

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

1. **Shri Bhanu Bhushan, Member**
2. **Shri R.Krishnamoorthy, Member**

Petition No. 138/2007

In the matter of

Determination of transmission tariff from DOCO and additional capitalization up to 1.4.2007 for (i) 400 kV S/C Dulhasti-Kishenpur Transmission line with associated bays (ii) 400 kV Kishenpur-Wagoora transmission line along with associated bays at Kishenpur and Wagoora sub-stations under Dulshasti combined transmission system in Northern Region for the period 2004-09.

And in the matter of

Power Grid Corporation of India Limited

...Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Vidyut Prasaran Nigam Ltd., Panchkula
8. Power Development Department, Govt. of J&K, Jammu
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Delhi Transco Ltd, New Delhi
11. BSES Yamuna Power Ltd., Delhi
12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., New Delhi
14. Chief Engineer, Chandigarh Administration, Chandigarh
15. Uttaranchal Power Corporation Ltd, Dehradun
16. North Central Railway, Allahabad

..Respondents

The following were present:

1. Shri V.V.Sharma, PGCIL
2. Shri U.K. Tyagi, PGCIL
3. Shri C. Kannan, PGCIL
4. Ms. Sangeeta Edwards, PGCIL
5. Shri B.C.Pant, PGCIL
6. Shri. A.K. Nagpal, PGCIL
7. Shri S.S.Raju, PGCIL
8. Shri S.N.Singh, UPPCL
9. Shri T.P.S.Bawa, OSD, PSEB

ORDER
(DATE OF HEARING:17.1.2008)

This petition has been filed for approval of final tariff for (i) 400 kV S/C Dulhasti-Kishenpur transmission line with associated bays (Asset-I) and (ii) 400 kV Kishenpur-Wagoora transmission line along with associated bays at Kishenpur and Wagoora sub-stations (Asset-II) from the date of commercial operation of the respective asset to 31.3.2009 under Dulshasti Combined Transmission System in Northern Region (the transmission system) in Northern Region, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "the 2004 regulations") after accounting for additional capitalization during 2006-07 in respect of Asset-II. The petitioner has also prayed for reimbursement of expenditure from the beneficiaries incurred towards publishing of notices in newspapers and the petition filing fee.

2. The Central Government in Ministry of Power under its letter dated 27.10.1987 accorded its approval for implementation of the transmission system for evacuation of central sector power from Dulhasti Hydroelectric Project in Northern Region at an estimated cost of Rs. 16657 lakh, comprising the following elements, namely:

- (i) 400 kV D/C Dulhasti-Kishenpur transmission line;
- (ii) 400 kV D/C Kishenpur-Srinagar/Wagoora transmission line;
- (iii) 400/220 kV sub-station at Kishenpur with 2x250 MVA transformer;
- (iv) 220 kV switching station at Srinagar/Wagoora; and
- (v) Area Load Despatch Centre at Kishenpur.

3. Subsequently, to meet the urgency of evacuation of power from Dulhasti HEP, scheduled for commissioning in July 1994, Ministry of Power vide its letter dated 28.12.1992, revised the scope of work at a total estimated cost of Rs. 13769.00 lakh, with the following elements, namely:-

- (i) 400 kV D/C Dulhasti-Kishtwar transmission line;
- (ii) 220 kV D/C Kishtwar-Kishenpur transmission line;
- (vi) 400/220 kV sub-station at Kishtwar (7x105 MVA);and
- (vii) 400/220 kV transformer at Kishenpur (7x105 MVA).

4. The implementation of the transmission system was initially undertaken by NHPC. However, consequent to formation of the petitioner company, the project was transferred to the petitioner in 1992.

5. In view of delay in execution of Dulhasti HEP, the scope of work as originally approved under letter dated 27.10.1987 was revived, based on the revised feasibility report submitted by the petitioner, and CEA issued TEC for the transmission system. The revised cost estimates for the completed transmission system were lastly approved by Ministry of Power vide its letter dated 2.7.2002 at a total capital investment of Rs. 56705 lakh, which included IDC of Rs. 14204 lakh. The transmission charges for ICT at Kishenpur, an element of the transmission system were approved vide order dated 9.9.2005 in Petition No. 104/2004.

6. The dates of commercial operation of the two assets are stated to be as under:

S. No.	Name of the assets	Date of commercial operation
1.	Asset- I	1.4.2007 (revised)
2.	Asset-II	1.11.2006

7. Asset-I was initially declared under commercial operation on 1.4.2000, but was revised to 1.4.2007 in view of delay in commissioning of Dulhasti HEP. The

petitioner has explained that shunt capacitors of 247.7 MVAR included in the approval have not been installed.

8. The details of the capital expenditure in relation to the transmission assets are stated to be as under:

Asset-I

(Rs. in lakh)	
Expenditure up to 1.4.2000 (up to the date of completion and capitalization)	14301.24
Expenditure from 1.4.2001 to 31.3.2002	52.76
Expenditure up to 31.3.2002	14354.00
IEDC/IDC expenses from 1.4.2000 to 31.3.2007	4057.53
Total	18411.53

Asset-II

(Rs. in lakh)	
Expenditure up to the date of commercial operation	27291.04
Expenditure from 1.11.2006 to 31.3.2007	840.13
Balance estimated expenditure	2376.09
Total	30507.26

9. It is noted that the expenditure capitalised on account of IEDC and IDC from 1.4.2000 to 31.3.2007 has been worked out based on memorandum of record as such expenditure has been debited to Profit & Loss account of respective year.

10. The petitioner has claimed the transmission charges as under:

(Rs.in lakh)					
	Asset- I		Asset-II		
	2007-08 (pro rata)	2008-09	2006-07 (Pro rata)	2007-08	2008-09
Depreciation	473.06	473.06	300.43	732.51	732.51
Interest on Loan	600.97	442.82	680.52	1618.05	1551.52
Return on Equity	1007.22	1007.22	300.01	737.67	737.67
Advance against Depreciation	648.65	648.65	0.00	26.12	359.10
Interest on Working Capital	81.87	80.03	36.93	90.74	97.44
O & M Expenses	62.17	64.76	100.80	251.26	261.62
Total	2873.94	2716.54	1418.70	3456.35	3739.86

11. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:

(Rs. in lakh)

	Asset- I		Asset-II		
	2007-08 (pro rata)	2008-09	2006-07 (Pro rata)	2007-08	2008-09
Maintenance Spares	184.12	195.16	277.11	288.24	305.53
O & M expenses	5.18	5.40	20.16	20.94	21.80
Receivables	478.99	452.76	567.48	576.06	623.31
Total	668.29	653.31	864.75	885.24	950.65
Rate of Interest	12.25%	12.25%	10.25%	10.25%	10.25%
Interest	81.87	80.03	44.32	90.74	97.44

12. The reply to the petition has been filed by Uttar Pradesh Power Corporation Limited (UPPCL). In response to the public notices published by the petitioner in accordance with the procedure specified by the Commission, no comments have been received from the general public.

13. UPPCL in its reply has *inter alia* stated that the amount of interest and incidental expenses for intervening period should not be allowed to be capitalized, since it would be burden on the States for no fault of theirs. It has been further stated that O & M charges once prescribed on normative basis must not be deviated till revision of the 2004 regulations.

CAPITAL COST

14. As per clause (1) of Regulation 52 of the 2004 regulations, subject to prudence check, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be determined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the transmission system and shall include capitalised initial spares subject to a ceiling norm as 1.5% of original project cost. The regulation is applicable in case of the transmission system declared under commercial operation on or after 1.4.2004.

15. The petitioner has claimed additional capitalization of Rs. 840.13 lakh on the works for the period from 1.11.2006 to 31.3.2007 over the capital expenditure of Rs. 27291.04 lakh for Asset-II as on the date of commercial operation. For Asset-I,

the petitioner has claimed capital cost of Rs. 18411.53 lakh as on the date of commercial operation.

ADDITIONAL CAPITALIZATION 2006-07

16. Clause (1) of Regulation 53 of the 2004 regulations provides-

“(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares in the original scope of works subject to the ceiling norm specified in regulation 52;
- (iv) Liabilities to meet award of arbitration or compliance of the order or decree of a court; and
- (v) On account of change in law:

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff:

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the transmission system.”

17. The details submitted by the petitioner in support of its claim for additional capital expenditure for Asset-II are given hereunder:

Asset-II	
Nature of expenditure	
Building and civil work	Rs. 5.94 lakh
Sub-station	Rs. 90.80 lakh
Transmission line	Rs. 729.54 lakh
PLCC	Rs. 13.85 lakh
Total	Rs. 840.13 lakh

18. The additional capital expenditure claimed for Asset-II is within the original scope of work and is found to be in order as it was against the committed liability. Accordingly, the additional capital expenditure of Rs.840.13 lakh has been allowed for Asset-II.

Time Over-run

19. As per the investment approval dated 2.7.2002, the transmission system was scheduled to be commissioned by July 2006. Asset-I was initially declared under commercial operation w.e.f. 1.4.2000, and subsequently this was revised to 1.4.2007 keeping in view the delay in the commissioning of Dulhasti HEP. Asset-II was declared under commercial operation on 1.11.2006 and there was a delay of about 4 months. The petitioner has explained the following reasons for delay in commissioning of Asset-II:

- (i) The transmission line was passing through militancy infected areas. There had been stoppage of work by militants a number of times and for weeks together. In Shopian, the work remained suspended for almost one and half years due to severe militancy problem. Militants are said to have attacked the employees of the petitioner and contractor's labourers. At most of the places, work had to be carried out with police protection, which caused shortened working hours and slow progress.
- (ii) The main approach road, NH-1 which runs almost parallel to the transmission line, gets blocked during most parts of the year due to landslides.
- (iii) In the State of Jammu and Kashmir, land acquisition was to be done for tower foundation through local administration. There had been inordinate delay in processing of land acquisition cases by District authorities.
- (iv) Department of Horticulture had taken long time to forward assessment of compensation for fruit bearing trees coming in ROW line.

(v) The transmission line passes through mountains with inclement weather. The work was stopped on a number of days even in working summer season. Inhumane working conditions during the winter season also affected the completion of work.

20. In view of the above, it has been submitted that delay in completion of the project was beyond the control of the petitioner.

21. On the issue of time over-run, the UPPCL has stated that the original work was approved in October, 1997 and has been completed (partially) in 2007. It has been further contended that beneficiaries and ultimate consumers have to suffer because of mismatch of generation and transmission.

22. Considering the peculiarities of the case wherein scope had to be changed and also that commercial operation of the Asset-I had to be delayed to match with the commissioning of Dulhasti HE Project, there is satisfactory explanation from the petitioner for the entire delay in completion of the transmission assets. Therefore, the delay in commissioning of transmission line is considered to be beyond the control of the petitioner and is condoned.

TOTAL CAPITAL COST

23. Based on the above, gross block as given below has been considered for the purpose of tariff for both the transmission assets, after allowing additional capitalization on works as claimed by the petitioner:

Asset-I

	(Rs. in lakh)
Expenditure up to 1.4.2000	14301.24
Expenditure from 1.4.2001 to 31.3.2002	52.76
IEDC/IDC expenses from 1.4.200 to 31.3.2007	4057.53
Total capital expenditure as on 1.4.2007	18411.53

Asset-II

	(Rs. in lakh)
Expenditure on the date of commercial operation	27291.04
Expenditure from 1.11.2006 to 31.3.2007	840.13
Total capital expenditure as on 1.4.2007	28131.17

24. In respect of Asset-I, the capital expenditure also includes IDC of Rs. 3035.71 lakh and IEDC of Rs. 1021.82 lakh for the period from 1.4.2000 to 31.3.2007. This has been done in the line of order dated 22.8.2002 in Petition No. 64/2000, in which the petitioner *inter alia* was directed to maintain a separate accounts for the interest charges. It is noted that although the actual completion cost of Asset-I as on 1.4.2007 has exceeded its apportioned approved cost, the expenditure for the transmission system as a whole is within the approved capital cost.

DEBT- EQUITY RATIO

25. Clause (1) of Regulation 54 of the 2004 regulations *inter alia* provides that,-

“(1) In case of the existing projects, debt–equity ratio Considered by the Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 01.04.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 53, equity in the additional capitalisation to be considered shall be :-

- (a) 30% of the additional capital expenditure admitted by the Commission, or
- (b) equity approved by the competent authority in the financial package, for additional capitalisation, or
- (c) actual equity employed,

whichever is the least:

Provided further that in case of additional expenditure admitted under the second proviso, the Commission may considered equity of more than 30% if the transmission licensee is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.”

26. The Note 1 below Regulations 53 lays down that any expenditure on account of committed liabilities with the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.

27. The petitioner has considered debt-equity ratio of 60.92:39.08 and 81.62:18.38 for Asset-I and Asset-II respectively, as actually deployed on the date of commercial operation. In respect of Asset-I, the equity considered is above the normative limit of 30%. The total of the capital expenditure on the date of commercial operation for the entire project has been considered Rs. 50701 lakh and the notional equity portion @ 30%, works out to Rs. 15210.47 lakh. The petitioner has considered the amount of additional capitalization in the debt-equity ratio of 70:30 for Asset-II. For this asset, we have considered the debt-equity ratio on the date of commercial operation and for the additional capitalisation on works of Rs. 840.13 lakh as considered by the petitioner. Accordingly, for the purpose of tariff, debt-equity considered for two assets as under:

(Rs. in lakh)

	Capital cost as on date of commercial operation	Equity on the date of commercial operation	Additional capital expenditure during 2006-07	Capital cost as on 1.4.2007	Addition of equity	Average equity during 2006-07	Equity considered as on 1.4.2007
Asset- I	18411.53	7194.43	-	18411.53	-	-	7194.43
Asset-II	27291.04	5017.04	840.13	28131.17	252.04	5143.06	5269.08
Total	45702.57	12211.47	840.13	46542.7	252.04	5143.06	12463.51

RETURN ON EQUITY

28. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 54 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

29. Equity has been considered as on the date of commercial operation and onwards as given in the table in para 27 above. However, in respect of Asst-II, tariff

for the period from date of commercial operation to 31.3.2007 has been allowed on average equity. Accordingly, the petitioner shall be entitled to return on equity as under:

(Rs. in lakh)

Name of the assets	Equity as on the date of commercial operation	Addition due to additional capitalization	Average equity	Return on equity		
				2006-07 (Pro rata)	2007-08	2008-09
Asset- I	7194.43	-	-	-	1007.22	1007.22
Asset- II	5017.04	252.04	5143.06	300.01	737.67	737.67

INTEREST ON LOAN

30. Clause (i) of regulation 56 of the 2004 regulations *inter alia* provides that,-

“(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.

(c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries.

(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries.

(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the transmission licensee during pendency of any dispute relating to re-financing of loan;

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(g) The transmission licensee shall not make any profit on account of re-financing of loan and interest on loan;

(h) The transmission licensee may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice versa, at its own cost and gains or losses as a result of such swapping shall accrue to the transmission licensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest.”

31. The petitioner has claimed interest on loan in the following manner:
- (i) There are a few on going loans for both the assts;
 - (ii) Bond XXII has been utilised for additional capital expenditure purpose for Asset-II;
 - (iii) BOI FC loan has been deployed with other loans for Asset-I;
 - (iv) On the basis of actual rate of interest on actual average loan, the weighted average rate of interest on loan is worked out for various years.
 - (v) Gross loans at (i) above has been considered and the weighted average rate of interest on loan for respective years as per above has been has been multiplied to arrive at interest on loan, considering (depreciation + AAD) as repayment for Asset-II.
32. In our calculation, the interest on loan has been worked out as detailed below:
- (i) In case of Asset-I, the loans were tied up much before the revised date of commercial operation. Therefore, gross amount of loan, repayment of instalments and rate of interest submitted have been verified from the loan reconciliation statements of the earlier years. For Asset-II, gross amount of loan, repayment of instalments and rate of interest as per the loan reconciliation statement for the year 2006-07 submitted by the petitioner have been used to work out weighted average rate of interest on actual loan.
 - (ii) Notional loan arising out of additional capitalization from the date of commercial operation to 31.3.2007 in respect of Asset-II has been added in loan amount as on the date of commercial operation to arrive at

total notional loan. This adjusted gross loan has been considered as normative loan for tariff calculations

- (iii) Tariff has been worked out considering normative loan and normative repayments. Once the normative loan has been arrived at, it has been considered for all purposes in the tariff. Normative repayment has been worked out by the following formula :

Actual repayment of actual loan during the year

----- X Opening balance of normative
Opening balance of actual loan during the year loan during the year

- (iv) Moratorium in repayment of loan has been considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation during the year, it has been considered as moratorium and depreciation during the year has been deemed as normative repayment of loan during the year.
- (v) Weighted average rate of interest on actual loan worked out as per (i) above has been applied on the average loan during the year to arrive at the interest on loan.
- (vi) In respect of Asset-I, as the date of commercial operation is revised to 1.4.2007, and interest amount corresponding to the period 2000-07 has been capitalized in the gross block as on revised date of commercial operation, actual cumulative repayment up to 31.3.2007 has been considered.
- (vii) PNB-I, IOB, Corporation bank, OBC and Bank of India (foreign currency) loans carry floating rates of interest. The rates of interest submitted by the petitioner have been used to work out the interest on loan. This is

subject to mutual settlement between the parties in case of any change/resetting of interest rates during the tariff period.

33. Based on the above, the year-wise details of interest worked out are given hereunder:

(Rs. in lakh)

Details of loan	Asset-I		Asset-II		
	2007-08	2008-09	2006-07 (Pro rata)	2007-08	2008-09
Opening Gross Loan	11217.10	11217.10	22274.00	22862.09	22862.09
Cumulative Repayment	3492.79	5375.03	209.75	510.18	1268.80
Net Loan-Opening	7724.31	5842.07	22064.25	22351.91	21593.29
Additions due to Additional Capitalisation	0.00		588.09		
Repayment during the year	1882.25	1622.29	300.43	758.62	1091.60
Net Loan-Closing	5842.07	4219.77	22351.91	21593.29	20501.69
Average Loan	6783.19	5030.92	22208.08	21972.60	21047.49
Weighted Average Rate of Interest on Loan	8.86%	8.80%	7.35%	7.36%	7.37%
Interest	600.96	442.80	680.52	1618.05	1551.52

34. The detailed calculations in support of the weighted average rate of interest are contained in Annexure I and Annexure II attached.

DEPRECIATION

35. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:

- (i) The value base for the purpose of depreciation shall be the historical cost of the asset.
- (ii) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange

Rate Variation up to 31.3.2004 already allowed by the Central Government/Commission.

- (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.

36. Depreciation allowed has been worked out as calculated below:

(Rs. in lakh)

Details of Depreciation	Asset-I		Asset-II		
	2007-08	2008-09	2006-07 (Pro rata)	2007-08	2008-09
Gross block as on the date of commercial operation	18411.53	18411.53	27291.04	28131.17	28131.17
Additional Capitalisation during the period			840.13		
Gross Block at the end of the period	18411.53	18411.53	28131.17	28131.17	28131.17
Rate of Depreciation	2.5694%	2.5694%	2.6020%	2.6039%	2.6039%
Depreciable Value (90%)	16511.81	16511.81	24382.92	24760.98	24760.98
Balance Useful life of the asset	-	-	-	-	-
Remaining Depreciable Value	16511.81	15390.10	24382.92	24460.55	23701.93
Depreciation	473.06	473.06	300.43	732.51	732.51

ADVANCE AGAINST DEPRECIATION

37. As per sub-clause (b) of clause (ii) of Regulation 56 of the 2004 regulations, in addition to allowable depreciation, the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of 1/10th of loan amount as per regulation 54 minus depreciation as per schedule

38. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. It is further provided that Advance Against Depreciation in a year shall

be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

39. The petitioner has claimed advance Against depreciation in the following manner:

- (i) 1/10th of gross loan considered for tariff calculations
- (ii) Cumulative loan as well as repayment of notional loan considered during the year.
- (ii) Depreciation as claimed in the petition.

40. In our calculation Advance Against Depreciation has been worked as under:

- (i) 1/10th of gross loan has been worked out from the gross notional loan as per para 33 above.
- (ii) Repayment of notional loan during the year has been considered as per para 33 above.
- (iii) Depreciation as worked out as per para 36 above has been taken into account.

41. The details of Advance Against Depreciation for Asset-I and Asset-II allowed is given hereunder:

(Rs. in lakh)

Advance against Depreciation	Asset-I		Asset-II		
	2007-08	2008-09	2006-07 (Pro rata)	2007-08	2008-09
1/10th of Gross Loan(s)	1121.71	1121.71	2227.40	2286.21	2286.21
Repayment of the Loan	1882.25	1622.29	300.43	758.62	1091.60
Minimum of the above	1121.71	1121.71	300.43	758.62	1091.60
Depreciation during the year	473.06	473.06	300.43	732.51	732.51
(A) Difference	648.65	648.65	0.00	26.11	359.09
Cumulative Repayment of the Loan	5375.03	6997.33	510.18	1268.80	2360.40
Cumulative Depreciation/ Advance against Depreciation	473.06	1594.77	300.43	1032.94	1791.56
(B) Difference	4901.98	5402.56	209.75	235.86	568.84
Advance against Depreciation Minimum of (A) and (B)	648.65	648.65	0.00	26.11	359.09

OPERATION & MAINTENANCE EXPENSES

42. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following norms are prescribed for O & M expenses

	Year				
	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses (Rs in lakh per ckt-km)	0.227	0.236	0.246	0.255	0.266
O&M expenses (Rs in lakh per bay)	28.12	29.25	30.42	31.63	32.90

43. The petitioner has claimed O & M expenses for 119.770 Ckt-km and 1 bay for Asset-I and 365.13 Ckt-km and 5 bays for Asset - II, which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(Rs. in lakh)

	Asset-I		Asset-II		
	2007-08	2008-09	2006-07 (Pro rata)	2007-08	2008-09
O&M expenses for 119.770 Ckt. km	30.54	31.86	37.43	93.11	97.12
O&M expenses for 1 bay	31.63	32.90	63.38	158.15	164.50
TOTAL	62.17	64.76	100.80	251.26	261.62

44. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, according to the petitioner, O & M expenses should be subject to revision on account of revision of employee cost from that date. In the alternative, it has been prayed that the increase in employee cost due to wage revision be allowed as per actuals for extra cost to be incurred consequent to wage revision. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for a relief in this regard at an appropriate stage in accordance with law.

INTEREST ON WORKING CAPITAL

45. The components of the working capital and the interest thereon are discussed hereunder:

(i) Maintenance spares

Regulation 56(v) (1) (b) of the 2004 regulations provides for maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation. In the present case, element wise capital expenditure on the date of commercial operation which has been considered as the historical cost for the purpose of the present petition and maintenance spares have been worked out accordingly by escalating 1% of the historical cost @ 6% per annum. In this manner, the value of maintenance spares works out to Rs. 184.12 lakh and Rs. 272.91 lakh for Asset-I and Asset-II as on 1.4.2008 and 1.4.2007 respectively. The necessary details are given hereunder:

Transmission assets	Date of Commercial Operation	Capital Expenditure (Rs. in lakh) on the date of commercial operation	Escalated spares Cost as on 1.4.2007 (Rs. in lakh)
Asset- I	1.4.2007	18411.53	184.12
Asset-II	1.11.2006	27291.04	272.91

(ii) O & M expenses

Regulation 56(v)(1)(a) of the 2004 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of O&M expenses of the respective year as claimed in the petition. This has been considered in the working capital.

(iii) Receivables

As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months average billing calculated on target availability level.

The petitioner has claimed the receivables on the basis 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Regulation 56(v) (2) of the 2004 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2004 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 12.25% based on SBI PLR as on 1.4.2006 in respect of Asset-I and @ 10.50% in respect of Asset-II, which is in accordance with the 2004 regulations and has been allowed.

46. The necessary computations in support of interest on working capital are appended herein below:

(Rs. in lakh)

Interest on working capital	Asset- I		Asset-II		
	2007-08	2008-09	2006-07 (Pro rata)	2007-08	2008-09
Maintenance Spares	184.12	195.16	272.91	279.73	296.52
O & M expenses	5.18	5.40	20.16	20.94	21.80
Receivables	478.99	452.75	567.41	575.91	623.15
Total	668.28	653.31	860.48	876.58	941.47
Rate of Interest	12.25%	12.25%	10.25%	10.25%	10.25%
Interest	81.86	80.03	36.75	89.85	96.50

TRANSMISSION CHARGES

47. The transmission charges being allowed for the two transmission assets are summarised below:

(Rs. in lakh)

	Asset-I		Asset-II		
	2007-08	2008-09	2006-07 (Pro rata)	2007-08	2008-09
Depreciation	473.06	473.06	300.43	732.51	732.51
Interest on Loan	600.96	442.80	680.52	1618.05	1551.52
Return on Equity	1007.22	1007.22	300.01	737.67	737.67
Advance against Depreciation	648.65	648.65	0.00	26.11	359.09
Interest on Working Capital	81.86	80.03	36.75	89.85	96.50
O & M Expenses	62.17	64.76	100.80	251.26	261.62
Total	2873.93	2716.52	1418.51	3455.45	3738.91

48. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2004 regulations.

49. The petitioner has sought approval for the reimbursement of expenditure of Rs.1,88,919/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondents in one installment in the ratio applicable for sharing of transmission charges. The Commission by its separate general order dated 11.9.2008 in Petition No. 129/2005 (suo motu) has decided that the petitioner shall not be allowed reimbursement of the petition filing fee.

50. This order disposes of Petition No.138/2007.

sd/-
(R.KRISHNAMOORTHY)
MEMBER
New Delhi dated the 1st December 2008

sd/-
(BHANU BHUSHAN)
MEMBER

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

400 kV S/C Dulhasti-Kishenpur Transmission line with associated bays

(Rs. in lakh)

Details of Loan	2007-08	2008-09
Bond-III (13.50%)		
Gross Loan opening	134.21	134.21
Cumulative Repayment upto DOCO/previous year	134.21	134.21
Net Loan-Opening	0.00	0.00
Additions during the year	0.00	0.00
Repayment during the year	0.00	0.00
Net Loan-Closing	0.00	0.00
Average Loan	0.00	0.00
Rate of Interest		
Interest	0.00	0.00
Repayment Schedule	Bullet Repayment	
Bond-III (9.75%)		
Gross Loan opening	838.79	838.79
Cumulative Repayment upto DOCO/previous year	838.79	838.79
Net Loan-Opening	0.00	0.00
Additions during the year	0.00	0.00
Repayment during the year	0.00	0.00
Net Loan-Closing	0.00	0.00
Average Loan	0.00	0.00
Rate of Interest		
Interest	0.00	0.00
Repayment Schedule	Bullet Repayment	
Bond-VII		
Gross Loan opening	442.00	442.00
Cumulative Repayment upto DOCO/previous year	353.60	442.00
Net Loan-Opening	88.40	0.00
Additions during the year	0.00	0.00
Repayment during the year	88.40	0.00
Net Loan-Closing	0.00	0.00
Average Loan	44.20	0.00
Rate of Interest	13.64%	13.64%
Interest	6.03	0.00
Repayment Schedule	5 Annual instalments from 04.08.2003	
Bond-XIII Option-II (Replacement of SBI-II)		
Gross Loan opening	1768.00	1768.00
Cumulative Repayment upto DOCO/previous year	1178.67	1473.34
Net Loan-Opening	589.33	294.66
Additions during the year	0.00	0.00
Repayment during the year	294.67	294.67
Net Loan-Closing	294.66	0.00
Average Loan	442.00	147.33
Rate of Interest	7.85%	7.85%
Interest	34.70	11.57

Repayment Schedule	6 Annual instalments from 3.7.2003	
PNB-I		
Gross Loan opening	442.00	442.00
Cumulative Repayment upto DOCO/previous year	176.80	221.00
Net Loan-Opening	265.20	221.00
Additions during the year	0.00	0.00
Repayment during the year	44.20	44.20
Net Loan-Closing	221.00	176.80
Average Loan	243.10	198.90
Rate of Interest	10.16%	10.16%
Interest	24.70	20.21
Repayment Schedule	10 Annual instalments from 30-3-2004	
IOB-II		
Gross Loan opening	1500.00	1500.00
Cumulative Repayment upto DOCO/previous year	600.00	750.00
Net Loan-Opening	900.00	750.00
Additions during the year	0.00	0.00
Repayment during the year	150.00	150.00
Net Loan-Closing	750.00	600.00
Average Loan	825.00	675.00
Rate of Interest	9.90%	9.90%
Interest	81.68	66.83
Repayment Schedule	10 Annual instalments from 11-2-2004	
Corporation Bank		
Gross Loan opening	221.00	221.00
Cumulative Repayment upto DOCO/previous year	88.40	110.50
Net Loan-Opening	132.60	110.50
Additions during the year	0.00	0.00
Repayment during the year	22.10	22.10
Net Loan-Closing	110.50	88.40
Average Loan	121.55	99.45
Rate of Interest	11.15%	11.15%
Interest	13.55	11.09
Repayment Schedule	20 HY Instalments from 10.3.2004	
BOI (Foreign Currency)		
Gross Loan opening	773.53	773.53
Cumulative Repayment upto DOCO/previous year	122.32	163.03
Net Loan-Opening	651.21	610.50
Additions during the year	0.00	0.00
Repayment during the year	40.71	40.71
Net Loan-Closing	610.50	569.78
Average Loan	630.85	590.14
Rate of Interest	6.93%	6.93%
Interest	43.71	40.89
Repayment Schedule	19 equal Half yearly Instalments from 10.6.2004	
Total Loan		
Gross Loan opening	6119.53	6119.53
Cumulative Repayment upto DOCO/previous year	3492.79	4132.87

Net Loan-Opening	2626.74	1986.66
Additions during the year	0.00	0.00
Repayment during the year	640.08	551.68
Net Loan-Closing	1986.66	1434.98
Average Loan	2306.70	1710.82
Rate of Interest	8.86%	8.80%
Interest	204.36	150.58

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

400 kV Kishenpur-Wagoora transmission line along with associated bays at Kishenpur and Wagoora sub-station

(Rs. in lakh)

Details of Loan	2006-07	2007-08	2008-09
Bond-X			
Gross Loan opening	43.00	43.00	43.00
Cumulative Repayment upto DOCO/previous year	10.75	10.75	14.33
Net Loan-Opening	32.25	32.25	28.67
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	3.58	3.58
Net Loan-Closing	32.25	28.67	25.09
Average Loan	32.25	30.46	26.88
Rate of Interest	10.90%	10.90%	10.90%
Interest	3.52	3.32	2.93
Repayment Schedule	12 Annual instalments from 21.6.2004		
Bond-XI Option-I			
Gross Loan opening	46.00	46.00	46.00
Cumulative Repayment upto DOCO/previous year	3.83	7.67	11.50
Net Loan-Opening	42.17	38.33	34.50
Additions during the year	0.00	0.00	0.00
Repayment during the year	3.83	3.83	3.83
Net Loan-Closing	38.33	34.50	30.67
Average Loan	40.25	36.42	32.58
Rate of Interest	9.80%	9.80%	9.80%
Interest	3.94	3.57	3.19
Repayment Schedule	12 Annual instalments from 07.12.2005		
Bond-XII			
Gross Loan opening	3.00	3.00	3.00
Cumulative Repayment upto DOCO/previous year	0.25	0.50	0.75
Net Loan-Opening	2.75	2.50	2.25
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.25	0.25	0.25
Net Loan-Closing	2.50	2.25	2.00
Average Loan	2.63	2.38	2.13
Rate of Interest	9.70%	9.70%	9.70%
Interest	0.25	0.23	0.21
Repayment Schedule	12 Annual instalments from 28.3.2006		
Bond-XIII Option-I			
Gross Loan opening	2247.00	2247.00	2247.00
Cumulative Repayment upto DOCO/previous year	187.25	187.25	374.50
Net Loan-Opening	2059.75	2059.75	1872.50
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	187.25	187.25
Net Loan-Closing	2059.75	1872.50	1685.25
Average Loan	2059.75	1966.13	1778.88
Rate of Interest	8.63%	8.63%	8.63%
Interest	177.76	169.68	153.52
Repayment Schedule	12 Annual instalments from 31.7.2006		
PNB-II			
Gross Loan opening	25.00	25.00	25.00
Cumulative Repayment upto DOCO/previous year	4.17	6.25	8.33

Net Loan-Opening	20.83	18.75	16.67
Additions during the year	0.00	0.00	0.00
Repayment during the year	2.08	2.08	2.08
Net Loan-Closing	18.75	16.67	14.59
Average Loan	19.79	17.71	15.63
Rate of Interest	9.35%	9.35%	9.35%
Interest	1.85	1.66	1.46
Repayment Schedule	12 Annual instalments from 8-3-2005		
OBC			
Gross Loan opening	21.00	21.00	21.00
Cumulative Repayment upto DOCO/previous year	3.50	5.25	7.00
Net Loan-Opening	17.50	15.75	14.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	1.75	1.75	1.75
Net Loan-Closing	15.75	14.00	12.25
Average Loan	16.63	14.88	13.13
Rate of Interest	9.10%	9.10%	9.10%
Interest	1.51	1.35	1.19
Repayment Schedule	12 Annual instalments from 22-3-2005		
Bond-XV			
Gross Loan opening	6700.00	6700.00	6700.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	558.33
Net Loan-Opening	6700.00	6700.00	6141.67
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	558.33	558.33
Net Loan-Closing	6700.00	6141.67	5583.34
Average Loan	6700.00	6420.84	5862.51
Rate of Interest	6.68%	6.68%	6.68%
Interest	447.56	428.91	391.62
Repayment Schedule	12 Annual instalments from 23-2-2008		
Bond- XVI			
Gross Loan opening	3323.00	3323.00	3323.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	3323.00	3323.00	3323.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	332.30
Net Loan-Closing	3323.00	3323.00	2990.70
Average Loan	3323.00	3323.00	3156.85
Rate of Interest	7.10%	7.10%	7.10%
Interest	235.93	235.93	224.14
Repayment Schedule	10 Annual instalments from 18-2-2009		
Bond- XVII			
Gross Loan opening	7326.00	7326.00	7326.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	7326.00	7326.00	7326.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	7326.00	7326.00	7326.00
Average Loan	7326.00	7326.00	7326.00
Rate of Interest	7.39%	7.39%	7.39%
Interest	541.39	541.39	541.39
Repayment Schedule	10 Annual Instalments from 22.9.2009		
Bond- XVIII			
Gross Loan opening	2540.00	2540.00	2540.00

Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	2540.00	2540.00	2540.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	2540.00	2540.00	2540.00
Average Loan	2540.00	2540.00	2540.00
Rate of Interest	8.15%	8.15%	8.15%
Interest	207.01	207.01	207.01
Repayment Schedule	12 annual instalments from 9-3-2010		
Bond- XXII (for addcap)			
Gross Loan opening	0.00	250.00	250.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	250.00	250.00
Additions during the year	250.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	250.00	250.00	250.00
Average Loan	125.00	250.00	250.00
Rate of Interest	8.68%	8.68%	8.68%
Interest	10.85	21.70	21.70
Repayment Schedule	12 Annual Instalments from 24.7.2010		
Total Loan			
Gross Loan opening	22274.00	22524.00	22524.00
Cumulative Repayment upto DOCO/previous year	209.75	217.67	974.74
Net Loan-Opening	22064.25	22306.33	21549.26
Additions during the year	250.00	0.00	0.00
Repayment during the year	7.91	757.07	1089.37
Net Loan-Closing	22306.33	21549.26	20459.89
Average Loan	22185.29	21927.80	21004.57
Rate of Interest	7.35%	7.36%	7.37%
Interest	1631.58	1614.75	1548.35