69.46
Rate of Interest	10.90%	10.90%
Interest	5.68	7.57
Repayment Schedule	12 Annual Instalments from 21.06.2004	
Bond-XI Option I		
Gross Loan -Opening	73.43	73.43
Cumulative Repayment up to Previous Year	0.00	0.00
Net Loan-Opening	73.43	73.43
Repayment during the year	0.00	0.00
Net Loan-Closing	73.43	73.43
Rate of Interest	9.80%	9.80%
Interest	5.40	7.20
Repayment Schedule	12 Annual Instalments from 07.12.2005	
Oriental Bank of Commerce		
Gross Loan -Opening	33.74	33.74
Cumulative Repayment up to Previous Year	0.00	0.00
Net Loan-Opening	33.74	33.74
Repayment during the year	0.00	0.00
Net Loan-Closing	33.74	33.74
Rate of Interest	9.10%	9.10%
Interest	2.30	3.07
Repayment Schedule	12 Annual Instalments from 22.03.2005	
PNB-II		
Gross Loan -Opening	40.68	40.68
Cumulative Repayment up to Previous Year	0.00	0.00
Net Loan-Opening	40.68	40.68
Repayment during the year	0.00	0.00
Net Loan-Closing	40.68	40.68
Rate of Interest	9.10%	9.10%
Interest	2.78	3.70
Repayment Schedule	12 Annual Instalments from 08.03.2005	

Bond-XII		
Gross Loan -Opening	150.83	150.83
Cumulative Repayment up to Previous Year	0.00	0.00
Net Loan-Opening	150.83	150.83
Repayment during the year	0.00	0.00
Net Loan-Closing	150.83	150.83
Rate of Interest	9.70%	9.70%
Interest	10.98	14.63
Repayment Schedule	12 Annual Instalments from 28.03.2006	
Total Loan		
Gross Loan -Opening	368.14	368.14
Cumulative Repayment up to Previous Year	0.00	0.00
Net Loan-Opening	368.14	368.14
Repayment during the year	0.00	0.00
Net Loan-Closing	368.14	368.14
Interest	**27.15**	**36.17**

28. PNB-II and OBC loans carry floating rate of interest and the interest rates as submitted by the petitioner in the petition have been considered in the calculation. Any change/resetting of the interest rates of the above loans during the tariff period covered in this petition shall be settled mutually between the petitioner and the respondents. In case of their inability to do so, any one of them may approach the Commission for appropriate relief.

DEPRECIATION

29. With regard to depreciation, para 4(b) of the CERC notification dated 26.3.2001 provides:

(i) The value base for the purpose of depreciation shall be the historical cost of the asset.

(ii) Depreciation shall be calculated annually as per straight-line method at the rate of depreciation as prescribed in the Schedule attached to the notification.

Provided that the total depreciation during the life of the project shall not exceed 90% of the approved Original Cost. The approved original cost shall include additional capitalisation on account of foreign exchange rate variation also.

(iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

(iv) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.

(v) Depreciation against assets relating to environmental protection shall be allowed on case-to-case basis at the time of fixation of tariff subject to the condition that the environmental standards as prescribed have been complied with during the previous tariff period.

30. The petitioner has claimed the depreciation on the capital expenditure of Rs.595.74 lakh in accordance with above principles.

31. The depreciation for individual items of capital expenditure has been calculated on the capital cost of Rs. 543.77 lakh at the rates as prescribed in the notification dated 26.3.2001. While approving depreciation component of tariff, the weighted average depreciation rate of 3.60% has been worked out. The break up of the capital cost has been considered as per the details furnished by the petitioner. The necessary calculations in support of calculation of weighted average rate of depreciation are as under:

	Total Cost (Rs. in lakh) as on 30.6.2002	Reduction in Capital cost* (Rs. In lakh)	Capital Cost considered (Rs. In lakh)	Approved capital cost (Rs. in lakh)	Rate of Depreciation	Depre-ciation (Rs. in lakh)
Capital Expenditure as on 30.6.2002						
Land	0.00	0.00	0.00		0%	0.00
Building & Other Civil Works	0.00	0.00	0.00		1.80%	0.00
Sub-station Equipment	547.99	4.22	543.77		3.60%	19.58
Transmission Line	0.00	0.00	0.00		2.57%	0.00
PLCC	0.00	0.00	0.00		6.00%	0.00
Total	**547.99**	**4.22**	**543.77**	**1068.00**		**19.58**

32. The calculations in support of depreciation allowed are appended hereinbelow:

(Rs. in lakh)

		2002-03 (9 months)	**2003-04**
Rate of Depreciation	3.60%		
Depreciable Value	489.39		
Balance Useful life of the asset			
Remaining Depreciable Value		489.39	474.71
Depreciation		14.69	19.58

ADVANCE AGAINST DEPRECIATION

33. In addition to allowable depreciation, the petitioner becomes entitled to Advance Against Depreciation when originally scheduled loan repayment exceeds the depreciation allowable as per schedule to the notification dated 26.3.2001. Advance Against Depreciation is computed in accordance with the following formula:

AAD = Originally scheduled loan repayment amount subject to a ceiling of $1/12^{th}$ of original loan amount minus depreciation as per schedule.

34. The petitioner has not claimed advance against depreciation.

35. For working out Advance Against Depreciation, $1/12^{th}$ of the loan as per the petition has been considered while repayment of loan as worked out above has been

taken as repayment of the loan during the year. The petitioner is not entitled to Advance Against Depreciation as calculated below:

(Rs. in lakh)

Advance Against Depreciation	**2002-03**	**2003-04**
1/12th of Gross Loan(s)	30.68	30.68
Scheduled Repayment of the Loan(s)	0.00	0.00
Minimum of the above	0.00	0.00
Depreciation during the year	14.69	19.58
Advance Against Depreciation	0.00	0.00

OPERATION & MAINTENANCE EXPENSES

36. In accordance with the notification dated 26.3.2001, Operation and Maintenance expenses, including expenses on insurance, if any, are to be calculated as under:

(a) Where O&M expenses, excluding abnormal O&M expenses, if any, on sub-station (OMS) and line (OML) are separately available for each region, these shall be normalised by dividing them by number of bays and line length respectively. Where data as aforesaid is not available, O&M expenses in the region are to be apportioned to the sub-station and lines on the basis of 30:70 ratio and these are to be normalised as below:

O&M expenses per Unit of the line length in Kms (OMLL) = Expenses for lines (OML)/Average line length in Kms (LL)

O&M expenses for sub-stations (OMBN) = O&M expenses for substations (OMB)/Average number of bays (BN)]

(b) The five years average of the normalised O&M expenses for lines and for bays for the period 1995-96 to 1999-2000 is to be escalated at 10% per annum for two years (1998-99 and 1999-2000) to arrive at normative O&M expenses per unit of line length and per bay for 1999-2000.

(c) The normative O&M per unit length and normative O&M per bay for the year 1999-2000 for the region derived in the preceding paragraph is to be escalated @ 6% per annum to obtain normative values of O&M expenses per unit per line length and per bay in the relevant year. These normative values are to be multiplied by line length and number of bays (as the case may be) in a given system in that year to compute permissible O&M expenses for the system.

(c) The escalation factor of 6% per annum is to be used to revise normative base figure of O&M expenses. Any deviation of the escalation factor computed from the actual inflation data that lies within 20% of the notified escalation factor of 6% shall be absorbed by utilities/beneficiaries.

37. The normalized O & M expenses for Northern Region have been considered in a number of other petitions based on the above noted methodology. Following table gives a comparison of the normative O&M expenses as calculated by the petitioner and as allowed by the Commission in the past for the base year i.e. 1999-2000 and afterwards:

NORMALISED O&M EXPENSES FOR NORTHERN REGION

(Rs. in Lakh)

S. NO.	Items	1995-96	1996-97	1997-98	1998-99	1999-2000	Total for five years 95-96 to 99-00	99-00	2000-01	2001-02	2002-03	2003-04
1	Total O&M expenses(Rs. in lakh)	4147.48	4336.62	6100.85	6676.57	7137.32						
2	Abnormal O&M expenses	0.00	0.00	57.64	107.13	99.08	263.85					
3	Normal O&M expenses (S.No. 1 -S.NO. 2)	4147.48	4336.62	6043.21	6569.44	7038.24						
4	**OML** (O&M for lines)= 0.7 X S. NO.3	2903.24	3035.63	4230.25	4598.61	4926.77	**19694.50**					
5	**OMS** (O&M for substation) = 0.3XS.NO.3	1244.24	1300.99	1812.96	1970.83	2111.47	**8440.49**					
6	Line length at beginning of the year in Kms.	9622.13	9622.13	9743.48	10561.88	10819.55						
7	Line length added in the year in Kms.	0.00	121.35	818.40	257.67	1705.07						
8	Line length at end of the year in Kms.	9622.13	9743.48	10561.88	10819.55	12524.62						
9	LL (Average line length in the Region)	9622.13	9682.81	10152.68	10690.72	11672.09	**51820.43**					
10	NO. of bays at beginning of the year	157	157	161	183	185						
11	NO. of bays added in the year	0	4	22	2	31						
12	NO. of bays at the end of the year	157	161	183	185	216						
13	BN (Average number of bays in the Region)	157.0	159.0	172.0	184.0	200.5	**872.50**					
14	AVOMLL(OML/LL)	0.302	0.314	0.417	0.430	0.422	1.884					
15	AVOMBN(OMS/BN)	7.925	8.182	10.540	10.711	10.531	47.890					
16	**NOMLL(allowable O&M per unit of line length)**			**0.3768**	**0.4145**	**0.4560**		**0.4560**	**0.4833**	**0.5123**	**0.5431**	**0.5756**
17	**NOMBN(Allowable O&M per bay)**			**9.5780**	**10.5358**	**11.5894**		**11.5894**	**12.2847**	**13.0218**	**13.8031**	**14.6313**
	NOMLL(as calculated by petitioner)			**0.42**				**0.51**	**0.54**	**0.57**	**0.60**	**0.64**
	NOMBN(as calculated by petitioner)			**10.75**				**13.01**	**13.79**	**14.62**	**15.50**	**16.43**

38. The differences in NOMLL and NOMBN as calculated by the petitioner and as allowed are mainly on account of certain expenses disallowed by the Commission. Using these normative values, O&M charges have been calculated.

39. In the Commission's calculations the escalation factor of 6% per annum has been used. In accordance with the notification dated 26.3.2001, if the escalation factor computed from the observed data lies in the range of 4.8% to 7.2%, this variation shall be absorbed by the petitioner. In case of deviation beyond this limit, adjustment shall be made on by applying actual escalation factor arrived at on the basis of weighted price index of CPI for industrial workers (CPI_IW) and index of selected component of WPI (WPI_TR).

40. The details of O&M expenses allowed are given hereunder:

2002-03 (9 months)			2003-04		
Line length in Ckm	**No. of bays**	**O&M expenses (Rs. in lakh)**	**Line length in Ckm**	**No. of bays**	**O&M expenses (Rs. in lakh)**
0	**2**	**20.70**	**0**	**2**	**29.26**

RETURN ON EQUITY

41. As per the notification dated 26.3.2001, return on equity shall be computed on the paid up and subscribed capital and shall be 16% of such capital. It further provides that premium raised by the Transmission Utility while issuing share capital & investment of internal resources created out of free reserve of the existing utility, if any, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing the return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the

Transmission project and forms part of the approved financial package as set out in the techno-economic clearance accorded by the Authority.

42. Equity of Rs.175.63 lakh has been considered for the purpose of tariff. On this basis, the petitioner shall be entitled to return on equity each year during the tariff period as under:

2002-03 (9 months)	Rs. 21.08 lakh
2003-04	Rs. 28.10 lakh

INTEREST ON WORKING CAPITAL

43. As provided in the notification dated 26.3.2001, the interest on working capital shall cover:

(a) Operation and maintenance expenses (cash) for one month;

(b) Maintenance spares at a normative rate of 1% of the capital cost less 1/5th of the initial capitalised spares. Cost of maintenance spares for each subsequent year shall be revised at the rate applicable for revision of expenditure on O & M of the transmission system; and

(c) Receivables equivalent to two months' average billing calculated on normative availability level, which is 98%.

44. In our calculations, maintenance spares for the years 2002-03 and 2003-04 have been worked out on the basis of capital expenditure up to the date of commercial operation considered in the present petition. A deduction of 1/5th of initial capitalised

spares has been made therefrom. Thereafter, the amount has been escalated @ 6% of the maintenance expenses for 2002-03 to arrive at maintenance spares for the year 2003-04.

45. The petitioner has claimed interest on working capital at the rate of 11%, based on annual SBI PLR as on the date of commercial operation, which has been allowed. The detailed calculations in support of interest on working capital are as under:

Interest on Working Capital

(Rs. in lakh)

Working Capital		**2002-03**	**2003-04**
Rate of Escalation for maintenance spares		6%	6%
Maintenance Spares	1%	5.44	
Less: Capitalised initial spares		4.24	
		1.20	1.25
O & M expenses		2.30	2.44
Receivables		18.99	19.27
Total		22.49	22.96
Rate of Interest		11.00%	11.00%
Interest		**1.86** (9 months)	**2.53**

TRANSMISSION CHARGES

46. In the light of above discussion, we approve the transmission charges as given in the Table below:

TABLE

(Rs. in lakh)

Transmission Tariff	**2002-03 (9 months)**	**2003-04**
Interest on Loan	27.15	36.17
Interest on Working Capital	1.86	2.53
Depreciation	14.69	19.58
Advance against Depreciation	0.00	0.00
Return on Equity	21.08	28.10
O & M Expenses	20.70	29.26
Total	**85.47**	**115.64**

47. In addition to the transmission charges, the petitioner shall be entitled to other charges like income tax, incentive and other cess and taxes in accordance with the notification dated 26.3.2001 subject to directions if any, of the superior courts. The petitioner shall also be entitled to recovery of filing fee of Rs 2 lakh, which shall be recovered from the respondents in five monthly installments of Rupees forty thousand each and shall be shared by the respondents in the same ratio as other transmission charges. This is subject to confirmation that the amount is not already included in O&M charges.

48. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's interim orders. The provisional billing of tariff shall be adjusted in the light of final tariff now approved by us.

49. The transmission charges approved by us shall be included in the regional transmission tariff for Northern Region and shall be shared by the respondents in accordance with the notification dated 26.3.2001.

50. Before parting we may point out that there is a marked reduction in estimated competition cost as compared to cost approved by Board of Directors. The petitioner has furnished following explanation for cost reduction:

(a) Utilisation of diverted equipment:

Description	Amount (Rs. In lakh)	Remarks
i) 400 KV CB	59.76	Received from NR-II at Nil value.
ii) 220 KV CVT	6.46	Old assets lying in inventory used of lower cost.
iii) Switchyard Equp.	100.67	Old equipments structure etc. were available at site.
Total	166.89	
IEDC	89.16	The project was commissioned with minimum manpower.
IDC	64.90	Due to supply of free material of Rs. 166.89 lakhs, reduction in IDC was possible.
Grand Total	**320.95**	

(b) Saving of Rs. 2 crore (approximate) was made on account of purchase of equipment at cost lower than the estimated cost through better contracting and due to slump in the market at that time.

51. It is seen that at the time of giving approval, estimate of the equipment amounting to Rs 166.89 lakh already available and not required to be procured, was not taken into account. This forms about 20% of the equipment cost in the approval accorded by the Board. This is alarming considering the fact that major part of this amount (more than Rs 100 lakh) was available at the site itself. Even after accounting for this equipment, which was not required to be procured, the balance approved cost of equipment amounts to Rs 688.11 lakh. The petitioner has stated that a saving of Rs 2 crore (i.e. Rs 200 lakh) was made on account of purchase of equipment at lower cost than that estimated through better contracting and due to slump in the market at that time. This should have led to actual cost of equipment to about Rs 488 lakh whereas the actual cost of equipment as per auditor's certificate

dated 22.9.2004 is Rs 538.80 lakh (equal to capital cost as there is no expenditure on land and building). Thus, the explanation furnished by the petitioner in support of reduction in cost is not congruous. Further, this difference of Rs 2 crore in the equipment cost of Rs 8.55 crore (estimated in the approval) attributed by the petitioner to better contracting and slump in the market is too high (about 23%) to be realistic. It is further observed that the IEDC component in the cost estimate approved by the Board is 13.75% (Misc. Tools and plants @1%, maintenance during construction @1%, Engg and administration @8.75% and contingencies @3%) which is much higher than the figure of 8% considered in approvals earlier accorded by the Central Government for transmission projects. Therefore, the cost estimates approved by the Board cannot be considered to be realistic. The fact that approved cost (Rs 1068 lakh) is far more (181%) than the estimated completion cost (Rs 589.74 lakh) is a matter of grave concern. The Board of Directors of the petitioner is advised to be more careful in future while approving the cost estimates for the transmission projects.

52. This order disposes of Petition No. 110/2002.

Sd/-	**Sd/-**
(BHANU BHUSHAN)	**(K.N. SINHA)**
MEMBER	**MEMBER**

New Delhi dated the 13th April 2005