# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI 

Petition No. 276/2010

# Coram: 1. Dr. Pramod Deo, Chaiperson 

2. Shri S.J ayaraman, Member
3. Shr V.S.Vemma, Member
4. Shri M.Deena Dayalan, Member

DATE OF HEARING: 25.1.2011
DATE OF ORDER: 16.5.2011

## In the matter of

Determination of transmission tariff for combined elements for (a) 315 MVA, $400 / 220 \mathrm{kV}$, ICT at Siliguri, (b) 400 kV D/C BiharsharifMuzaffarpur line, Biharsharif 400 kV extension and Muzaffarpur 400 kV extension; (c) 315 MVA, $400 / 220 \mathrm{kV}$, ICT-I at Subhashgram sub-station (New); and (d) LILO of One Circuit of 400 kV D/C Farakka-J eerat line at Shubhashgram and establishment of 400/200 kV Sub-Station at Subhashgram including 1x 315 MVA, ICT-II under System Strengthening Scheme for Eastem Region (ERSS) (formerly part of TALA Supplementary Scheme) in Eastem Region for tariff period 2009-14.

## And in the matter of

Power Grid Corporation of India Ltd., Gurgaon .... Petitioner Vs
1 Bihar State Electricity Board, Patna
2 West Bengal State Elec tric ity Distribution Company Limited, Calcutta
3 Grid Corporation of Orissa Ltd., Bhubaneswar
4 DamodarValley Corporation, Calcutta
5 Power Depa rtment, Govt. of Sikkim, Gangtok
6 Jharkhand State Electricity Board, Ranchi

## The following were present

1 Shri Rajeev Gupta, PGCIL
2 ShriM.M. Mondal, PGCIL
3 Shri Rakesh Prasad, PGCIL

## ORDER

The petition has been filed for determination of transmission ta riff
in respect of (a) 315 MVA, 400/220 kV, ICT at Siliguni; (b) 400 kV D/C

Biharsha rif-Muzaffa ppur line, Biha rsha rif 400 kV extension and Muzaffarpur 400 kV extension; (c) 315 MVA, 400/220 kV, ICT-I at Subhashgram substation (New); and (d) LLO of one circuit of 400 kV D/C Farakka-Jeerat line at Shubhashgram and establishment of 400/200 kV Sub-Station at Subhashgram including $1 \times 315$ MVA, ICT-II (hereinafter collectively referred to as 'the transmission assets) uunder System Strengthening Scheme for Eastem Region (ERSS) (Formenly part of TALA Supplementary Scheme) (hereinafter referred to as 'the transmission scheme') in Eastem Region for the period from 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations") after accounting for additional capital expenditure proposed to be incurred during 2009-10 and 2010-11. The petitioner has made the following additional prayers to:-
(i) Allow the additional capitalization incurred/ to be incurred on account of Undischarged liabilities after the cut off date under clause 9(2)(v) CERC (Terms and Conditions of Tariff) Regulations, 2009 or altematively, invoke the provision of Clause- 44 (Power to Relax) of 2009 regulations, so that additional capitalization incurred on account of undischarged lia bilities after the cut off date is considered for tariff fixation for the period 2009-14 block;
(ii) Allow grossing up of base rate of retum with the applicable tax rate as per the Finance Act for the relevant year and direct settlement of tax liability between the Transmission Licensee and the beneficiaries/ long-tem transmission customers on yearto yearbasis.;
(iii) In case of the assets being combined to calculate the transmission charges, allow the petitioner to recover full depreciation ( $90 \%$ of the gross block) of the assets during its useful life ( 25 years for sub-station and 35 years for transmission lines) reckoning from its actual date of commercial operation. Hon'ble Commission may also be pleased to permit the petitioner to treat the recovery of depreciation after achieving the useful life by an asset (to be reckoned from the actual date of commercial operation) in accordance with para 14 of the petition;
(iv) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in tems of Regulation 42 of the 2009 regulations, and other expenditure (if any) in relation to the filing of petition;
(v) Allow the petitioner to bill and recover Service Tax on transmission charges separately from the respondents, if at any
time exemption from senvice tax is withdrawn and transmission is notified as a taxable service; and
(vi) Allow the petitioner to bill and recover licensee fee separately from the respondents".
2. The transmission lines included in the transmission scheme and the date of commercial operation thereof are as stated below:

| S.No. | Name of the transmission line | date of <br> commercial <br> operation |
| :--- | :--- | ---: |
| 1 | $315 \mathrm{MVA}, 400 / 220 \mathrm{kV}$, ICTat Siliguri (Asset-I) | 1.10 .2006 |
| 2 | 400 kV D/C Biharsha riff-Muzaffa rpur line, <br> Biharsharif 400 kV extension and Muzaffarpur <br> 400 kV extension (Asset-II) | 1.11 .2006 |
| 3 | $315 \mathrm{MVA}, 400 / 220 \mathrm{kV}$, ICT-I at Subha shgram <br> sub-station (New) (Asset-III) | 1.4 .2007 |
| 4 | LLO of one circuit of 400 kV D/C Farakka- <br> Jeerat line at Shubha shgram and <br> establishment of 400/200 kV Sub-Station at <br> Subhashgram including 1 x 315 MVA, ICT-II <br> (Asset-IV) | 1.3 .2007 |

3. In accordance with the procedure of the Commission issued under letter Ref No. C-7/189(204)/2009-CERC, dated 23.10.2009, the above assets under System Strengthening Scheme for Eastem Region (ERSS) (formenly part of TALA Supplementary Scheme) in Eastem Region have been clubbed for the purpose of detemmination of transmission charges with notional date of commercial as 1.4.2007.
4. The annual transmission charges up to 31.3.2009 for Asset-I and Asset-II were detemmined by the Commission in its order dated 6.5.2008 in Petition No. 97/2007 and same were revised vide order dated 19.8.2009 in Petition No. 68/2009 read with order dated 26.4.2010 in Petition No. 325/2009. The annual transmission charges up to 31.3.2009 for Asset-III and Asset-IV were determined by the Commission in its order dated 1.5 .2008 in Petition No. 160/2007 and same were revised vide order dated 26.4.2010 in Petition No. 325/2009.
5. The petitioner has claimed the transmission charges during 2009-14 as under:

|  |  |  |  |  | (₹ in lakh) |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 9 - 1 0}$ | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |  |  |  |
| Deprec ia tion | 1655.32 | 1665.48 | 1667.61 | 1667.61 | 1667.61 |  |  |  |
| Interest on Loan | 1522.39 | 1411.24 | 1286.68 | 1158.39 | 1029.95 |  |  |  |
| Retum on Equity | 1661.77 | 1674.63 | 1677.05 | 1677.05 | 1677.05 |  |  |  |
| Interest on Working <br> Capital | 143.45 | 144.06 | 144.13 | 144.18 | 144.38 |  |  |  |
| O \& M Expenses |  | 851.39 | 900.15 | 951.68 | 1006.05 |  |  |  |
|  | Total | $\mathbf{5 8 3 4 . 3 2}$ | $\mathbf{5 7 9 5 . 5 6}$ | $\mathbf{5 7 2 7 . 1 5}$ | $\mathbf{5 6 5 3 . 2 8}$ |  |  |  |

6. The details submitted by the petitioner in support of its claim for Interest on Working Capital are given hereunder:
(₹ in lakh)

|  | $\mathbf{2 0 0 9 - 1 0}$ | $\mathbf{2 0 1 0}-\mathbf{1 1}$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Ma intenance Spares | 127.71 | 135.02 | 142.75 | 150.91 | 159.53 |
| O \& M expenses | 70.95 | 75.01 | 79.31 | 83.84 | 88.63 |
| Receivables | 972.39 | 965.93 | 954.53 | 942.21 | 930.42 |
|  | Total | $\mathbf{1 1 7 1 . 0 5}$ | $\mathbf{1 1 7 5 . 9 6}$ | $\mathbf{1 1 7 6 . 5 9}$ | $\mathbf{1 1 7 6 . 9 6}$ |
| Rate of Interest | $12.25 \%$ | $12.25 \%$ | $12.25 \%$ | $12.25 \%$ | $12.25 \%$ |
| Interest | $\mathbf{1 4 3 . 4 5}$ | $\mathbf{1 4 4 . 0 6}$ | $\mathbf{1 4 4 . 1 3}$ | $\mathbf{1 4 4 . 1 8}$ | $\mathbf{1 4 4 . 3 8}$ |

7. In response to the public notice issued by the petitioner on 20.10.2010 as required under Section 64 of the Electricity Act, 2003 (the Act) read with Regulation 3 (6) of the Central Electricity Regulatory Commission (Procedure for making of application for determination of tariff, publication of the application and other related matters) Regulations, 2004, no comments or suggestions have been received from the general public in response to the public notice.
8. No reply has been filed by any respondent.

## CAPITALCOST

9. The last proviso to clause (2) of Regulation 7 of the 2009 regulations provides as under:
"Provided that in case of the existing projects, capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14 as may be admitted by the Commission, shall form the basis for detemination of tariff".
10. The asset wise detail of admitted capital cost, which has been considered for detemination of tariff are as under:
(₹ in lakh)

| Assets | Admitted capital cost as on <br> 31.3 .2009 |
| :--- | ---: |
| Asset-I | 1001.64 |
| Asset-II | 18541.45 |
| Asset- III | 1086.71 |
| Asset- IV | 10942.28 |
| Total | $\mathbf{3 1 5 7 2 . 0 8}$ |

11. Capital cost of ₹ 31572.08 lakh has been considered as opening capital cost for the purpose of tariff.

## ADDIIONALCAPITALEXPENDITURE

12. Regulation 9 of the 2009 regulations provides as under:
(1) The capital expenditure incurred or projected to be incurred, on the following counts with in original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
(i) Undischarged liabilities;
(ii) Works deferred forexecution;
(iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulating 8 ;
(iv) Liabilities to meet award of arbitration or for compliance of the orderordec ree of a court; and
(v) Change in law;

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted a long with the application for determination of the tariff.
(2) The capital expenditure incurred on the following counts after the cut-off-date, in its discretion, be admitted by the Commission, subject to prudence check:
(i) Liabilities to meet award of arbitration or for compliance of the order ordecree of a court;
(ii) Change in law;
(iii) ****
(iv) ****
(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line camier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of the transmission system.
13. The details submitted by the petitioner in support of its claim for projected additional capital expenditure for the transmission assets is given as under:

| Assets | Years | Nature and details of expenditure | Amount <br> (₹ in lakh) |
| :--- | :--- | :--- | ---: |
| Asset-II | $2009-10$ | Transmission line- Ba lance a nd Retention <br> payments | 81.01 |
| Asset-III | $2010-11$ | Sub-station- Ba lance a nd Retention payments | 0.30 |
| Asset-IV | $2009-10$ | Building- Ba lance a nd Retention payments | 255.13 |
|  | $2010-11$ | Sub-station- Balance a nd Retention payments | 62.24 |
|  |  | Sub-station- Balance a nd Retention payments | 32.00 |
|  | Total |  | 60.00 |

14. The petitioner has claimed the additional capital expenditure under Regulation 9 (2) (v) of the 2009 regulations. The petitioner was directed to explain the admissibility of additional capital expenditure incurred during 2009-10 and 2010-11 on account of balance and retention payments. The petitioner has submitted that the projected additional capital expenditure is on account of balance and retention payments and is within the original scope of work under committed lia bilities in terms of Regulations 9 (2) of the 2009 regulations.
15. In regard to admissibility of undischarged liabilities, it is observed that the cut off date of the transmission assets reckoned from the notional date of commercial operation as per the 2004 tariff regulations is 31.3.2009. As such the expenditure projected to be incurred during 2009-10 and 2010-11 are beyond the cut off date for which there is no
provision in Regulation 9 (2) of the 2009 regulations. We have decided in our order dated 8.2.2011 in Petition No. 176/2010 to relax Regulation 9 (2) of the 2009 regulations to admit the expenditure incured after the cut-off date, partic ularly the expenditure pertaining to balance and retention payments. Accordingly, the expenditure of ₹ 490.68 lakh projected to be incurred during 2009-10 and 2010-11 is allowed by relaxing the provisions of Regulation 9 (2) of the 2009 regulations.

## TOTALCAPITALCOST

16. Based on the above, gross block as given below, has been considered for the purpose of tariff for the transmission assets, after allowing projected additional capital expenditure on works as claimed by the petitioner:
(₹ in lakh)

| Admitted capital <br> cost as on <br> 31.3.2009 | Projected <br> capital <br> expenditure <br> incured <br> during 2009-10 | Projected <br> expenditure <br> incurred <br> 2010-11 | duping | Total estimated <br> capital <br> expenditure |
| :--- | :--- | :--- | ---: | :--- |
| 31572.08 | 398.38 |  | 92.30 | 32062.76 |

## DEBT- EQUITY RATIO

17. Clause (2) of Regulation 12 of the 2009 regulations inter-alia providesthat,-
"(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered."
18. The petitioner has claimed tariff based on debt-equity ratio of 70.08:29.92 for transmission assets as admitted on 31.3.2009. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the year 2009-10 and 2010-11. For the purpose of tariff, equity considered for the transmission a ssets is a s under:
(₹ in lakh)

| Equity as | Notional <br> on <br> equity due to <br> additional <br> capital <br> expenditure <br> for the period <br> $\mathbf{2 0 0 9 - 1 0}$ | Average <br> equity for <br> $2009-10$ | Notional <br> equity <br> due to <br> additional <br> capital <br> expenditur <br> e for the <br> period <br> 2010-11 | Average <br> equity for <br> 2010-11 | Notional <br> equity due <br> to <br> additional <br> capital <br> expenditure <br> for the <br> peniod <br> 2011-14 | Average <br> equity for <br> 2011-14 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9446.38 | 119.51 | 9506.14 | 27.69 | 9579.74 | 0.00 | 9593.59 |

## RETURN ON EQUITY

19. Regulation 15 of the 2009 regulations provides that,-
"15. (1) Retum on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
(2) Retum on equity shall be computed on pre-tax basis at the base rate of $15.5 \%$ to be grossed up asperclause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional retum of $0.5 \%$ shall be allowed if such projects are completed within the timeline specified in Appendix-II:

Provided further that the additional retum of $0.5 \%$ shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.
(3) The rate of retum on equity shall be computed by grossing up the base rate with the nomal tax rate for the year 2008-09 a pplicable to the concemed generating company or the transmission licensee, as the case may be:

Provided that retum on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts
of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.
(4) Rate of retum on equity shall be rounded off to three decimal points and be computed as perthe formula given below:
Rate of pre-tax retum on equity = Base rate / (1-t)
Where $t$ is the applicable tax rate in accordance with clause (3) of this regulation."
20. The petitioner has requested to allow grossing up of base rate of retum with the applicable tax as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long-tem transmission customers on year to years basis. It is clarified that the Commission is in the process of amending the regulation to allow grossing up of the ROE as per the applicable MAT rate in accordance with the relevant Finance Act which would take care of the interest of the petitioner. Accordingly, the retum on equity has been computed in terms of the existing provision of Regulation 15 (3) of 2009 regulation as under:
(₹ in lakh)

| Particulars | $\mathbf{2 0 0 9 - 1 0}$ | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 1} \mathbf{- 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Opening Equity as on 1.4.2009 | 9446.38 | 9565.90 | 9593.59 | 9593.59 | 9593.59 |
| Addition due to Additional <br> Capitalisation | 119.51 | 27.69 | 0.00 | 0.00 | 0.00 |
| Closing Equity | 9565.90 | 9593.59 | 9593.59 | 9593.59 | 9593.59 |
| Average Equity | 9506.14 | 9579.74 | 9593.59 | 9593.59 | 9593.59 |
| Retum on Equity (Base Rate ) | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ | $15.50 \%$ |
| Tax rate forthe year 2008-09 | $11.330 \%$ | $11.330 \%$ | $11.330 \%$ | $11.330 \%$ | $11.330 \%$ |
| Rate of Retum on Equity (Pre Tax) | $17.481 \%$ | $17.481 \%$ | $17.481 \%$ | $17.481 \%$ | $17.481 \%$ |
| Retum on Equity (Pre Tax) | $\mathbf{1 6 6 1 . 7 7}$ | $\mathbf{1 6 7 4 . 6 3}$ | $\mathbf{1 6 7 7 . 0 5}$ | $\mathbf{1 6 7 7 . 0 5}$ | $\mathbf{1 6 7 7 . 0 5}$ |

## INIERESTON LOAN

21. Regulation 16 of the 2009 regulations provides that,-
"16. (1) The loans arived at in the manner indicated in regulation 12 shall be considered as gross nomative loan for calculation of interest on loan.
(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross nomative loan.
(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:
(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed,.
(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each yearapplicable to the project:

Provided that if there is no actual loan for a particular year but nomative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.
(6) The interest on loan shall be calculated on the nomative average loan of the yearby applying the weighted average rate of interest.
(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be bome by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of $2: 1$.
(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission
(Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of a ny dispute arising out of re-financing of loan."
22. The interest on loan has been worked out as under:
(a) Gross a mount of loan, repayment of insta llments, rate of interest and weighted average rate of interest on actual average loan have been considered asper the petition;
(b) The Repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed forthat period;
(c) Where the moratorium period has been availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;
(d) Weighted average rate of interest on actual average loan has been worked out as per (a) above and applied on the notional average loan during the year to a rive at the interest on loan; and
(e) The interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009. Any change in rate of interest subsequent to 1.4.2009 will be considered at the time of truing up.
23. The detailed calculations in support of the weighted revised average rate of interest are contained in Annexure attached to this order. Based on the above, interest on loan has been worked out as under:

|  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 0 9 - 1 0}$ | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| Gross Normative Loan | 22125.70 | 22404.56 | 22469.17 | 22469.17 | 22469.17 |
| Cumulative Repayment up <br> to Previous Year | 1991.59 | 3646.91 | 5312.39 | 6980.00 | 8647.61 |
| Net Loan-Opening | 20134.11 | 18757.66 | 17156.78 | 15489.17 | 13821.56 |
| Addition due to Additional <br> Capita lization | 278.87 | 64.61 | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 1655.32 | 1665.48 | 1667.61 | 1667.61 | 1667.61 |
| Net Loan-Closing | 18757.66 | 17156.78 | 15489.17 | 13821.56 | 12153.95 |
| Average Loan | 19445.88 | 17957.22 | 16322.98 | 14655.37 | 12987.76 |
| Weighted Average Rate of <br> Interest on Loan | $7.8289 \%$ | $7.8589 \%$ | $7.8826 \%$ | $7.9042 \%$ | $7.9301 \%$ |
| Interest | $\mathbf{1 5 2 2 . 3 9}$ | $\mathbf{1 4 1 1 . 2 4}$ | $\mathbf{1 2 8 6 . 6 8}$ | $\mathbf{1 1 5 8 . 3 9}$ | $\mathbf{1 0 2 9 . 9 5}$ |

## DEPRECIATION

24. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner:
"17. (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.
(2) The salvage value of the asset shall be considered as $10 \%$ and depreciation shall be allowed up to maximum of $90 \%$ of the capital cost of the asset.
xxxx
(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and
its cost shall be excluded from the capital cost while computing depreciable value of the asset.
(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the a ssets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.
(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.
(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."
25. Notional date of commercial operation of the transmission assets has been taken as 1.4.2007. Accordingly they will complete 12 years beyond 2013-14 and thus, depreciation has been calculated annually based on Straight Line Method and at rate specified in Appendix-III of the 2009 regulations. Accordingly, depreciation has been worked out as under:

|  |  |  |  |  | ( |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Details of Depreciation | $\begin{array}{c\|} \hline \text { Up to } \\ 31.3 .2009 \end{array}$ | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Gross block as per last order | 31572.08 | 31572.08 | 31970.46 | 32062.76 | 32062.76 | 32062.76 |
| Addition during 2009-14 <br> due to projected <br> Additional Capital <br> Expenditure   |  | 398.38 | 92.30 | 0.00 | 0.00 | 0.00 |
| $\begin{aligned} & \text { Gross block as on } \\ & 31.3 .2009 \end{aligned}$ |  | 31970.46 | 32062.76 | 32062.76 | 32062.76 | 32062.76 |
| Average gross block |  | 31771.27 | 32016.61 | 32062.76 | 32062.76 | 32062.76 |
| Rate of Depreciation |  | 5.2101\% | 5.2019\% | 5.2011\% | 5.2011\% | 5.2011\% |
| Depreciable Value of Combined Assets |  | 28389.46 | 28610.26 | 28651.80 | 28651.80 | 28651.80 |
| Remaining Depreciable Value |  | 26397.86 | 24963.36 | 23339.41 | 21671.80 | 20004.19 |
| Depreciation |  | 1655.32 | 1665.48 | 1667.61 | 1667.61 | 1667.61 |

## OPERATION \& MAINIENANCE EXPENSES

26. In accordance with clause (g) of Regulation 19 of the 2009 regulations, the following noms have been specified for operation and maintenance expenses:

| Transmission line/bays: | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 0 9 - 1 0}$ | 2010-11 | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| 400 kV Double Circ uit twin <br> conductor transmission line (₹ in <br> lakh/per kms.) | 0.627 | 0.663 | 0.701 | 0.741 | 0.783 |
| 400 KV bay (₹ lakh/bay) | 52.40 | 55.40 | 58.57 | 61.92 | 65.46 |
| 220 KV bay (₹ lakh/bay) | 36.68 | 38.78 | 41.00 | 43.34 | 45.82 |

27. Accordingly, the petitioner's entitlement to $O \& M$ expenses has been worked out as under.
(₹ in lakh)

|  | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 9 - 1 0}$ | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| O \& M expenses 400 KV <br> double Circuit, twin conductor <br> transmission line [196.213 <br> (133.3+62.913) Kms] | 123.03 | 130.09 | 137.55 | 145.39 | 153.63 |
| O \& M expenses 400 KV bays <br> (9 bays) | 471.60 | 498.60 | 527.13 | 557.28 | 589.14 |
| O \& M expenses 200 KV bays <br> (7 bays) | 256.76 | 271.46 | 287.00 | 303.38 | 320.74 |
| Total |  |  |  |  |  |

28. The petitioner has submitted that the compensation of $50 \%$ on account of pay revision of the employees of public sector undertaking considered under the $O \& M$ charges for 2009-14 periods may not be sufficient to meet the impact of pay revision. The petitioner has further submitted that it would approach the Commission for suitable revision in the noms of $O \& M$ expenses in case the impact of wage hike w.e.f.
1.1.2007 is more than $50 \%$. With reference to the submission of the petitioner, it is clarified that if any such application is made, it will be dealt with in accordance with law.

## INIERESTON WORKING CAPITAL

29. The components of the working capital and the interest thereon are discussed hereunder:
(i) Receivables: As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis two months transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis two months' transmission charges.
(ii) Maintenance spares: Regulation 18(1)(c)(ii) of the 2009 regulations provides for maintenance spares @ $15 \%$ per annum of the $O \& M$ expenses from 1.4.2009.
(iii) $\mathbf{O} \& \mathbf{M}$ expenses: Regulation 18(1)(c)(iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed $O \& M$ expenses for one month of $O \& M$ expenses of the respective year which has been considered in the working capital.
(iv) Rate of interest on working capital: As per Regulation 18(3) of the 2009 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 1.4.2009 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 petitioner has claimed interest on working capital @ $12.25 \%$ based on SBI PLR as on 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.
30. The necessary computations in support of interest on working capital as under.
(₹ in lakh)

|  | $\mathbf{2 0 0 9 - 1 0}$ | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Ma intenance Spares | 127.71 | 135.02 | 142.75 | 150.91 | 159.53 |
| O \& M expenses | 70.95 | 75.01 | 79.31 | 83.84 | 88.63 |
| Receivables | 972.39 | 965.93 | 954.53 | 942.21 | 930.42 |
| Total | $\mathbf{1 1 7 1 . 0 4}$ | $\mathbf{1 1 7 5 . 9 6}$ | $\mathbf{1 1 7 6 . 5 8}$ | $\mathbf{1 1 7 6 . 9 6}$ | $\mathbf{1 1 7 8 . 5 7}$ |
| Interest | $\mathbf{1 4 3 . 4 5}$ | $\mathbf{1 4 4 . 0 6}$ | $\mathbf{1 4 4 . 1 3}$ | $\mathbf{1 4 4 . 1 8}$ | $\mathbf{1 4 4 . 3 7}$ |
| Rate of Interest | $12.25 \%$ | $12.25 \%$ | $12.25 \%$ | $12.25 \%$ | $12.25 \%$ |

## IRANSMISSION CHARGES

31. The transmission charges being allowed for the transmission asset are summarised below:
(₹ in lakh)

|  | $\mathbf{2 0 0 9}-\mathbf{1 0}$ | $\mathbf{2 0 1 0}-11$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Depreciation | 1655.32 | 1665.48 | 1667.61 | 1667.61 | 1667.61 |
| Interest on Loan | 1522.39 | 1411.24 | 1286.68 | 1158.39 | 1029.95 |
| Retum on Equity | 1661.77 | 1674.63 | 1677.05 | 1677.05 | 1677.05 |
| Interest on Working Capital | 143.45 | 144.06 | 144.13 | 144.18 | 144.37 |
| O \& M Expenses | 851.39 | 900.15 | 951.68 | 1006.05 | 1063.51 |
|  | Total | $\mathbf{5 8 3 4 . 3 2}$ | $\mathbf{5 7 9 5 . 5 7}$ | $\mathbf{5 7 2 7 . 1 6}$ | $\mathbf{5 6 5 3 . 2 8}$ |

## Application fee and the publication expenses

32. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of transmission ta nff. In accordance with our decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the respondents on pro rata basis. The petitioner shall also be entitled for reimbursement from the beneficianes on pro rata basis the publication expenses for issuing public notice in connection with the present petition under Section 64 of the Act.

## Senvice Tax

33. The petitioner has prayed to allow to bill and recover the service tax on transmission charges separately from the respondents, if at any time exemption from service tax is withdrawn and transmission is notified as a taxable service. Therefore, the prayer of the petitioner is premature in the absence of any demand for service tax and accordingly is rejec ted.

## Licence Fee

34. The petitioner hassubmitted that licence fee is a new component of cost to the transmission licensee and has become incidental to the petitioner with effect from 2008-09. The nomative $O \& M$ rates in the 2009 regulations do not capture the cost associated with the licence
fee and therefore it should be allowed to be recovered from the respondents. In this regard, it is clarified that the matter is under consideration of the Commission and any decision on the issue as and when taken will be applicable to this petition.
35. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.
36. This order disposes of Petition No. 276/2010.

Sd/-
(M.DEENA DAYALAN) (V.S.VERMA) MEMBER
sd/-
MEMBER

ANNEXURE


| 5 | Bond XIX |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grossloan opening | 2223.00 | 2223.00 | 2223.00 | 2223.00 | 2223.00 |
|  | Cumulative Repayment up to DOCO/previous year | 0.00 | 0.00 | 185.25 | 370.50 | 555.75 |
|  | Net Loan-Opening | 2223.00 | 2223.00 | 2037.75 | 1852.50 | 1667.25 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 185.25 | 185.25 | 185.25 | 185.25 |
|  | Net Loan-Closing | 2223.00 | 2037.75 | 1852.50 | 1667.25 | 1482.00 |
|  | Average Loan | 2223.00 | 2130.38 | 1945.13 | 1759.88 | 1574.63 |
|  | Rate of Interest | 9.25\% | 9.25\% | 9.25\% | 9.25\% | 9.25\% |
|  | Interest | 205.63 | 197.06 | 179.92 | 162.79 | 145.65 |
|  | Rep Schedule | 12 Annual instalments from 24.7.2010 |  |  |  |  |
| 6 | Bond XXVII (ADD CAP FOR 200708) |  |  |  |  |  |
|  | Gross loan opening | 1472.47 | 1472.47 | 1472.47 | 1472.47 | 1472.47 |
|  | Cumulative Repayment up to DOCO/previous year | 0.00 | 0.00 | 0.00 | 122.71 | 245.41 |
|  | Net Loan-Opening | 1472.47 | 1472.47 | 1472.47 | 1349.76 | 1227.06 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 122.71 | 122.71 | 122.71 |
|  | Net Loan-Closing | 1472.47 | 1472.47 | 1349.76 | 1227.06 | 1104.35 |
|  | Average Loan | 1472.47 | 1472.47 | 1411.12 | 1288.41 | 1165.71 |
|  | Rate of Interest | 9.47\% | 9.47\% | 9.47\% | 9.47\% | 9.47\% |
|  | Interest | 139.44 | 139.44 | 133.63 | 122.01 | 110.39 |
|  | Rep Schedule | 12 Annual instalments from 31.3.2012 |  |  |  |  |
|  | Bond XXVIII (ADD CAP FOR 200809 DRAML ON 15.12.2008) |  |  |  |  |  |
|  | Gross loan opening | 556.01 | 556.01 | 556.01 | 556.01 | 556.01 |
|  | Cumulative Repayment up to DOCO/previous year | 0.00 | 0.00 | 0.00 | 0.00 | 46.33 |
|  | Net Loan-Opening | 556.01 | 556.01 | 556.01 | 556.01 | 509.68 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 46.33 | 46.33 |
|  | Net Loan-Closing | 556.01 | 556.01 | 556.01 | 509.68 | 463.34 |
|  | Average Loan | 556.01 | 556.01 | 556.01 | 532.84 | 486.51 |
|  | Rate of Interest | 9.33\% | 9.33\% | 9.33\% | 9.33\% | 9.33\% |
|  | Interest | 51.88 | 51.88 | 51.88 | 49.71 | 45.39 |
|  | Rep Schedule | 12 Annual instalments from 15.12.2012 |  |  |  |  |
|  | Total Loan |  |  |  |  |  |
|  | Grossloan opening | 22634.48 | 22634.48 | 22634.48 | 22634.48 | 22634.48 |
|  | Cumulative Repayment up to DOCO/previous year | 431.06 | 2206.28 | 4166.75 | 6249.92 | 8379.43 |
|  | Net Loan-Opening | 22203.42 | 20428.20 | 18467.73 | 16384.56 | 14255.05 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 1775.22 | 1960.47 | 2083.17 | 2129.51 | 2129.51 |
|  | Net Loan-Closing | 20428.20 | 18467.73 | 16384.56 | 14255.05 | 12125.55 |
|  | Average Loan | 21315.81 | 19447.97 | 17426.15 | 15319.81 | 13190.30 |
|  | Weighted Average Rate of Interest | 7.8289\% | 7.8589\% | 7.8826\% | 7.9042\% | 7.9301\% |
|  | Interest | 1668.78 | 1528.40 | 1373.64 | 1210.90 | 1046.01 |

