# CENTRALEECTRICITY REGULATORY COMMISSION <br> NEW DEH 

Petition No. 263/2009

## Coram:

1. Dr. Pramod Deo, Chaiperson
2. Shi S.J a yaraman, Member
3. Shri V.S.Verma, Member

DATE OF HEARING: 19.1.2010
DATE OF ORDER: 11.3.2010

## In the matter of

Revision of transmission tariff due to additional capital expenditure for (i) Tehri-Meenut Ckt-I along with associated bay at Meerut end; (ii) Tehri-Meerut Ckt-II along with associated bay at Meerut end and 400 kV S/C Meerut Muzaffamagar Transmission line along with associated bays and (iii) ICTat Muzaffamagar along with one No. 400 kV and one No. 220 kV associated bay under Tehri transmission system in Northem Region during 2008-09.

## And in the matter of

Power Grid Corporation of India Limited, Gurgaon ..Petitioner Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, J a ip ur
2. Ajmer Vidyut Vita ran Nigam Ltd., J a ipur
3. J a ipur Vidyut Vita ran Nigam Ltd, J aipur
4. J odhpur Vid yut Vitaran Nigam Ltd, J a ipur
5. Himac hal Pradesh State Electric ity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula
8. Power Development Department, G ovt. of J \&K, J ammu
9. Uttar Pradesh Power Coporation Ltd, Lucknow
10.Delhi Transco Ltd, New Delhi
11.BSES Yamuna Power Limited, New Delhi
12.BSES Rajdhani Power Ltd., New Delhi
13.North Delhi Power Ltd., New Delhi
14.Chandigarh Administration, Chandigarh
15.Uttarakhand Power Corporation Ltd, Dehradun
10. North Central Railway, Allahabad
17.New Delhi Municipal Council, New Delhi

## The following were present

1. Shri Rakesh Prasad, PGCIL
2. Shri M.M.Mondal, PGCIL

## ORDER

This petition has been filed seeking revision of transmission charges for (i) Tehri-Meerut Ckt-I along with associated bay at Meerut end (Asset-I); (ii) Tehri-Meerut Ckt-ll along with associated bay at Meent end and 400 kV S/C Meerut-Muzaffamagar Transmission line along with associated bays (Asset-II) and (iii) ICT at Muzaffamagar along with one No. 400 kV and one No. 220 kV associated bay (AssetIII) under Tehri transmission system (the transmission system) in Northem Region during 2008-09, based on the Central Electricity Regulatory Commission (Tems and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "the 2004 regulations") after accounting for additional capital expenditure from the date of commercial operation to 2009. The petitioner has also prayed for reimbursement, from the benefic iaries of the expenditure inc urred towards petition filing fee and licence fee.
2. The investment a p proval for the transmission system including ICT at Meerut was accorded by the Central Govemment in Ministry of Power (the Ministry) vide letter dated 15.3.1994 at an estimated cost of Rs. 42100 lakh which included IDC of Rs. 5000 lakh. Subsequently, revised cost estimate for the transmission system was approved by the Ministry vide its letter dated 20.8.2002 at an estimated cost of Rs. 70229 lakh which included IDC of Rs. 13601 lakh. The cost estimate for the transmission system was further revised by the Ministry vide letter dated 9.1.2006 to Rs. 91384 la kh, which includes IDC of Rs. 26916 lakh.
3. Transmission tariff in respect of the above mentioned assets, as also ICT Meerut which formed part of the transmission system, was initially approved vide Commission's order dated 21.8.2008 in Petition No. 146/2007. Subsequently, consequent to additional capital expenditure during 2007-08 the transmission tariff was revised vide Commission's order dated 20.7.2009 in Petition No. 57/2009. Through this petition, the petitioner seeks revision of tariff consequent to additional capital expenditure during 2008-09.
4. The petitioner hasclaimed the following transmission charges:
(Rs. in lakh)

|  | Asset-I | Asset-II | Asset-III |
| :--- | ---: | :---: | ---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ |
| Depreciation | 908.30 | 1020.34 | 61.67 |
| Interest on Loan | 1254.74 | 1478.16 | 95.44 |
| Retum on Equity | 1437.06 | 1658.69 | 71.88 |
| Advance against Depreciation | 1165.46 | 1221.34 | 0.00 |
| Interest on Working Capital | 126.99 | 143.61 | 7.57 |
| O \& M Expenses | 115.14 | 190.49 | 65.80 |
| Total | $\mathbf{5 0 0 7 . 6 9}$ | $\mathbf{5 7 1 2 . 6 3}$ | $\mathbf{3 0 2 . 3 6}$ |

5. 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 | Asset-III |
| :--- | ---: | ---: | ---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ |
| Maintenance Spares | 394.70 | 433.10 | 18.01 |
| O \& M expenses | 9.60 | 15.87 | 5.48 |
| Receivables | 834.62 | 952.11 | 50.39 |
| Total | 1238.91 | 1401.08 | 73.88 |
| Rate of Interest | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ |
| Interest | $\mathbf{1 2 6 . 9 9}$ | $\mathbf{1 4 3 . 6 1}$ | $\mathbf{7 . 5 7}$ |

6. The date of commercial operation of the transmission assets, their apportioned approved cost and estimated completion cost, etc.
are as under.
(Rs in lakh)

| S. <br> No. | Name of <br> Asset | Date of <br> commercial <br> operation | Apportioned <br> approved <br> cost | Capital Cost as on <br> 31.3 .2008 admitted as <br> per order dated <br> 20.7 .2009 in Petition <br> No. $57 / 2009$ | Additional <br> Capital <br> Expenditure <br> during <br> $2008-09$ | Expenditure <br> as on <br> 31.3 .2009 |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |
| 1. | Asset-I | 1.4 .2006 | 37208.28 | 35261.14 | 45.49 | 35306.63 |
| 2. | Asset-II | 1.6 .2006 | 41473.41 | 39683.62 | 30.03 | 39713.65 |
| 3. | Asset-III | 1.2 .2007 | 1085.19 | $\mathbf{1 6 8 2 . 1 9}$ | 61.62 | 1743.81 |
| 4 | ICT-I at <br> Meenut <br> sub- <br> station | 1.8 .2005 | 3038.24 | 2391.27 |  | -- |
|  |  | $\mathbf{7 9 0 1 8 . 2 2}$ | $\mathbf{1 3 7 . 1 4}$ | $\mathbf{7 9 1 5 5 . 3 6}$ |  |  |

7. The reply to the petition has been filed by Uttar Pradesh Power Comoration Ltd. (UPPCL), J aipur Vidyut Vitran Nigam Ltd (JVVNL) and J odhpur Vidyut Vitran Nigam Ltd. (J dVVNL). The said respondents have raised the issue on $O \& M$ expenses, breakup of balance and retention charges, technical justification for these assets, etc. These concems have been taken care of in the order.

## CAPITALCOST

8. 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 detemined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the transmission system and shall include capita lised initial spares subject to
a ceiling nom of $1.5 \%$ of original project cost. The regulation is applicable in case of the transmission system declared under commercial operation on or a fter 1.4.2004.
9. The petitioner has claimed tariff in respect of three assets from the date of commercial operation up to 31.3 .2009 based on the capital cost as on the date of commercial operation after accounting for additional capital expenditure and as given in the table below para 6 above.

## ADDIIONALCAPITALEXPENDITURE 2008-09

10. Cla use (1) of Regulation 53 of the 2004 regulations provides-
"(1) The following capital expenditure within the original scope of work a ctually 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 forexecution;
(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 ordecree 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 applic ation for final ta riff after the date of commercial operation of the transmission system."
11. The details submitted by the petitioner in support of its claim for additional capital expenditure for the year 2007-08 for Asset-I, for the year 2008-09 Asset-II and Asset-III a re given hereunder.
(Rs. In Lakh)

|  | Year | Nature | Amount as <br> Auditor <br> certificate | Deta ils of expenditure |
| :--- | :---: | :--- | :---: | :--- |
| Asset-I | $2008-09$ | Transmission line | 42.01 | Balance and retention Payments |
|  |  | Sub-station | 3.58 | Balance and retention Payments |
| Asset-II | $2008-09$ | Transmission line | 22.87 | Retention Payments |
|  |  | Sub-station | 7.16 | Balance Payments |
| Asset-III | $2008-09$ | Sub-station | 61.62 | Ba lance and retention Payments |

12. The additional capital expenditure claimed is within the original scope of work and is found to be in order as it is against the committed liability. Accordingly, capitalization of the additional expenditure claimed by the petitioner has been allowed for all the three transmission assets.

## TOTALCAPITALCOST

13. Based on the above, capital cost as on date of commercial operation as per the table at para 4 above and the additional capital expenditure as per the table at para 11 above are considered for the purpose of tariff in this order. It is noticed that in respect of Asset-III as on 31.3.2009, capital expenditure works out Rs. 1743.81 lakh which exceeds the apportioned approved cost of Rs. 1085.19 lakh. However, the over all capital expenditure up to 31.3 .2009 in respect of the all the four assets of the project including ICT- I at Meerut sub-station works out Rs. 79155.36 lakh against the apportioned approved cost of Rs. 82805.12 lakh.

## DEBT- EQUITY RATIO

14. Clause (1) of Regulation 54 of the 2004 regulations inter alia providesthat,-
"(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, debtequity 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 capita lisation 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) a ctual equity employed,
whic hever is the least:
Provided further that in case of additional expenditure admitted under the second proviso, the Commission may consider 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."
15. Note 1 below Regulation 53 of the 2004 regulations lays down that any expenditure on account of committed liabilities within the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.
16. As on the date of commercial operation, debt-equity ratio of 70.91:29.09, 70.16:29.84 and 70.03:29.97 for Asset-I, Asset-II and Asset-III,
respectively, has been admitted. The petitioner has considered the amount of additional capitalization in the debt-equity ratio of 70:30 for the three assets. The additional capital expenditure in the ratio of 70:30 has been considered in accordance with the 2004 regulations. Accordingly, for the purpose of tariff, equity considered for the three transmission assets is as under:
(Rs. in lakh)
$\left.\begin{array}{|c|r|r|r|r|r|r|}\hline \text { Description } & \begin{array}{c}\text { Equity a s on } \\ \text { the date of } \\ \text { commercial } \\ \text { operation }\end{array} & \begin{array}{c}\text { Notional equity } \\ \text { due to } \\ \text { additional } \\ \text { capital } \\ \text { expenditure for } \\ \text { the period } \\ 2006-07\end{array} & \begin{array}{c}\text { Notional equity } \\ \text { due to } \\ \text { additional } \\ \text { capital } \\ \text { expenditure for } \\ \text { the period } \\ 2007-08\end{array} & \begin{array}{c}\text { Notional equity } \\ \text { due to } \\ \text { additional } \\ \text { capital } \\ \text { expenditure for } \\ \text { the period } \\ 2008-09\end{array} & \begin{array}{c}\text { Average } \\ \text { equity } \\ \text { considered } \\ \text { fortariff } \\ \text { calculations } \\ \text { forthe } \\ \text { period } 2008- \\ 09\end{array} & \begin{array}{c}\text { Total equity } \\ \text { considered } \\ \text { for the }\end{array} \\ \text { period 2008- } \\ 09\end{array}\right]$

## REIURN ON EQUITY

17. As per clause (iii) of Regulation 56 of the 2004 regulations, retum 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 retum 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.
18. Equity has been considered as on the date of commercial operation as given in the table in para 16 above. However, tariff for the period from date of commercial operation to 31.3 .2009 has been allowed on average equity. Accordingly, the petitioner shall be
entitled to retum on equity as under:
(Rs. in lakh)

|  | Asset-I | Asset-II | Asset-III |
| :--- | :---: | :---: | :---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ |
| Retum on equity | 1437.06 | 1658.69 | 71.88 |

## INIERESTON LOAN

19. 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 a mived at in the manner indic ated 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 nomative basis.
(c) The transmission licensee shall make every effort to refinance the loan as long as it results in net benefit to the benefic ia ries. The costs associated with such re-fina ncing shall be bome 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."
20. In our calculation, the interest on loan has been worked out as detailed below:
(a) Gross amount of loan, repayment of instalments, rate of interest and weighted average rate of interest on actual loan have been considered as per the petition.
(b) Notional loan arising out of additional capitalisation for 2008-09 has been added in loan amount as on the date of commercial operation to arive at total Notional loan. This adjusted Gross loan has been considered as nomative loan for tariff calculations
(c) Tariff has been worked out considering normative loan and nomative repayment. Nomative repayments have been worked out by the following formula:

Actual repayment of actual loan during the year
----------------------------------------------------1 X Opening balance of nomative
Opening balance of actual loan during the year loan during the year
(d) Moratorium in repayment of loan has been considered with reference to nomative loan and if the nomative repayment of loan during the year is less than the depreciation including Advance Against Depreciation during the year, then
depreciation including Advance Against Depreciation during the year is deemed as nomative repayment of loan during the year.
(e) Weighted average rate of interest on actual loan worked out asper (a) above has been applied on the notional average loan during the yearto a mive at the interest on loan.
21. Based on the above, the year-wise details of interest worked out are given hereunder:
(Rs. in lakh)

|  | Asset-I | Asset-II | Asset-III |
| :--- | ---: | ---: | ---: |
|  | 2008-09 | $2008-09$ | $2008-09$ |
| Opening Gross Loan | 25003.23 | 27840.36 | 1178.00 |
| Cumulative Repa yment up to <br> Previous Year | 9846.20 | 11054.04 | 98.81 |
| Net Loan-Opening | 15157.04 | 16786.32 | 1079.19 |
| Additions including additions due to <br> Additional Capitalisation | 31.91 | 21.02 | 43.13 |
| Repayment during the year | 2073.76 | 2241.69 | 61.67 |
| Net Loan-C losing | 13115.19 | 14565.65 | 1060.66 |
| Average Loan | 14136.11 | 15675.99 | 1069.92 |
| Weighted Average Rate of Interest <br> on Loan | $8.88 \%$ | $9.43 \%$ | $8.92 \%$ |
| Interest | $\mathbf{1 2 5 4 . 7 4}$ | $\mathbf{1 4 7 8 . 1 6}$ | $\mathbf{9 5 . 4 4}$ |

22. The detailed calculations in support of the weighted average rate of interest in respect of three assets are contained in Annexure-I, Annexure-II and Annexure-III, respectively attached to this order.

## DEPRECIATION

23. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, na mely:
"(i) The value base for the purpose of depreciation shall be the historic al 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 $10 \%$ a nd 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 Govemment/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."
24. Based on the above, depreciation allowed has been worked out as below:
(Rs. in la kh)

|  | Asset - I | Asset-II | Asset-III |
| :---: | :---: | :---: | :---: |
|  | 2008-09 | 2008-09 | 2008-09 |
| Gross block as on the date of commercial operation | 35261.14 | 39683.62 | 1682.19 |
| Addition due to Additional C a pita lisation during 2008-09 | 45.59 | 30.03 | 61.62 |
| Gross Block at the end of the year | 35306.73 | 39713.65 | 1743.81 |
| Rate of Depreciation | 2.5742\% | 2.5702\% | 3.6000\% |
| Depreciable Value | 31443.90 | 35105.49 | 1541.70 |
| Balance Useful life of the asset | - | - | - |
| Remaining Depreciable Value | 27035.16 | 30322.70 | 1468.39 |
| Depreciation | 908.30 | 1020.34 | 61.67 |

## ADVANCE AGAINSTDEPRECIATION

25. 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 mannergiven hereunder:
$A A D=$ Loan repayment a mount as per regulation 56 (i) subject to a ceiling of $1 / 10$ th of loan a mount as per regulation 54 minus depreciation as per sc hedule
26. 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.
27. Accordingly, in our calculation the Advance Against Depreciation has been worked as detailed below:
(a) 1/10th of gross loan has been worked out from the Gross Notional Loan asperpara 21 above.
(b) Repayment of notional loan during the year has been considered as perpara 21 above.
(c) Depreciation hasbeen worked out asperpara 24 above.
(d) In the calculation of Advance Against Depreciation, cumulative depreciation/Advance Against Depreciation up to the preceding year along with the depreciation of the current year have been considered.
28. The details of Advance Against Depreciation are as under:
(Rs. in lakh)

|  | Asset- I | Asset-II | Asset-III |
| :--- | ---: | ---: | ---: |
|  | 2008-09 | $2008-09$ | $2008-09$ |
| 1/10th of Gross Loan(s) | 2500.32 | 2784.04 | 117.80 |
| Repayment of the Loan | 2073.76 | 2241.69 | 61.67 |
| Minimum of the above | 2073.76 | 2241.69 | 61.67 |
| Deprec iation during the year | 1165.30 | 1020.34 | 61.67 |
| (A) Difference | 1221.34 | 0.00 |  |
| Cumulative Repayment of the Loan | 11919.96 | 13295.73 | 160.48 |
| Cumula tive Depreciation/ <br> Advance against Depreciation | 5317.03 | 5803.13 | 134.98 |
| (B) Difference | 6602.93 | 7492.60 | 25.50 |
| Advance against Depreciation <br> Minimum of (A) and (B) | $\mathbf{1 1 6 5 . 4 6}$ | $\mathbf{1 2 2 1 . 3 4}$ | $\mathbf{0 . 0 0}$ |

## OPERATION \& MAINIENANCE EXPENSES

29. In accordance with clause (iv) of Regulation 56 the 2004
regulations, the following noms are presc ribed 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 |

30. As the line length and number of bays remain unchanged, $O \& M$ expenses as allowed vide Commission's order dated 21.8.2009 in Petition No. 146/2008 have been considered for the purpose of computation of tariff in this petition.
31. 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 altemative, it has been prayed that the increase in employee cost due to wage revision be
allowed as per actual based on the auditor's certificate for such extra employee cost. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for relief in this regard at an appropriate stage in accordance with law.

## INIERESTON WORKING CAPITAL

32. 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 where applicable:

## (ii) 0 \& 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 calc ulated on target availability level. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 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 nomative 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, whic hever is later. The interest on working capital is payable on nomative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 10.25 \% based on SBI PLR as on 1.4.2007 for Asset-I and @12.25\% based on SBI PLR as on 1.4.2008 for Asset-II and Asset-III, which is in accordance with the 2004 regulations and has been allowed.
33. The necessary computations in support of interest on working capital are appended herein below:

|  |  |  | (Rs. in lakh) |  |
| :--- | ---: | ---: | ---: | :---: |
|  | Asset-I | Asset-II | Asset-III |  |
|  | $2008-09$ | $2008-09$ | $2008-09$ |  |
| Maintenance Spares | 394.70 | 433.10 | 18.01 |  |
| O \& M expenses | 9.60 | 15.87 | 5.48 |  |
| Receivables | 834.62 | 952.11 | 50.39 |  |
| Total | 1238.91 | 1401.08 | 73.89 |  |
| Rate of Interest | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ |  |
| Interest | $\mathbf{1 2 6 . 9 9}$ | $\mathbf{1 4 3 . 6 1}$ | $\mathbf{7 . 5 7}$ |  |

## IRANSMISSION CHARGES

34. The transmission charges being allowed for the three transmission a ssets are summarised below:
(Rs. in lakh)

|  | Asset- I | Asset-II | Asset-IIII |
| :--- | ---: | ---: | ---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ |
| Depreciation | 908.30 | 1020.34 | 61.67 |
| Interest on Loan | 1254.74 | 1478.16 | 95.44 |
| Retum on Equity | 1165.46 | 1658.69 | 71.88 |
| Advance against Deprec iation | 1221.34 | 0.00 |  |
| Interest on Working Capital | 126.99 | 143.61 | 7.57 |
| O \& M Expenses | 115.14 | 190.49 | 65.80 |
| Total | $\mathbf{5 0 0 7 . 6 9}$ | $\mathbf{5 7 1 2 . 6 4}$ | $\mathbf{3 0 2 . 3 7}$ |

35. 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.
36. The reimbursement of filing fee is not being allowed in terms of the Commission's order dated 11.9.2008 in Petition No. 129/2005. Decision in regard in licence fee will be communic ated separately.
37. Transmission charges shall be shared by all the Northem Regional beneficiaries as per the provisions of the 2004 regulations.
38. This order disp oses of Petition No. 263/2009.

Sd/-
(V.S.VERMA) MEMBER
sd/-
(S.J AYARAMAN) MEMBER
sd/(DR.PRAMOD DEO) CHAIRPERSON

## Asset-I

(Rs. in lakh)

|  | Details of Loan | 2008-09 |
| :---: | :---: | :---: |
| 1 | Bond VI |  |
|  | Gross Loan opening | 147.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 88.20 |
|  | Net Loan-Opening | 58.80 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 14.70 |
|  | Net Loan-C losing | 44.10 |
|  | Average Loan | 51.45 |
|  | Rate of Interest | 13.13\% |
|  | Interest | 6.76 |
|  | Repayment Schedule | 10 Annual installments from 6.12.2002 |
| 2 | Bond VII |  |
|  | Gross Loan opening | 642.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 642.00 |
|  | Net Loan-Opening | 0.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 0.00 |
|  | Average Loan | 0.00 |
|  | Rate of Interest | 13.64\% |
|  | Interest | 0.00 |
|  | Repayment Schedule | 5 Annual insta llments from 4.8.2003 |
| 3 | Bond VIII |  |
|  | Gross Loan opening | 167.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 50.10 |
|  | Net Loan-Opening | 116.90 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 16.70 |
|  | Net Loan-Closing | 100.20 |
|  | Average Loan | 108.55 |
|  | Rate of Interest | 10.35\% |
|  | Interest | 11.23 |
|  | Repayment Schedule | 10 Annual installments from 27.4.2005 |
| 4 | Bond IX |  |
|  | Gross Loan opening | 500.00 |


|  | Cumulative Repayment up to the date of commercial operation/previous year | 250.00 |
| :---: | :---: | :---: |
|  | Net Loan-Opening | 250.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 50.00 |
|  | Net Loan-Closing | 200.00 |
|  | Average Loan | 225.00 |
|  | Rate of Interest | 12.25\% |
|  | Interest | 27.56 |
|  | Repayment Schedule | 10 Annual installments from 22.8.2003 |
| 5 | Bond X |  |
|  | Gross Loan opening | 3863.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 1287.67 |
|  | Net Loan-Opening | 2575.33 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 321.92 |
|  | Net Loan-Closing | 2253.41 |
|  | Average Loan | 2414.37 |
|  | Rate of Interest | 10.90\% |
|  | Interest | 263.17 |
|  | Repayment Schedule | 12 Annual installments from 21.6.2004 |
| 6 | Bond XI option - I |  |
|  | Gross Loan opening | 4295.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 1073.76 |
|  | Net Loan-Opening | 3221.24 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 357.92 |
|  | Net Loan-Closing | 2863.32 |
|  | Average Loan | 3042.28 |
|  | Rate of Interest | 9.80\% |
|  | Interest | 298.14 |
|  | Repayment Schedule | 12 Annual installments from 7.12.2005 |
| 7 | Bond XI option - II |  |
|  | Gross Loan opening | 752.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 626.66 |
|  | Net Loan-Opening | 125.34 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 125.34 |
|  | Net Loan-Closing | 0.00 |
|  | Average Loan | 62.67 |
|  | Rate of Interest | 9.20\% |
|  | Interest | 5.77 |
|  | Repayment Schedule | 6 Annual Insta llments |

$\left.\begin{array}{|l|l|r|}\hline & & \text { from 7.12.2003 } \\ \hline \mathbf{8} & \text { Bond XII } & \\ \hline & \text { Gross Loan opening } & 97.00 \\ \hline & \text { Cumulative Repayment up to the date of commercial } \\ \text { operation/previousyear }\end{array}\right)$

|  | Repayment Schedule | 12 Annual <br> installments from <br> 22.3.2005 |
| :--- | :--- | ---: |
| $\mathbf{1 2}$ | ICICI |  |
|  | Gross Loan opening | 2016.00 |
|  | Cumula tive Repayment up to the date of c ommercial |  |
| operation/previous year |  |  |$\quad 1008.00$


|  | Average Loan | 561.87 |
| :---: | :---: | :---: |
|  | Rate of Interest | 8.60\% |
|  | Interest | 48.32 |
|  | Repayment Schedule | 12 Annual installments from 8.3.2005 |
| 16 | PFC |  |
|  | Gross Loan opening | 4304.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 2367.20 |
|  | Net Loan-Opening | 1936.80 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 430.40 |
|  | Net Loan-Closing | 1506.40 |
|  | Average Loan | 1721.60 |
|  | Rate of Interest | 9.25\% |
|  | Interest | 159.25 |
|  | Repayment Schedule | 40 equal quarterly installments from 15.10.2002 |
| 17 | BOI (foreign currency)(USD Rs. 85 lakhs @Rs. 44.95/ USD) |  |
|  | Gross Loan opening | 3820.75 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 804.34 |
|  | Net Loan-Opening | 3016.41 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 201.09 |
|  | Net Loan-Closing | 2815.32 |
|  | Average Loan | 2915.86 |
|  | Rate of Interest | 6.74\% |
|  | Interest | 196.53 |
|  | Repayment Schedule | 38 equal half yearly installiments from 10.6.2004 |
| 18 | Bond XXVII (Add cap 2007-08) |  |
|  | Gross Loan opening | 92.49 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 |
|  | Net Loan-Opening | 92.49 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 92.49 |
|  | Average Loan | 92.49 |
|  | Rate of Interest | 9.47\% |
|  | Interest | 8.76 |
|  | Repayment Schedule | 12 Annual Installments from 31.3.2012 |
|  | Gross Loan opening | 25002.24 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 9842.46 |
|  | Net Loan-Opening | 15159.77 |


|  | Additions during the year | 0.00 |
| :--- | :--- | ---: |
|  | Repayment during the year | 2074.13 |
|  | Net Loan-C losing | 13085.64 |
|  | Average Loan | 14122.71 |
|  | Rate of Interest | $8.88 \%$ |
|  | Interest | 1253.55 |

## Asset-II

|  | (Rs. in lakh) |  |
| :---: | :---: | :---: |
|  | Details of Loan | 2008-09 |
| 1 | Bond VI |  |
|  | Gross Loan opening | 149.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 89.40 |
|  | Net Loan-Opening | 59.60 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 14.90 |
|  | Net Loan-Closing | 44.70 |
|  | Average Loan | 52.15 |
|  | Rate of Interest | 13.13\% |
|  | Interest | 6.85 |
|  | Repayment Schedule | 10 Annual installments from 06.12.2002 |
| 2 | Bond VII |  |
|  | Gross Loan opening | 1212.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 1212.00 |
|  | Net Loan-Opening | 0.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 0.00 |
|  | Average Loan | 0.00 |
|  | Rate of Interest | 13.64\% |
|  | Interest | 0.00 |
|  | Repayment Sc hedule | 05 Annual installments from 4.8.2003 |
| 3 | Bond VIII |  |
|  | Gross Loan opening | 168.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 50.40 |
|  | Net Loan-Opening | 117.60 |
|  | Additionsduring the year | 0.00 |
|  | Repayment during the year | 16.80 |
|  | Net Loan-Closing | 100.80 |
|  | Average Loan | 109.20 |
|  | Rate of Interest | 10.35\% |
|  | Interest | 11.30 |
|  | Repayment Sc hedule | 10 Annual installments from 27.4.2005 |
| 4 | Bond IX |  |
|  | Gross Loan opening | 2146.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 1073.00 |


|  | Net Loan-Opening | 1073.00 |
| :---: | :---: | :---: |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 214.60 |
|  | Net Loan-Closing | 858.40 |
|  | Average Loan | 965.70 |
|  | Rate of Interest | 12.25\% |
|  | Interest | 118.30 |
|  | Repayment Sc hedule | 10 Annual installments from 22.8.2003 |
| 5 | Bond X |  |
|  | Gross Loan opening | 3903.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 1301.00 |
|  | Net Loan-Opening | 2602.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 325.25 |
|  | Net Loan-Closing | 2276.75 |
|  | Average Loan | 2439.38 |
|  | Rate of Interest | 10.90\% |
|  | Interest | 265.89 |
|  | Repayment Schedule | 12 Annual installments from 21.06.2004 |
| 6 | Bond XI option - I |  |
|  | Gross Loan opening | 4340.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 1085.01 |
|  | Net Loan-Opening | 3254.99 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 361.67 |
|  | Net Loan-Closing | 2893.32 |
|  | Average Loan | 3074.16 |
|  | Rate of Interest | 9.80\% |
|  | Interest | 301.27 |
|  | Repayment Schedule | 12 Annual installments from 7.12.2005 |
| 7 | Bond XI option - II |  |
|  | Gross Loan opening | 759.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 632.50 |
|  | Net Loan-Opening | 126.50 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 126.50 |
|  | Net Loan-Closing | 0.00 |
|  | Average Loan | 63.25 |
|  | Rate of Interest | 9.20\% |
|  | Interest | 5.82 |
|  | Repayment Sc hedule | 6 Annual Insta llments from 7.12.2003 |
| 8 | Bond XII |  |
|  | Gross Loan opening | 98.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 24.51 |


|  | Net Loan-Opening | 73.49 |
| :---: | :---: | :---: |
|  | Additionsduring the year | 0.00 |
|  | Repayment during the year | 8.17 |
|  | Net Loan-Closing | 65.32 |
|  | Average Loan | 69.41 |
|  | Rate of Interest | 9.70\% |
|  | Interest | 6.73 |
|  | Repayment Sc hedule | 12 Annual Installments from 28.3.2006 |
| 9 | Bond XIII option - II |  |
|  | Gross Loan opening | 717.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 597.50 |
|  | Net Loan-Opening | 119.50 |
|  | Additionsduring the year | 0.00 |
|  | Repayment during the year | 119.50 |
|  | Net Loan-Closing | 0.00 |
|  | Average Loan | 59.75 |
|  | Rate of Interest | 7.85\% |
|  | Interest | 4.69 |
|  | Repayment Sc hedule | 6 Annual Insta llments from 31.7.2003 |
| 10 | Bond XV |  |
|  | Gross Loan opening | 254.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 21.17 |
|  | Net Loan-Opening | 232.83 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 21.17 |
|  | Net Loan-Closing | 211.66 |
|  | Average Loan | 222.25 |
|  | Rate of Interest | 6.68\% |
|  | Interest | 14.85 |
|  | Repayment Sc hedule | 12 Annual Installments from 23.2.2008 |
| 11 | Bond XVII |  |
|  | Gross Loan opening | 1226.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 |
|  | Net Loan-Opening | 1226.00 |
|  | Additionsduring the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 1226.00 |
|  | Average Loan | 1226.00 |
|  | Rate of Interest | 7.39\% |
|  | Interest | 90.60 |
|  | Repayment Sc hedule | 10 Annual Insta llments from 22.9.2009 |
| 12 | Bridge loan of Canara Bank @ 7.5\% from 01.06.2006 to 23.07.2006/Bond XIX from 24.07.2006 |  |
|  | Gross Loan opening | 1768.00 |


|  | Cumulative Repayment up to the date of commercial <br> operation/previous year | 0.00 |
| :--- | :--- | ---: |
|  | Net Loan-Opening | 1768.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 1768.00 |
|  | Average Loan | 1768.00 |
|  | Rate of Interest | $9.25 \%$ |
|  | Interest | 163.54 |
|  | Repayment Schedule | 10 Annual Installments <br> from 24.7.2010 |
| $\mathbf{1 3}$ | OBC | 1017.00 |
|  | Gross Loan opening | 339.00 |
|  | Cumulative Repayment up to the date of commercial |  |
| operation/previousyear |  |  |


|  | Gross Loan opening | 932.00 |
| :---: | :---: | :---: |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 466.00 |
|  | Net Loan-Opening | 466.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 93.20 |
|  | Net Loan-Closing | 372.80 |
|  | Average Loan | 419.40 |
|  | Rate of Interest | 9.16\% |
|  | Interest | 38.42 |
|  | Repayment Sc hedule | 10 Annual installments from 30.3.2004 |
| 17 | PNB - II |  |
|  | Gross Loan opening | 909.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 303.00 |
|  | Net Loan-Opening | 606.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 75.75 |
|  | Net Loan-Closing | 530.25 |
|  | Average Loan | 568.13 |
|  | Rate of Interest | 9.10\% |
|  | Interest | 51.70 |
|  | Repayment Schedule | 12 Annual installments from 8.3.2005 |
| 18 | PFC |  |
|  | Gross Loan opening | 4349.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 2391.96 |
|  | Net Loan-Opening | 1957.04 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 434.90 |
|  | Net Loan-Closing | 1522.14 |
|  | Average Loan | 1739.59 |
|  | Rate of Interest | 9.25\% |
|  | Interest | 160.91 |
|  | Repa yment Sc hedule | 40 equal quarterly installments from 15.10.2002 |
| 19 | BOI (foreign currency)(USD Rs. 18.17 lakhs @Rs. 46.81/USD) |  |
|  | Gross Loan opening | 850.54 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 179.07 |
|  | Net Loan-Opening | 671.47 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 44.77 |
|  | Net Loan-Closing | 626.70 |
|  | Average Loan | 649.09 |
|  | Rate of Interest | 6.99\% |
|  | Interest | 45.37 |
|  | Repayment Sc hedule | 38 equal half yearly installments from |


|  |  | 10.6 .2004 |
| :--- | :--- | ---: |
| $\mathbf{2 0}$ | Bond XXVII (Add cap 2007-08) |  |
|  | Gross Loan opening | 109.14 |
|  | Cumula tive Repayment up to the date of c ommercial <br> operation/previous year | 0.00 |
|  | Net Loan-Opening | 109.14 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 109.14 |
|  | Average Loan | 109.14 |
|  | Rate of Interest | $9.47 \%$ |
|  | Interest | 10.34 |
|  | Repayment Schedule | 12 Annual Installments |
|  |  | from <br>  <br>  <br> Gross Loan opening |
|  | Cumulative Repayment up to the date of commercial | 109993.72 |
| operation/previousyear | 16415.96 |  |
|  | Net Loan-Opening | 0.00 |
|  | Additionsduring the year | 2192.23 |
|  | Repayment during the year | 14223.73 |
|  | Net Loan-Closing | 15319.85 |
|  | Average Loan | $9.429 \%$ |
|  | Rate of Interest | 1444.58 |
|  | Interest |  |

## Asset-III

(Rs. in lakh)

|  | Details of Loan | 2008-09 |
| :---: | :---: | :---: |
| 1 | Bond XV |  |
|  | Gross Loan opening | 46.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 3.83 |
|  | Net Loan-Opening | 42.17 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 3.83 |
|  | Net Loan-Closing | 38.34 |
|  | Average Loan | 40.26 |
|  | Rate of Interest | 6.68\% |
|  | Interest | 2.69 |
|  | Repayment Schedule | 12 Annual Installments from 23.2.2008 |
| 2 | Bond XVII |  |
|  | Gross Loan opening | 147.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 |
|  | Net Loan-Opening | 147.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 147.00 |
|  | Average Loan | 147.00 |
|  | Rate of Interest | 7.39\% |
|  | Interest | 10.86 |
|  | Repayment Schedule | 10 Annual Installments from 22.9.2009 |
| 3 | Bond XIX |  |
|  | Gross Loan opening | 832.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 |
|  | Net Loan-Opening | 832.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 0.00 |
|  | Net Loan-Closing | 832.00 |
|  | Average Loan | 832.00 |
|  | Rate of Interest | 9.25\% |
|  | Interest | 76.96 |
|  | Repayment Schedule | 10 Annual Installments from 24.7.2010 |
| 4 | OBC |  |
|  | Gross Loan opening | 153.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 51.00 |
|  | Net Loan-Opening | 102.00 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 12.75 |


|  | Net Loan-Closing | 89.25 |
| :--- | :--- | ---: |
|  | Average Loan | 95.63 |
|  | Rate of Interest | $9.35 \%$ |
|  | Interest | 8.94 |
|  | Repayment Schedule | 12 Annual insta llments <br> from 22.3.2005 |
|  | Gross Loan opening | 1178.00 |
|  | Cumulative Repayment up to the date of <br> commercial operation/previous year | 54.83 |
|  | Net Loan-Opening | 1123.17 |
|  | Additions during the year | 0.00 |
|  | Repayment during the year | 16.58 |
|  | Net Loan-Closing | 1106.59 |
|  | Average Loan | 1114.88 |
|  | Rate of Interest | $8.921 \%$ |
|  | Interest | 99.45 |

