CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 189/TT/2011

Coram:

Dr. Pramod Deo, Chairperson
Shri S. Jayaraman, Member
Shri V.S. Verma, Member
Shri A.S. Bakshi, Member *(Ex-officio)*

Date of Hearing: 14.06.2012
Date of Order : 08.02.2013

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 400/220 kV 500 MVA ICT along with 2 nos. 220 kV Line Bays at Bahadurgarh sub-station under Northern Region System Strengthening Scheme XXIII in Northern Region during 2009-14 period.

And

In the matter of:

Power Grid Corporation of India Limited, Gurgaon ……**Petitioner**

Vs

Haryana Power Purchase Centre, Panchkula … **Respondent**

The following were present:

Shri S.S Raju, PGCIL
Shri B.K. Sahoo, PGCIL
Shri Mahender Singh, PGCIL
Shri T.P.S. Bawa, PSPCL

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of transmission tariff in respect of 400/220kV 500 MVA ICT along with 2 nos. 220 kV Line Bays at Bahadurgarh sub-station under Northern Region System Strengthening Scheme XXIII in Northern Region (hereinafter referred to as “the transmission asset”) during 2009-14 period based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 Tariff Regulations”).

2. The investment approval of the project was accorded by Board of Directors of the petitioner vide memorandum dated 10.12.2009, at an estimated cost of `10972 lakh including interest during construction of `641 lakh, based on 2nd quarter of 2009 price level. The scope of the project includes the following assets:-

(a) **Asset I** : ICT III at Maharanibagh

(b) **Asset II** : ICT IV at Maharanibagh

(c) **Asset III** : ICT II at Lucknow

(d) **Asset IV** : ICT at Bahadurgarh

3. The transmission tariff for Asset I and Asset II were approved by the Commission vide order dated 16.5.2012 in Petition No 3/TT/2011 and transmission tariff for Asset III was approved vide order dated 9.7.2012 in Petition No 146/TT/2011.

4. The instant petition is for determination of transmission tariff in respect of Asset IV based on the actual expenditure incurred up to the date of commercial

operation, i.e. 1.11.2011 and actual/estimated additional capital expenditure projected to be incurred from date of commercial operation to 31.3.2012 and during 2012-13 and 2013-14. The details of apportioned approved cost as on date of commercial operation and additional capital expenditure projected to be incurred for the above mentioned transmission assets are as below:-

(` in lakh)

Apportioned approved cost	**Cost as on date of commercial operation 1.11.2011**	**Proposed expenditure from 1.11.2011 to 31.3.2012**	**Expenditure during 2012-13**	**Expenditure from 2013 - 14**	**Total Estimated completion cost**
2377.78	956.01	951.42	274.67	100	2282.10

5. Details of the transmission charges claimed by the petitioner are as under:-

(` in lakh)

Particulars	**2011-12 (pro-rata)**	**2012-13**	**2013-14**
Depreciation	26.17	117.53	123.26
Interest on Loan	32.52	139.43	135.21
Return on equity	26.78	120.30	126.17
Interest on Working Capital	3.88	16.74	17.41
O & M Expenses	45.39	191.94	202.92
Total	**134.74**	**585.94**	**604.97**

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

(` in lakh)

Particulars	**2011-12 (pro-rata)**	**2012-13**	**2013-14**
Maintenance Spares	27.23	28.79	30.44
O & M expenses	15.13	16.00	16.91
Receivables	89.83	97.66	100.83
Total	**132.19**	**142.45**	**148.18**
Interest	3.88	16.74	17.41
Rate of Interest	11.75%	11.75%	11.75%

7. 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. The reply to the petition has been filed by Punjab State Power Corporation Limited (PSPCL) and BSES Rajdhani Power Limited (BRPL). The respondents have raised the issue of cost variation, additional RoE, initial spares, filing fee, licence fee, service tax and O&M expenses. The objections raised by the respondents are dealt in relevant paragraphs of this order.

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

Capital cost

9. As regards the capital cost, Regulation 7 (1) of the 2009 Tariff Regulations provides as under:-

> “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.”

10. Capital cost of `956.01 lakh as on the date of commercial operation, 1.11.2011, as per management certificate dated 12.6.2012, has been considered for tariff calculation.

Cost variation

11. The total estimated completion cost of the transmission project is `10908 lakh against the total apportioned cost, as per FR, of `10972 lakh. Hence, there is no cost overrun.

12. BRPL has submitted that the reasons given by the petitioner for cost variation in preliminary works & land, foundation for structures, transformers, bus bars/conductors/insulators and structure for switchyard are very casual and the cost variation may not be allowed.

13. The petitioner has submitted, vide affidavit dated 8.2.2012, the reasons for cost variation. As regards the increase in cost of foundation structures and transformer by more than 100% and about 30% respectively, the petitioner has submitted that the actual cost of foundation for ICT and structures increased due to carrying out pile foundations at Bahadurgarh sub-station. The variation in cost of transformer was due to the difference in estimate and actual awarded cost through open competitive bid and price variation. The petitioner was directed further to explain the need for pile foundation in Bahadurgarh sub-station. The petitioner, vide affidavit dated 9.7.2012, has filed a copy of a portion of the recommendations of the "Report on Geotechnical Investigation for 400/220kV Bahadurgarh Sub-station site at Bahadurgarh". We have examined the Report, which has considered the geotechnical aspects and recommended pile foundation. We are convinced with the requirement for pile foundation in the

Bahadurgarh Sub-station and accordingly the additional cost with respect to pile foundation is allowed.

14. Though there is cost variation in some of the elements of the transmission asset, the overall cost of the project is within the apportioned approved cost of the transmission asset. Hence, the cost variation is allowed.

Treatment of initial spares

15. The petitioner has claimed higher initial spares than specified in Regulation 8 of the 2009 Tariff Regulations. The petitioner has submitted that the Bahadurgarh sub-station was commissioned during 2006 with LILO of 400 kV Bawana-Bhiwani line. There was only one 315 MVA ICT and is under commercial operation on 1.11.2006. The 500 MVA 400/220 kV ICT-II along with associated bays is to be put under commercial operation on 1.1.2012 under extension of the sub-station. Mandatory spares were procured by the petitioner for the assets commissioned in 2006 and now mandatory spares for this 500 MVA ICT-II and associated bay equipments are being procured. The ICT-II at Lucknow sub-station is of higher capacity and is different from the existing ICT-I. ICT is critical and costliest equipment in AC sub-station and availability of adequate spares for the same is essential in order to ensure its smooth operation as well as to avoid long outages in case of problem. The petitioner has further submitted that ICT-II is an extension project of sub-station, the % age of cost of initial spares w.r.t. the capital cost for this ICT is higher because of less population of equipments in present project compared to projects having assets along with ICTs in green field sub-station. The initial spares of one model cannot

be used in other modes; hence, higher initial spares are to be procured. In view of above, petitioner has requested to invoke Regulation 44 (Power to Relax) of 2009 Tariff Regulations, for relaxation of Regulation 8 (iv) of the 2009 Tariff Regulations so that the initial spares of sub-station may be allowed in full for the asset covered in the instant petition.

16. BRPL has submitted that the capitalization of the initial spares in the capital cost should be limited to the ceiling norms specified in the 2009 Tariff Regulations. BRPL has also submitted that relaxation of the 2009 Tariff Regulations, for allowing higher % of initial spares, would result in unreasonable benefit to the petitioner and hence the petitioner's request for higher initial spares may be rejected.

17. As per norms, the initial spares are allowed as per the percentage of the capital cost. Since, this equipment is not of special nature, we are not inclined to relax the provisions specified in the 2009 Tariff Regulations and award higher initial spares than specified in the 2009 Tariff Regulations. Accordingly, excess expenditure incurred on initial spares has been reduced from the admitted cost of sub-station as on the date of commercial operation.

18. The details of the initial spares claimed by the petitioner and the initial spares allowed under Regulation (8) of the 2009 Tariff Regulations are as follows:-

(` in lakh)

Rate as per Regulation 8 of the 2009 Tariff Regulations	Expenditure pertaining to sub - station up to cut off date as per charted accountant certificate	Initial spares claimed by the petitioner	Initial spares calculated as per 2009 Tariff Regulations	Excess initial spares disallowed
2	3	4	5 [(3)-(4)]*(2.5)/[100%-(2.5)]	6 [(4)-(5)]
2.50%	2282.10	113.16	55.61	57.55

19. The petitioner has claimed initial spares of `113.16 lakh for sub-station against the maximum permissible limit of `55.61 lakh as per Regulation 8 of the 2009 Tariff Regulations. Thus, the expenditure on initial spares exceeds the limit by `57.55 lakh. The excess initial spares have been reduced from the admitted cost of sub-station as on the date of commercial operation.

20. Since all the assets covered in the project have been commissioned, the initial spares are worked out with reference to the complete project. The initial spares worked out for the whole project is as under:-

(` in lakh)

Asset	Petition No.	Particulars	Cost as on cut-off date pertaining to transmission line & sub-station	Initial spares claimed	Ceiling limit as per 2009 Tariff Regulations	Initial spares worked out / allowed as per ceiling limit	Excess initial spares claimed
			(a)	(b)	(c)	(d)=[(a)-(b)]*(c)/[100%-(c)]	(e)=(b)-(d)
Asset-1	3/2011	SS	3237.33	266.61	2.50%	76.17	190.44
Asset-2		SS	2822.97	266.61	2.50%	67.09	199.52
Asset-3	146/2011	SS	2224.63	79.98	2.50%	54.99	24.99
Asset-4	189/2011	SS inclusive of PLCC	2282.10	113.16	2.50%	55.61	57.55
TOTAL		**Total of SS inclusive of PLCC**	**10567.03**	**726.36**	**2.50%**	**253.86**	**472.5**

21. In view of the foregoing, capital cost of the transmission asset as on the date of commercial operation considered for tariff calculation is `898.46 lakh, after deducting excess initial spares.

Projected additional capital expenditure

22. With regard to additional capital expenditure, clause 9(1) of the 2009 Tariff Regulations provides as under:

> "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;
> (i) Works deferred for execution;
> (ii) Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 8;
> (iii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
> (iv) Change in Law:"

23. The 2009 Tariff Regulations further defines cut-off date as under:-

> "cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and incase 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."

24. As per the above definition, cut-off date for the transmission assets covered in the instant petition is 31.3.2015.

25. The petitioner has claimed additional capital expenditure of `951.42 lakh, `274.67 lakh and `100 lakh for the years 2011-12 (from the date of commercial operation to 31.03.2012), 2012-13 and 2013-14 respectively. As the expenditure during 2011-12 was disproportionate to the expenditure during the other years, the petitioner was asked to explain such huge expenditure during 2011-12. The petitioner has clarified that the additional capital expenditure amounting to `951.42 lakh for the financial year 2011-12 includes `745.37 lakh towards progress payments for ICT (65%), `30.46 lakh on account of 90% PV payments and `175.59 lakh for bay extension payments and major portion of the supply payments was released after commercial operation. It has also been submitted that the additional capital expenditure claimed is mainly on account of balance & retention payments. In view of clarifications provided by petitioner, projected additional capital expenditure has been allowed and has been considered for the purpose of tariff calculation.

Debt- equity ratio

26. Regulation 12 of the 2009 Tariff Regulations provides that:-

> "12. **Debt-Equity Ratio**. (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.
>
> **Explanation.-** The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are

actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(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.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

27. Details of debt-equity in respect of the transmission assets as on the date of commercial operation is as under:-

(` in lakh)

	Approved		**Admitted as on date of commercial operation**	
	Amount	**%**	**Amount**	**%**
Debt	1664.45	70.00	628.93	70.00
Equity	713.33	30.00	269.54	30.00
Total	**2377.78**	**100.00**	**898.47**	**100.00**

28. Debt-equity ratio for projected additional capital expenditure considered in the calculation is as under:-

(` in lakh)

2011-12	**Normative**	
Particulars	**Amount**	**%**
Debt	665.99	70.00
Equity	285.43	30.00
Total	**951.42**	**100.00**
2012-13	**Normative**	
Particulars	**Amount**	**%**
Debt	192.27	70.00
Equity	82.40	30.00
Total	**274.67**	**100.00**
2013-14	**Normative**	
Particulars	**Amount**	**%**
Debt	70.00	70.00
Equity	30.00	30.00
Total	**100.00**	**100.00**

29. Debt- equity ratio as on 31.3.2014 is as under:-

(` in lakh)

	Cost as on 31.03.2014	
Particulars	**Amount**	**%**
Debt	1557.19	70.00
Equity	667.36	30.00
Total	**2224.55**	**100.00**

Return on Equity

30. Regulation 15 of the 2009 Tariff 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% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall 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.

(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 year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

31. The petitioner has submitted that as per the investment approval dated 10.12.2009, the project was scheduled to be commissioned within 24 months from the date of investment approval i.e. by 10.12.2011. The petitioner has claimed additional return on equity of 0.5% as the ICT at Bahadurgarh sub-station along with associated bays has been put under commercial operation before the scheduled commissioning, on 1.11.2011. The petitioner, vide affidavit dated 8.2.2012, has submitted that all the works i.e. award of contract, execution of the project, testing, commissioning, etc. is a new work and all the equipments installed are new, hence the timeline for this project is same as for new 400kV as sub-station i.e. 24 months for plain area from the date of investment approval. The petitioner has also requested to invoke Regulation 44, Power to Relax, of 2009 Tariff Regulations for relaxing the timeline specified in Appendix-II of 2009 Tariff Regulations, so that the timeline specified for a new sub-station for allowing additional return on equity is considered in the case of extension of a sub-station.

32. BRPL has submitted that the petitioner's claim for 0.5% of additional return on equity may not be allowed.

33. No timeline has been specified in the Appendix-II of the 2009 Tariff Regulations for allowing additional return on equity for commissioning only an

ICT in an existing sub-station. We do not find any reason to apply the timeline specified in the Appendix II of the 2009 Tariff Regulations for a new sub-station to an ICT to be set up in an existing sub-station. Accordingly, the petitioner's request to invoke Regulation 44, Power to Relax, for relaxing the timeline specified in Appendix-II of 2009 Tariff Regulations is rejected. Further, we are of the consistent view that additional return on equity of 0.5% shall be admissible only when all the elements of the project are completed within the timeline specified in Appendix II of the 2009 Tariff Regulations. This view has been upheld by the Hon'ble Appellate Tribunal for Electricity in its order dated 10.5.2012 in Appeal No. 155 of 2011 filed by the petitioner. It is observed that the 400/220 kV sub-station (Extension)-1X500 MVA, 400/220 kV Transformer at Lucknow was commissioned on 1.2.2012, i.e. after the scheduled commissioning of 10.12.2011. Thus, all the assets of the transmission project were not commissioned within the scheduled date of commissioning and hence the petitioner's request for additional return on equity is rejected.

34. Based on the above, the following return on equity has been allowed:-

(` in lakh)

Particulars	**2011-12 (pro-rata)**	**2012-13**	**2013-14**
Opening Equity	269.54	554.96	637.36
Addition due to Additional Capitalisation	285.43	82.40	30.00
Closing Equity	554.96	637.36	667.36
Average Equity	412.25	596.16	652.36
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	30.03	104.22	114.04

Interest on loan

35. Regulation 16 of the 2009 Tariff 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."

36. In these calculations, interest on loan has been worked out as detailed overleaf:-

(a) 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.

(b) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.

(c) 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.

37. Detailed calculation of the weighted average rate of interest has been given in the Annexure to this order.

38. Details of the interest on loan worked on the above basis is as under:-

(` in lakh)

	2011-12 (pro-rata)	**2012-13**	**2013-14**
Gross Normative Loan	628.93	1294.92	1487.19
Cumulative Repayment upto Previous Year	0.00	30.30	135.41
Net Loan-Opening	628.93	1264.62	1351.78
Addition due to Additional Capitalisation	665.99	192.27	70.00
Repayment during the year	30.30	105.10	115.01
Net Loan-Closing	1264.62	1351.78	1306.78
Average Loan	946.77	1308.20	1329.28
Weighted Average Rate of Interest on	9.1682%	9.0864%	9.0864%

Loan			
Interest	36.17	118.87	120.78

Depreciation

39. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner, namely:

> "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
> 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 assets 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."

40. The petitioner initially, at the time of filing the petition, submitted the statement of capital cost according to the anticipated date of commercial operation i.e. 1.1.2012. However, the date of commercial operation of the transmission of the asset was 1.11.2011 and thus, there is a reduction in the capital cost as on date of commercial operation. Further, the capital cost as on

the date of commissioning has been restricted due to reduction of excess initial spares claimed by the petitioner. The additional capital expenditure has also undergone change as compared to the additional capital expenditure furnished in the original petition.

41. Accordingly, depreciation has been worked out on the basis of capital expenditure as on the date of commercial operation, wherein depreciation for the first year has been calculated on *pro-rata* basis for the part of year.

42. Details of the depreciation worked out are as under:-

(` in lakh)

Particulars	**2011-12 (pro-rata)**	**2012-13**	**2013-14**
As per previous tariff order	898.46	1849.88	2124.55
Addition during 2009-14 due to Projected additional capital expenditure	951.42	274.67	100.00
Gross Block	1849.88	2124.55	2224.55
Average Gross Block	1374.17	1987.22	2174.55
Rate of Depreciation	5.29%	5.29%	5.29%
Depreciable Value	1236.76	1788.50	1957.10
Remaining Depreciable Value	1236.76	1758.19	1821.69
Depreciation	30.30	105.10	115.01

Operation & maintenance expenses

43. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

Element	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
400 kV bays (` in lakh per bay)	52.40	55.40	58.57	61.92	65.46

220 kV bays (` in lakh per bay)	36.68	38.78	41.00	43.34	45.82

(` in lakh)

44. Based on the above norms, the petitioner has calculated the following operation and maintenance expenses which are allowed: -

(` in lakh)

Elements	**2011-12 (pro-rata)**	**2012-13**	**2013-14**
1 no. 400 kV bay	24.40	61.92	65.46
3 nos. 220 kV bays	51.25	130.02	137.46
Total O&M expenses	**75.65**	**191.94**	**202.92**

45. 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 also submitted that it would approach Commission for suitable revision in the norms for O&M expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

46. BRPL has submitted that the Commission has already covered the increase in employee cost on account of pay revision of the employees of Public Service Undertakings in the O&M expenses for the year 2009-10 by rationalizing the O&M expenses by 50% increase for increase in employee cost. Any further

increase in the employee cost should be taken care by the petitioner by improving its productivity levels and the beneficiaries are not unduly burdened over and above the provisions made in the 2009 Tariff Regulations.

47. We would like to clarify that the O&M expenses have been allowed as per the norms specified in the 2009 Tariff Regulations. If any application is filed by the petitioner for revision of O&M norms on account of impact of pay revision, it will be dealt in accordance with law.

Interest on working capital

48. As per the 2009 Tariff Regulations 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 Tariff Regulations, receivables will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of 2 months of annual 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 Tariff 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 Tariff 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 the respective year as claimed in the petition. This has been considered in the working capital.

(iv) Rate of interest on working capital

In these calculations, SBI Base Rate of 8.25%, as on 1.4.2011 Plus 350Bps i.e. 11.75% has been considered as the rate of interest on working capital.

49. Necessary computations in support of interest on working capital are appended herein below:-

(` in lakh)

	2011-12 (pro-rata)	**2012-13**	**2013-14**
Maintenance Spares	27.23	28.79	30.44
O & M expenses	15.13	16.00	16.91
Receivables	71.08	89.31	94.91
Total	**113.44**	**134.10**	**142.26**
Rate of Interest	11.75%	11.75%	11.75%
Interest	5.55	15.76	16.72

<u>Transmission Charges</u>

50. The transmission charges being allowed for the transmission assets are summarized as under:-

(` in lakh)

Particulars	**2011-12 (pro-rata)**	**2012-13**	**2013-14**
Depreciation	30.30	105.10	115.01
Interest on Loan	36.17	118.87	120.78
Return on equity	30.03	104.22	114.04
Interest on Working Capital	5.55	15.76	16.72
O & M Expenses	75.65	191.94	202.92

Total	**177.70**	**535.88**	**569.46**

Filing fee and the publication expenses

51. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that Commission in order dated 11.9.2008 in Petition No.129/2005 has rejected the petitioner's request of reimbursement of application filing fee and accordingly the petitioner's request in the instant case should also be rejected. It is clarified that Petition No.129/2005 pertains to 2004-09 tariff period. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009, pertaining to 2009-14 period, 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

52. The petitioner has submitted that in 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. BRPL has submitted that licence fee is part of the O&M expenses and there is no separate provision for reimbursement for licence fee in 2009 Tariff Regulations and hence petitioner's request for reimbursement of licence fee should be rejected. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A(1)(b) of the 2009 Tariff Regulations.

Service tax

53. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. BRPL has submitted that service tax on transmission of electricity is exempted. We consider the prayer of the petitioner pre-mature and accordingly this prayer is rejected.

Sharing of transmission charges

54. The Punjab State Power Corporation Limited (PSPCL) in its reply has submitted that the Commission's Sharing of Inter-State Transmission Charges and Losses Regulations (hereinafter referred to as "POC regulations") have come into force on 1.7.2011 and the petition was filed during August, 2011. Since the transmission charges are shared as per POC regulations, all the Northern Region constituents are required to be made respondents, instead of just Haryana.

55. The representative of PSPCL reiterated the submissions made in its reply dated 5.6.2012 during the hearing on 14.6.2012. In response, the representative of the petitioner submitted that before the POC regulations came into force on 1.7.2011, it was a bilateral issue and that the petitioner has already filed Petition No.199/MP/2011 seeking clarifications regarding publication of notices regarding tariff petitions and related matters. We then observed that the prayer of PSPCL would be decided in the light of the order to be issued in Petition No.199/MP/2011.

56. The Commission in its order dated 17.9.2012 in Petition No. 199/MP/2011 has held as under:-

> "13. As regards the serving of petitions on the beneficiaries, similar is the procedure as in the case of publication, as the PoC does not change the process of determination of tariff. Accordingly, the existing process of serving the copies of the petition on the identified beneficiaries shall continue. PoC charges will be shared by all DICs depending on the amount of injection and drawl, there is a requirement to give opportunity of hearing to all DICs. Therefore, without amending the existing procedure, we direct that the petitioner shall send the PDF version of the petition and other documents by e-mail to all DICs before filing an application for determination of tariff."

57. In view of the above order, the existing practice of serving the copies of the petition on the identified beneficiaries shall be applicable in the instant petition. As regards billing, collection & disbursement of the transmission charges, it shall be governed by the provision of Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010, as amended from time to time.

58. This order disposes of Petition No. 189/TT/2011.

sd/-	sd/-	sd/-	sd/-
(A S Bakshi)	**(V. S. Verma)**	**(S. Jayaraman)**	**(Dr. Pramod Deo)**
Member	**Member**	**Member**	**Chairperson**
(Ex-officio)			

Annexure

(` in lakh)

	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	**2011-12**	**2012-13**	**2013-14**
1	**Bond- XXXIII**			
	Gross loan opening	49.64	**49.64**	**49.64**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**	**0.00**
	Net Loan-Opening	49.64	49.64	49.64
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	49.64	49.64	49.64
	Average Loan	49.64	49.64	49.64
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	4.29	4.29	4.29
	Rep Schedule	12 Annual instalments from 08.07.2014		
2	**Bond XXXIV**			
	Gross loan opening	196.00	**861.99**	**861.99**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**	**0.00**
	Net Loan-Opening	196.00	861.99	861.99
	Additions during the year	665.99	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	861.99	861.99	861.99
	Average Loan	529.00	861.99	861.99
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	46.76	76.20	76.20
	Rep Schedule	12 Annual instalments from 21.10.2014		
3	**Bond XXXV**			
	Gross loan opening	423.57	**423.57**	**423.57**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**	**0.00**
	Net Loan-Opening	423.57	423.57	423.57
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	423.57	423.57	423.57
	Average Loan	423.57	423.57	423.57
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	40.83	40.83	40.83
	Rep Schedule	12 Annual instalments from 31.05.2015		

	Total Loan			
	Gross loan opening	669.21	1335.20	1335.20
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	669.21	1335.20	1335.20
	Additions during the year	665.99	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1335.20	1335.20	1335.20
	Average Loan	1002.21	1335.20	1335.20
	Weighted Average Rate of Interest	**9.17%**	**9.09%**	**9.09%**
	Interest	91.88	121.32	121.32