CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 87/TT/2011

Coram: Dr. Pramod Deo, Chairperson Shri S. Jayaraman, Member Shri M. Deena Dayalan, Member

Date of Hearing: 16.2.2012

Date of Order:25.4.2012

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 for determination of transmission tariff for combined assets of Asset-I 400 kV D/C Gorakhpur –Lucknow transmission line along with its associated bays (date of commercial operation: 1.11.2010) and Asset-II 30% FSC on 400 kV D/C Gorakhpur-Lucknow transmission line (anticipated date of commercial operation: 1.4.2011) at Lucknow along with associated bays under NRSS-X, from anticipated date of commercial operation to 31.3.2014 for tariff block 2009-14 period in Northern Region (combined assets of NRSS-X).

And

In the matter of:

Power Grid Corporation of India Ltd., GurgaonPetitioner

Vs

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
- 2. Ajmer Vidyut Vitran Nigam Limited, Jaipur
- 3. Jaipur Vidyut Vitran Nigam Limited, Jaipur
- 4. Jodhpur Vidyut Vitran Nigam Limited, Jaipur
- 5. Himachal Pradesh State Electricity Board, Shimla
- 6. Punjab State Electricity Board, Patiala
- 7. Haryana Power Purchase Centre, Panchkula
- 8. Power Development Department, Jammu
- 9. Uttar Pradesh Power Corporation Ltd., Lucknow
- 10. Delhi Transco Limited, New Delhi



- 11. BSES Yamuna Power Limited, New Delhi
- 12. BSES Rajdhani Power limited, New Delhi
- 13. North Delhi Power Limited, New Delhi
- 14. Chandigarh Administration, Chandigarh
- 15. Uttarakhand Power Corporation Ltd., Dehradun
- 16. North Central Railway, Allahabad
- 17. New Delhi Municipal Council, New DelhiRespondents

The following were present:

- 1. Shri. S.S. Raju, PGCIL
- 2. Shri. Rajeev Gupta, PGCIL
- 3. Shri Tej Pal singh, PSPCL
- 4. Shri Padamjit singh, PSPCL
- 5. Shri R.B. Sharma, Advocate, BSES and JSEB
- 6. Mr. Sunil Barnwal, BRPL

<u>ORDER</u>

This petition has been filed by Power Grid Corporation Limited (hereinafter referred to as "PGCIL") for determination of transmission tariff for combined assets of 400 kV D/C Gorakhpur-Lucknow transmission line along with its associated bays and 30% FSC on 400 kV D/C Gorakhpur-Lucknow transmission line at Lucknow along with associated bays under Northern Region System Strengthening Scheme – X (NRSS-X) (hereinafter referred to as "transmission assets') from anticipated date of commercial operation (1.4.2011) to 31.3.2014 for tariff block 2009-14 period in Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as "2009 regulations").

2. The administrative approval and expenditure sanction to the transmission project was accorded by Board of Directors of PGCIL vide C/CP/NRSS-X dated 26.12.2007 for ₹40836 lakh, including IDC of ₹3531 lakh (based on 3rd Quarter,



2007 price level).

3. The scope of work covered under the instant petition includes construction of following transmission line and sub-stations:-

Transmission Lines

Gorakhpur-Lucknow 400 kV D/C Line-255 Km.

Sub-stations

- a. Extension of 400/200 kV Gorakhpur Sub-Station
- b. Extension of 400/200 kV Lucknow Sub-station
- c. 30% Series Compensation at Lucknow on proposed Gorakhpur-Lucknow
 400kV D/C line.

Reactive Compensation:-

63 MVAR switchable line reactors at both ends on proposed Gorakhpur-Lucknow 400 kV D/C line.

4. The details of assets covered in the petition are as follows:-

| Sr. No. | Name of the asset | Schedule Completion (FR) | Date of commercial operation |
|------------|---|--------------------------------|------------------------------------|
| 1 | 400 kV D/C Gorakhpur-Lucknow transmission line along with its associated bays (Asset-I) | 26.12.2010 | 1.11.2010 |
| 2. | 30%Series Compensation on Gorakhpur- Lucknow 400 kV D/C line (Asset-II) | 26.12.2010 | 1.4.2011 |



5. The transmission tariff for Asset-I has already been approved by the Commission vide order dated 19.1.2012 in Petition No. 345/2010. The Asset II has been clubbed with Asset I as on 1.4.2011.

6. The present petition covers determination of tariff based on actual expenditure incurred up to date of commercial operation and estimated additional capital expenditure projected to be incurred from the date of commercial operation to 31.3.2014. The details of apportioned approved cost as on the date of commercial operation and estimated additional capital expenditure projected to be incurred for the above mentioned assets are as follows:-

| | | | | | (₹ in | lakh) |
|------------------|------------------------------------|---------------------------------|---|---|---|--|
| Name of Asset | Date of commercial operation | Apportioned approved cost | Expenditure up to date of commercial operation | Expenditure from date of commercial operation to 31.03.11 | Projected additional-capital expenditure from date of commercial operation to 31.3.2012 | Total estimated completion cost |
| Asset-I | 1.11.2010 | 36289.47 | 30643.12 | 3045.38 | 1015.13 | 34703.63 |
| Asset-II | 1.4.2011 | 4546.57 | 1973.22 | - | 740.56 | 2713.78 |
| Total | | 40836.04 | 32616.34 | 3045.38 | 1755.69 | 37417.41 |

Capital cost as on date of commercial operation is inclusive of Initial Spares of ₹175.60 lakh in Asset-II.

7. Details of the transmission charges claimed by the petitioner are as follows:-



| | | (| ₹ in lakh) |
|-----------------------------|---------|---------|------------|
| | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 1913.29 | 1958.42 | 1958.42 |
| Interest on Loan | 2171.10 | 2050.03 | 1870.80 |
| Return on equity | 1916.25 | 1962.28 | 1962.28 |
| Interest on Working Capital | 173.86 | 175.54 | 174.04 |
| O & M Expenses | 770.72 | 814.77 | 861.26 |
| Total | 6945.22 | 6961.04 | 6826.80 |

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

| | | | (₹ in lakh) |
|--------------------|---------|---------|-------------|
| | 2011-12 | 2012-13 | 2013-14 |
| Maintenance Spares | 115.16 | 122.22 | 129.19 |
| O & M expenses | 64.23 | 67.90 | 71.77 |
| Receivables | 1157.54 | 1160.17 | 1137.80 |
| Total | 1337.38 | 1350.29 | 1338.76 |
| Interest | 173.86 | 175.54 | 174.04 |
| Rate of Interest | 13.00% | 13.00% | 13.00% |

9. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003. Reply to the petition has been filed by Respondent No. 2, Ajmer Vidyut Vitran Nigam Ltd (AVVNL); Respondent No. 3, Jaipur Vidyut Vitran Nigam Ltd. (JVVNL); Respondent No. 4, Jodhpur Vidyut Vitran Nigam (Jd.VVNL); Respondent No. 6, Punjab State Power Corporation Ltd.(PSPCL; Respondent No. 9, Uttar Pradesh Power Corporation Limited (UPPCL) and Respondent No. 12, BSES Rajdhani Power Ltd (BRPL). The respondents have raised the issue of time over-run, initial spares, O&M expenses, filing fee and publication expenses, licence fee



and service tax. The objections raised by the respondents have been dealt with in relevant paragraphs of this order.

10. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

TIME OVER RUN

11. As per investment approval, accorded on 26.12.2007, the transmission project was to be commissioned within 36 months from the date of investment approval i.e. by 26.12.2010. The asset was put under commercial operation on 1.4.2011 and there was delay of 3 months in commissioning the transmission assets. The petitioner has submitted that the delay in commissioning of the transmission asset was primarily on account of delay in supply of the equipment. It has also been submitted that the Liquidated Damages (LD), if any, to be levied on contractor, shall be worked out at the time of closing the contract and shall be adjusted in the capital cost.

12. The respondents AVVNL, JVVNL, Jd.VVNL and PSPCL have submitted that estimated LD may be deducted from the capital cost and on finalization of LD the difference of cost can be adjusted.

13. The respondent, BRPL has submitted that balance and retention payment claimed by the petitioner may be adjusted against the LD to be recovered from contractor due to delay.



14. We are of the view that the delay of 3 months in commissioning of the asset was due to bilateral issue between the petitioner and the contractor. The IDC and IEDC for these three months are not allowed for the asset - 30% FSC on 400kV D/C Gorakhpur-Lucknow transmission line. If the LD amount recovered from the contractor exceeds the IDC and IEDC disallowed in the order, the difference shall be adjusted in capital cost at the time of truing up.

CAPITAL COST

15. As regards capital cost, Regulation 7(1) (a) of the 2009 regulations provides that:-

"The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii)being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check."

16. Capital cost of Asset-I as on 31.3.2009, allowed by the Commission vide order dated 19.1.2012 in Petition No. 345/2010 and the capital cost of Asset-II, given in the auditor's certificate dated 1.11.2011 has been considered for the purpose of tariff calculation.

17. Capital cost, on date of commercial operation, considered for the purpose of tariff calculation is as follows:-



| | | | | (₹ in lakh) |
|-----------------|--|-------------------------------|--------------------------------------|-------------------------------|
| Particulars | As on Date of commercial operation | Initial spares deducted | Additional capital expenditure | Considered for Calculation |
| Asset-I | 31332.04 | 0.00 | 1219.54 | 32551.58 |
| Asset-II | 2319.90 | 77.40 | 0.00 | 2242.50 |
| Capital cost co | 34794.08 | | | |

PROJECTED ADDITIONAL CAPITAL EXPENDITURE

18. As per Regulation 9 (1) of 2009 regulations-

"Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the 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) XXX
- (iii) XXX
- (iv) XXX
- (v) XXX"
- 19. As per Regulations 2009,

"cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and in-case of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation".

Therefore, cut-off date for the above mentioned assets is 31.03.2013.

20. Petitioner has claimed additional capital expenditure of ₹2886.84 lakh for the

year 2011-12. Additional capital expenditure claimed falls within the cut-off date.

Hence, the same has been considered for the purpose of tariff calculation.



TREATMENT OF INITIAL SPARES

21. The initial spares claimed by petitioner is more than the ceiling norms specified in 2009 regulations. The petitioner has submitted that the investment approval and finalization of BOQ for procurement of various equipments along with initial spares was done during 2004-09 period and hence initial spares were procured as per the norms specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "2004 regulations"). Therefore, the petitioner has requested to allow initial spares as per the 2004 regulations.

22. The respondent, BRPL has submitted that capitalization of the initial spares in the capital cost should be limited to the ceiling norms specified in 2009 regulations.

23. We are of the view that the initial spares should be allowed as per the norms specified in the 2009 regulations, as the date of commercial operation of the transmission assets was during 2009-14 period. The petitioner has claimed ₹175.61 lakh for sub-station (FSC). However, as per Regulation 8 of 2009 regulations it works out to ₹98.21 lakh and it exceed the limit by ₹77.40 lakh. Therefore, excess Initial Spares claimed by the petitioner has been deducted from the admitted cost and capital cost of ₹34794.08 lakh, as on date of commercial operation, has been considered for tariff calculations.



24. Accordingly, the initial spares are worked out under:-

| | | | | (₹ in | lakh) |
|-------------|--|---|-----------------------------|---|---------------|
| Particulars | Rate as per Regulation 8 of 2009 regulations | Expenditure pertaining to sub -station (FSC) up to cut off date as per CA certificate dated 01.11.2011 | Claimed by petitioner | Initial spares calculated as per Regulation | In excess |
| 1 | 2 | 3 | 4 | 5= [(3)- (4)]*(2)/[100%- (2)] | 6=(4)- (5) |
| Sub-Station | 3.50% | 2883.48 | 175.61 | 98.21 | 77.40 |

DEBT- EQUITY RATIO

- 25. Regulation 12 of the 2009 regulations provides that,
 - "(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

(2) XXX."

26. The details of debt-equity of asset considered for the purpose of tariff calculation as on the date of commercial operation is given below:-

| | (₹ in lakh) | | | |
|-------------|----------------------|--------|--|--|
| | Capital cost as | | | |
| | commercial operation | | | |
| Particulars | Amount | % | | |
| Debt | 24355.86 | 70.00 | | |
| Equity | 10438.23 | 30.00 | | |
| Total | 34794.08 | 100.00 | | |



27. Details of debt- equity ratio projected for additional capital expenditure are as follows:-

| | | (₹ in lakh) | | | |
|-------------|-----------|-------------|--|--|--|
| 2011-12 | Normative | | | | |
| Particulars | Amount | % | | | |
| Debt | 2020.79 | 70.00 | | | |
| Equity | 866.05 | 30.00 | | | |
| Total | 2886.84 | 100.00 | | | |

28. Details of debt-equity ratio of the transmission asset as on 31.3.2014 are as

follows:-

| | | (₹ in lakh) |
|-------------|--------------|-------------|
| | Cost as on 3 | 1.3.2014 |
| Particulars | Amount | % |
| Debt | 26376.65 | 70.00 |
| Equity | 11304.28 | 30.00 |
| Total | 37680.92 | 100.00 |

RETURN ON EQUITY

29. Regulation 15 of the 2009 regulations provides that:-

"15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:

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

Provided further that the additional return 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 return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be:

Provided that return 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 return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission.

Provided further that Annual Fixed charge with respect to the 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 financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations"

30. The petitioner has prayed to allow grossing up of base rate of return with the applicable base rate as per the Finance Act for the relevant year and direct settlement of tax liability between generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis. The respondent, BRPL has submitted that transmission tariff should be allowed by deleting the component of depreciation and the return on equity.

31. Petitioner's prayer to allow grossing up the base rate of return on equity based on tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 regulations.

32. Return on equity has been calculated as per Regulation 15 of the 2009 regulation with pre-tax return on equity of 17.481%. The return on equity for the



transmission assets works out to ₹1900.40 lakh for the period 2011-12 and ₹1976.10 lakh per year for 2012-12 and 2013-14.

33. In view of the above, the following amount of equity has been considered for calculation of return of equity:-

| | | | (₹ i n lakh) |
|--|----------|----------|---------------------|
| | 2011-12 | 2012-13 | 2013-14 |
| Opening Equity | 10438.23 | 11304.28 | 11304.28 |
| Addition due to Additional Capitalisation | 866.05 | 0.00 | 0.00 |
| Closing Equity | 11304.28 | 11304.28 | 11304.28 |
| Average Equity | 10871.25 | 11304.28 | 11304.28 |
| Return on Equity (Base Rate) | 15.50% | 15.50% | 15.50% |
| Tax rate for the year 2008-09 (MAT) | 11.33% | 11.33% | 11.33% |
| Rate of Return on Equity (Pre Tax) | 17.481% | 17.481% | 17.481% |
| Return on Equity (Pre Tax) | 1900.40 | 1976.10 | 1976.10 |

INTEREST ON LOAN

34. Regulation 16 of the 2009 regulations provides that-

"16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative 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 normative 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 year applicable to the project:

Provided that if there is no actual loan for a particular year but normative 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 normative average loan of the year by 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 borne 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 any dispute arising out of re-financing of loan."

- 35. In these calculations, interest on loan has been worked out as as under :-
 - (i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition. The petitioner has revised the gross loan amount of loan, vide affidavit dated 8.11.2011, corresponding to Bond XXXIV to ₹993.90 lakh and the same has been considered for arriving at the weighted average interest rate.
 - (ii) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.



(iii) Weighted average rate of interest on actual loan worked out as above has been applied on the notional average loan during the year to arrive at the interest on loan.

36. Detailed calculations of the weighted revised average rate of interest are given in Annexure to this order.

37. Details of the interest on loan worked on the above basis are as follows:-

| | | (₹ | in lakh) |
|---|----------|----------|----------|
| | 2011-12 | 2012-13 | 2013-14 |
| Gross Normative Loan | 24355.86 | 26376.65 | 26376.65 |
| Cumulative Repayment upto Previous | 699.27 | 2599.82 | 4572.10 |
| Year | | | |
| Net Loan-Opening | 23656.59 | 23776.83 | 21804.54 |
| Addition due to Additional Capitalisation | 2020.79 | 0.00 | 0.00 |
| Repayment during the year | 1900.54 | 1972.29 | 1972.29 |
| Net Loan-Closing | 23776.83 | 21804.54 | 19832.26 |
| Average Loan | 23716.71 | 22790.69 | 20818.40 |
| Weighted Average Rate of Interest on Loan | 9.0697% | 9.0648% | 9.0570% |

DEPRECIATION

38. Regulation 17 (4) of the 2009 regulations provides as under:-

"Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31th 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 asset".



39. Accordingly, depreciation has been worked out on the basis of capital expenditure from the first year of commercial operation wherein depreciation for the first year is calculated on pro-rata basis for the part of the year. The depreciation is computed for the tariff period of 2009-14 as ₹1900.54 lakh in 2011-12 and ₹1972.29 lakh per year for 2012-13 and 2013-14.

| | | | (₹ in lakh) |
|---|----------|----------|-------------|
| | 2011-12 | 2012-13 | 2013-14 |
| Opening Gross Block | 34794.08 | 37680.92 | 37680.92 |
| Addition during 2009-14 due to Projected Additional Capitalisation | 2886.84 | 0.00 | 0.00 |
| Closing Gross Block | 37680.92 | 37680.92 | 37680.92 |
| Average Gross Block | 36237.50 | 37680.92 | 37680.92 |
| Rate of Depreciation | 5.2447% | 5.2342% | 5.2342% |
| Depreciable Value | 32613.75 | 33912.61 | 33912.83 |
| Remaining Depreciable Value | 31914.48 | 31313.02 | 29340.73 |
| Depreciation | 1900.54 | 1972.29 | 1972.29 |

40. Details of the depreciation worked out are given below:-

OPERATION & MAINTENANCE EXPENSES

41. The petitioner has submitted that the O&M expenses for 2009-14 tariff block had been arrived on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O&M expenses for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenses in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.



42. The respondents AVVNL, JVVNL, Jd.VVNL and PSPCL, submitted that the O&M expenses should be allowed only as per existing norms. The respondent BRPL has submitted that the increase in the employee cost due to wage revision must be taken care by the petitioner by improving their productivity level and the beneficiaries should not be unduly burdened over and above the provisions made in the 2009 regulations.

43. The UPPCL in its reply has submitted that once the O&M norms have been defined, the question of considering the actuals does not arise. The O&M norms have been prescribed after detailed consultations, discussions and public hearing and sanctity of the same should be maintained.

44. Clause (9) of Regulation 19 of the 2009 regulations prescribed the norms for O&M expenses based on the type of sub-station and line. The norms for the assets covered in this petition are as follows:-

| Element | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---|---------|---------|---------|---------|---------|
| 400 kV D/C, twin conductor T/L (₹ Lakh / km) | 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 |

45. As per the above mentioned norms the allowable O & M expenses for the assets covered in this petition are given overleaf:-



| | | | | | (₹ in lakh) |
|--|---------|---------|---------|---------|-------------|
| Element | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 263.933 km, 400 kV D/C twin conductor T/L | Nil | Nil | 185.02 | 195.57 | 206.66 |
| 10 nos., 400 kV, bays | Nil | Nil | 585.70 | 619.20 | 654.60 |
| Total O&M Expenditure | Nil | Nil | 770.72 | 814.77 | 861.26 |

46. In the instant petition O&M expenses are allowed on the basis of existing norms. It is clarified that, if any, application for revision of norms of O&M expenses is filed by the petitioner in future, it will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

47. As per the 2009 regulations the components of the working capital and the interest thereon are discussed are given as under:-

(i) **Receivables:** As per Regulation 18 (1) (c) (i) of the 2009 regulations, receivables will be equivalent to two months of fixed cost. 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.

(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. The value of maintenance spares has accordingly been worked out.



(iii) O & M expenses: Regulation 18(1) (c) (iii) of the 2009 regulations provides for operation and maintenance expenses for one month of the recommended O & M expenses.

(iv) Rate of interest on working capital: In the calculations, as per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 dated 21.6.2011, SBI Base Rate (8.25%) Plus 350Bps i.e. 11.75% has been considered as the rate of interest on working capital.

50. Necessary computations in support of interest on working capital are appended hereunder:-

| | | | (₹ in lakh) |
|-------------|----------|---------|-------------|
| | 2011- 12 | 2012-13 | 2013-14 |
| | | | |
| Maintenance | 115.61 | 122.22 | 129.19 |
| Spares | | | |
| O & M | 64.23 | 67.90 | 71.77 |
| expenses | | | |
| Receivables | 1146.42 | 1164.71 | 1142.16 |
| Total | 1326.26 | 1354.82 | 1343.12 |
| Interest | 155.84 | 159.19 | 157.82 |

TRANSMISSION CHARGES

48. The transmission charges being allowed for the transmission lines are

summarized overleaf:-



| | | | (₹ in lakh) |
|--------------------------------|---------|---------|-------------|
| | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 1900.54 | 1972.29 | 1972.29 |
| Interest on Loan | 2151.04 | 2065.92 | 1885.51 |
| Return on equity | 1900.40 | 1976.10 | 1976.10 |
| Interest on Working Capital | 155.84 | 159.19 | 157.82 |
| O & M Expenses | 770.72 | 814.77 | 861.26 |
| Total | 6878.54 | 6988.27 | 6852.98 |

FILING FEE AND THE PUBLICATION EXPENSES:-

49. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. UPPCL and BRPL have submitted that the filing fee shall be governed as per the Commission's order. In accordance with our order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiary on *pro-rata* basis.

LICENCE FEE

50. The petitioner has submitted that they be allowed to bill and recover the licence fee separately from the respondents. The petitioner has further submitted that in the O&M norms for tariff block 2009-14, the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents.



51. The respondents, UPPCL and BRPL have submitted that the petitioner's request for reimbursement for licence fee should be rejected as license fee is the eligibility fee of a licence holder and it is the onus of the petitioner. The petitioner's prayer for licence fee shall be dealt with in accordance with our order dated 25.10.2011 in Petition No. 21/2011 and 22/2011.

SERVICE TAX

52. The petitioner has made a prayer to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The respondents, BRPL and UPPCL objected to levying of service tax on the beneficiaries and have submitted that the petitioner's request for recovery of service tax is pre-mature. We consider the prayer of the petitioner pre-mature and accordingly it is rejected.

SHARING OF TRANSMISSION CHARGES

53. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 regulation up to 30.6.2011. With effect from 1.7.2011, the billing, collection & disbursement of the transmission charges shall be governed by the provision of Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010 as amended.



54. This order disposes of Petition No.87/TT/2011.

Sd/-

Sd/-

Sd/-

(M. Deena Dayalan) Member (S. Jayaraman) Member (Dr. Pramod Deo) Chairperson



<u>Annexure</u>

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

| | | | | (₹ in lakh) |
|---|---|---------------------------------------|-----------------|-------------|
| | Details of Loan | 2011-12 | 2012-13 | 2013-14 |
| 1 | Bond XXVIII | | | |
| | Gross loan opening | 7900.00 | 7900.00 | 7900.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 658.33 |
| | Net Loan-Opening | 7900.00 | 7900.00 | 7241.67 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 658.33 | 658.33 |
| | Net Loan-Closing | 7900.00 | 7241.67 | 6583.33 |
| | Average Loan | 7900.00 | 7570.83 | 6912.50 |
| | Rate of Interest | 9.33% | 9.33% | 9.33% |
| | Interest | 737.07 | 706.36 | 644.94 |
| | Rep Schedule | 12 Annual ii | nstalments fron | 15.12.2012 |
| | | | | |
| 2 | Bond XXIX | | | |
| | Gross loan opening | 5298.00 | 5298.00 | 5298.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 441.50 |
| | Net Loan-Opening | 5298.00 | 5298.00 | 4856.50 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 441.50 | 441.50 |
| | Net Loan-Closing | 5298.00 | 4856.50 | 4415.00 |
| | Average Loan | 5298.00 | 5077.25 | 4635.75 |
| | Rate of Interest | 9.20% | 9.20% | 9.20% |
| | Interest | 487.42 | 467.11 | 426.49 |
| | Rep Schedule | 12 Annual instalments from 12.03.2013 | | |
| 3 | Bond XXX | | | |
| | Gross loan opening | 4135.00 | 4135.00 | 4135.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 4135.00 | 4135.00 | 4135.00 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 344.58 |
| | Net Loan-Closing | 4135.00 | 4135.00 | 3790.42 |
| | Average Loan | 4135.00 | 4135.00 | 3962.71 |



| | Rate of Interest | 8.80% | 8.80% | 8.80% | |
|---|--|--------------|---------------------------------------|--------------|--|
| | Interest | 363.88 | 363.88 | 348.72 | |
| | Rep Schedule | 12 Annual in | nstalments fron | n 29.09.2013 | |
| | • | | | | |
| 4 | Bond XXXI | | | | |
| | Gross loan opening | 2898.00 | 2898.00 | 2898.00 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | |
| | Net Loan-Opening | 2898.00 | 2898.00 | 2898.00 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.00 | 0.00 | 241.50 | |
| | Net Loan-Closing | 2898.00 | 2898.00 | 2656.50 | |
| | Average Loan | 2898.00 | 2898.00 | 2777.25 | |
| | Rate of Interest | 8.90% | 8.90% | 8.90% | |
| | Interest | 257.92 | 257.92 | 247.18 | |
| | Rep Schedule | 12 Annual i | nstalments fron | n 25.02.2014 | |
| | | | | | |
| 5 | Bond XXXIII | | | | |
| - | Gross loan opening | 1850.00 | 1850.00 | 1850.00 | |
| | Cumulative Repayment upto | 0.00 | 0.00 | 0.00 | |
| | DOCO/previous year | | | | |
| | Net Loan-Opening | 1850.00 | 1850.00 | 1850.00 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.00 | 0.00 | 0.00 | |
| | Net Loan-Closing | 1850.00 | 1850.00 | 1850.00 | |
| | Average Loan | 1850.00 | 1850.00 | 1850.00 | |
| | Rate of Interest | 8.64% | 8.64% | 8.64% | |
| | Interest | 159.84 | 159.84 | 159.84 | |
| | Rep Schedule | 12 Annual ii | 12 Annual instalments from 08.07.2014 | | |
| 6 | Bond XXXIV | | | | |
| - | Gross loan opening | 1497.90 | 1497.90 | 1497.90 | |
| | Cumulative Repayment upto | 0.00 | 0.00 | 0.00 | |
| | DOCO/previous year | | | | |
| | Net Loan-Opening | 1497.90 | 1497.90 | 1497.90 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.00 | 0.00 | 0.00 | |
| | Net Loan-Closing | 1497.90 | 1497.90 | 1497.90 | |
| | Average Loan | 1497.90 | 1497.90 | 1497.90 | |
| | Rate of Interest | 8.84% | 8.84% | 8.84% | |
| | Interest | 132.41 | 132.41 132.41 | | |
| | Rep Schedule | 12 Annual i | nstalments fron | n 21.10.2014 | |
| | | | | | |
| | Total Loan | | | | |
| | Gross loan opening | 23578.90 | 23578.90 | 23578.90 | |

| Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 1099.83 |
|--|----------|----------|----------|
| Net Loan-Opening | 23578.90 | 23578.90 | 22479.07 |
| Additions during the year | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 0.00 | 1099.83 | 1685.92 |
| Net Loan-Closing | 23578.90 | 22479.07 | 20793.15 |
| Average Loan | 23578.90 | 23028.98 | 21636.11 |
| Rate of Interest | 9.0697% | 9.0648% | 9.0570% |
| Interest | 2138.54 | 2087.52 | 1959.57 |

