# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## **Petition No. 117/2010**

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

Date of Hearing: 19.5.2011 Date of Order:16.3.2012

#### 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 from date of commercial operation to 31.3.2014 for 220/132 kV, 100 MVA ICT-II at Sitarganj along with associated bays under System Strengthening Scheme in Uttaranchal for tariff block 2009-14 period in Northern Region under Regulation of 2009.

#### And

In the matter of:

PowerGrid Corporation of India Ltd., Gurgaon ......Petitioner

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Uttarakhand Power Corporation Ltd., Dehradun ......Respondent

#### The following were present:

- 1. Shri. S.S. Raju, PGCIL
- 2. Shri. Rajeev Gupta, PGCIL
- 3. Shri U. K. Tyaqi, PGCIL

#### <u>ORDER</u>

This petition has been filed by PGCIL seeking approval of transmission tariff, from date of commercial operation to 31.3.2014, for 220/132 kV D/C, 100 MVA ICT-II at Sitarganj along with associated bays under transmission system



associated with Northern Region System Strengthening Scheme (hereinafter referred to as "transmission assets"), for tariff block 2009-14, 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 assets covered in the petition and dates of their commercial operation are as under:-

Assets	DOCO	Nos. of bays	
Sub-Station/ Bay:			
220 kV, ICT-II at Sitarganj bay	1.8.2009	1	
132 kV, ICT-II at Sitarganj bay	1.8.2009	3	

- 3. The administrative approval and expenditure sanction to the transmission project was accorded by Board of Directors vide Memorandum ref. C/CP/N79-00 dated 13.7.2004 for estimated completion cost of ₹7642 lakh, including IDC of ₹305 lakh (based on 4th quarter, 2003 price level). The Revised Cost Estimate has been approved by the Board of Directors vide Memorandum dated 20.12.2010, at the estimate cost of ₹14258 lakh including IDC of ₹779 lakh at 2nd quarter, 2010, price level.
- 4. Details of the transmission charges claimed by the petitioner are given hereunder:-

	2009-10 (Pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	64.52	104.17	105.65	105.65	105.65
Interest on Loan	88.41	139.63	132.03	122.07	112.13
Return on equity	71.98	119.88	121.71	121.71	121.71
Interest on Working Capital	8.53	13.68	13.94	14.10	14.28
O & M Expenses	76.85	121.88	128.84	136.22	144.01
Total	310.29	499.24	502.17	499.75	497.78

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

(₹ in lakh						
	2009-10 (Pro-rata)	2010-11	2011-12	2012-13	2013-14	
Maintenance Spares	17.29	18.28	19.33	20.43	21.60	
O & M expenses	9.61	10.16	10.74	11.35	12.00	
Receivables	77.57	83.21	83.70	83.29	82.96	
Total	104.47	111.65	113.77	115.07	116.56	
Interest	8.53	13.68	13.94	14.10	14.28	
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	

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- 6. 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 respondent, Uttarakhand Power Corporation Limited, has not filed any reply to the petition.
- 7. Having heard the representative of the parties and perused the material on record, we proceed to dispose of the petition.

## CAPITAL COST

8. 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."

9. Petitioner, vide affidavit dated 12.5.2011, submitted that the Auditor's Certificate has been revised due to change in project expenditure. Accordingly, revised Auditor's certificate has been considered for the purpose of tariff

calculation. Details of actual expenditure incurred up to date of commercial operation and additional capital expenditure projected to be incurred for the asset covered in this petition are summarized below.

(₹ in lakh)

Particular	Apportioned approved cost	Revised Cost Estimate	Actual cost incurred as on DOCO (claimed)	Expenditure from DOCO to 31.3.2010	Expenditure from 1.4.2010 to 31.3.2011	Total estimated completion cost
220/132 kV, 100 MVA ICT-II at Sitarganj along with associated bays (Asset -1)	1117.85	2326.00	1867.40	384.15	69.79	2321.34

Capital cost as on the date of commercial operation is inclusive of initial spares of ₹37.45 lakh which falls within the ceiling limit specified in Regulation 8 of 2009 regulations.

10. The petitioner has claimed the capital cost of ₹1867.40 lakh as on the date of commercial operation as per Auditor's Certificate dated 27.12.2010. Capital expenditure of ₹1747.06 lakh (excluding disallowed IDC and IEDC) has been considered for the purpose of tariff calculation as on the date of commercial operation.

## TREATMENT OF IDC AND IEDC

11. As per the investment approval, the transmission assets are scheduled to be commissioned within 24 months from the first Letter of Award for transformation package i.e. March 2005. Accordingly, the transmission assets were scheduled to be commissioned by April 2007. However, the transmission

assets were declared under commercial operation on 1.8.2009 i.e. after 28 months of the scheduled date.

- 12. Time overrun of 28 months has been attributed to unprecedented rain/flood in the vicinity of sub-station, Civil Suits filed by PGCIL for land acquisition in Courts of Civil Judge/ District Court, Writ petition in High Court and delay in supply of 220/132 kV transformer due to shortage of CRGO core lamination and condenser bushing in the international market.
- 13. Petitioner, vide affidavit dated 5.7.2010, has submitted that due to heavy rain/flood no work could be carried out during July to October, 2006 and the foundation work 220 kV and 132 kV switchyard was completed in May, 2007. Thus, by May, 2007 only foundation work was completed, while March, 2007 was the scheduled commissioning date. Rain during monsoon months is a normal phenomenon and it cannot be considered as force-majeure. The work could have been planned accordingly to avoid delay in the project. Further, no documentary evidence was provided by the petitioner showing flood in the substation area during this period. Thus, keeping in view that there was no major hindrance to work, all the works except commissioning of ICT could have been completed by March, 2007.
- 14. Petitioner has also submitted that the work was stopped in the 132 kV switchyard, from March, 2007 to April, 2008, due to court orders. Some area of ICT foundation was also in the disputed land. The court gave permission to resume the work on 21.4.2008 and the erection and testing of the 220 kV and 145 kV equipments was taken up after getting the permission and was

completed in February, 2009. However, the ICT was supplied in April, 2009 against the schedule of September, 2006. Subsequently, the erection of transformer was completed in June, 2009 and after CEA inspection the ICT was declared under commercial operation on 1.8.2009.

- 15. The petitioner has also submitted that there was Liquidated Damages clause (LD) in the LOA for supply of ICT. Few elements of the project are yet to be commissioned and hence the contract could not be closed. The Liquidated Damages, if any would be settled at the time of closing the contract and the same would be accounted for in the project cost.
- 16. The petitioner, vide affidavit dated 24.6.2011, has submitted that there was CRGO shortage during 2005 and 2006, due to which the manufacturer rescheduled the delivery of transformer. The second ICT was supplied in April, 2009 against the scheduled delivery of September, 2006. It was also submitted that the delay in commissioning of ICT-II is due to shortage of CRGO and bushings initially and later on due to court case, and hence the reasons for delay were beyond the control of the petitioner.
- 17. From the submissions of the petitioner and the documents enclosed with the petition, it has been noted that the supplier of the ICT i.e. M/s Transformers & Rectifiers (India) Ltd. had rescheduled the supply of second transformer to September, 2007. M/s Transformers & Rectifiers (India) Ltd., in its letter dated 2.5.2007, has stated that due to CRGO shortage, the supply of ICTs for Sitarganj had to be reschedule to June and September, 2007. However, the petitioner has not submitted any documentary evidence justifying the reasons for

delay in supply of ICT beyond September, 2007. Further, M/s Areva in its letter dated 3.10.2007, has also stated that the petitioner has not intimated the date of delivery of transformers at site inspite of repeated reminders. Therefore, it has been observed that supplier was willing to supply transformers in September, 2007, but there was delay on the part of PGCIL. The petitioner has not given sufficient reasons for delay in supply of transformer beyond September, 2007.

18. As per the schedule, work was due to be completed by March, 2007. On account of the court case, the supply of ICT was rescheduled to September, 2007. However, there was no embargo on the petitioner to complete other works related to bay equipment, etc., by the schedule date. The petitioner obtained the permission from the court on 21.4.2008 for resumption of work. It was expected of the petitioner to complete the residual work as well as the commissioning of the ICT much earlier than the actual date of completion since the supplier was ready to supply ICT in September, 2007. Keeping in view the total erection time of 8 months as per the schedule, four months from May, 2008 to August, 2008 is considered adequate for completion of the rest of the work after permission was granted by the Court. Accordingly, the delay upto August, 2008 has been condoned and delay beyond August, 2008 i.e. September, 2008 to July, 2009 has not been condoned, since the petitioner has not given any justification for delay in starting the work before the institution of court case in March, 2007 and delay in supply of ICT beyond September, 2007, despite the readiness of M/s. Areva to supply the ICT. Accordingly, IDC and IEDC for 11 from September, 2008 to July, 2009 months have not been allowed. The petitioner is at liberty to claim the liquidated damages from the supplier of ICT for delay in supply of the ICT by the OEM.

- 19. The date of Investment Approval is 13.7.2009 and the date of First Letter of Award is March, 2005. The petitioner has claimed the IDC and IEDC w.e.f. the date of Letter of Award. Accordingly, IDC and IEDC had been allowed from the date of First Letter of Award after deducting the period of 11 months on account of delay on the part of the petitioner.
- 20. Detail of disallowed IDC and IEDC is as follows:-

(₹ In lakh)					
Detail of IDC and IEDC as per CA Certificate dated 27	.12.2010				
	IEDC	IDC			
From the date of first letter of award to 31.03.2009	322.19	131.84			
From 01.04.2009-31.07.2009	13.44	40.69			
Total IDC and IEDC Claimed	335.63	172.53			
Detail of IDC and IEDC Disallowed for 11 months					
From Sep'08 to March'09 (for 7 months)	46.99	19.23			
From April'09 to July'09 (for 4 months)	13.44	40.69			
Total Disallowed IDC and IEDC (for 11 months)	60.43	59.92			

21. Detail of capital cost, as on date of commercial operation, considered for the purpose of tariff calculation is as given hereunder:-

(₹ in lakh)

Capital Cost claimed as on DOCO	IDC and IEDC deducted as per Engineering Input	Capital Expenditure considered for the purpose of tariff calculation as on DOCO	
(a)	(b)	(c )=(a)-(b)	
1867.40	(120.34)	1747.06	

# **ADDITIONAL CAPITAL EXPENDITURE**

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

- (i) Undischarged liabilities;
- (ii) XXX
- (iii) XXX



<sup>&</sup>quot;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:

(iv) XXX (iv) XXX"

23. As per Regulations 2009,

"Cut-off date means 31<sup>st</sup> 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 31<sup>st</sup> March of the year closing after 3 years of the year of commercial operation".

Therefore, cut-off date for the above mentioned Asset is 31.3.2012

24. Details of proposed additional capital expenditure for above mentioned asset are as under:-

(₹ In lakh)

Year	Work/Equipment proposed to be added after COD upto cut off date / beyond cutoff date	Amount capitalized and proposed to be capitalized	Justification as per purpose
	Building	149.67	Dolonos 9 rotontion
2009-10	Substation	129.48	Balance & retention payments
	Free Hold Land	105.00	paymonts
	Subtotal	384.15	
	Building	37.42	Balance & retention
2010-11	Substation	32.37	payments
	Subtotal	69.79	
	Total	453.94	

#### **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 opening debt-equity of asset considered for the purpose of tariff calculation as on the date of commercial operation are as follows:-



(₹ in lakh)

Financial Package					
	Amount (₹ in lakh)	%			
Debt	1223.10	70.01			
Equity	523.96	29.99			
Total	1747.06	100.00			

27. Details of debt- equity ratio of assets as on 31.3.2014 are as follows:-

(₹ in lakh)

Capital cost as on 31.3.2014					
	Amount %				
	(₹ in lakh)				
Debt	1540.86	70.01			
Equity	660.14	29.99			
Total	2201.00	100.00			
Debt	1540.86	70.01			
Equity	660.14	29.99			

28. Details of projected additional capital expenditure claimed by the petitioner are given as under:-

(₹ in lakh)

	(* III lakii)				
Particulars	Additional capital expenditure for 2009-10				
	(₹ in lakh) %				
	Nominative				
Debt	268.91	70.00			
Equity	115.25	30.00			
Total	384.15	100.00			
Particulars	Additional Capi	tal for 2010-11			
Debt	48.85	70.00			
Equity	20.94	30.00			
Total	69.79	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. In this order, Return on Equity has been calculated as per Regulation 15 of the 2009 regulations with pre-tax of 17.481%. The petitioner's prayer to allow grossing up the base rate of ROE based on the tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per the relevant Finance Act, has already been taken care of through the second amendment to the 2009 regulations
- 31. The following amount of equity has been considered for calculation of return of equity:-



(₹ in lakh)

Equity as on DOCO	Equity due to ACE for the period 2009- 2010	Total equity considered for tariff calculation s for the period 2009-2010*	Equity due to ACE for the period 2010- 2011	Total equity considered for tariff calculations for the period 2010- 2011*	Equity due to ACE for the period 2011- 2014	Total equity considered for tariff calculations for the period 2011-2014*
523.96	115.25	581.58	20.94	649.67	0.00	660.14

- \* Average equity corresponding to ACE has been considered for working out return of equity during these periods. Return on Equity has been calculated as follows- Base rate / (1-t), where Base rate is 15.5 % and the period 2008-09 applicable to Power Grid which is under MAT i.e. 10% + surcharge @ 10%+3 % Education Cess.
- 32. In view of the above, the following amount of equity has been considered for calculation of return of equity:-

(₹ in lakh)

	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14	
Opening Equity	523.96	639.20	660.14	660.14	660.14	
Addition due to Additional Capitalisation	115.25	20.94	0.00	0.00	0.00	
Closing Equity	639.20	660.14	660.14	660.14	660.14	
Average Equity	581.58	649.67	660.14	660.14	660.14	
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%	15.50%	
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%	11.33%	11.33%	
Rate of Return on Equity (Pre Tax )	17.481%	17.481%	17.481%	17.481%	17.481%	
Return on Equity (Pre-Tax)	67.78	113.57	115.40	115.40	115.40	

# **INTEREST ON LOAN**

- 33. 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."

- 34. In these calculations, interest on loan has been worked out as under:-
  - (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) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;
  - (c) Moratorium period 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; and

- (d) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.
- 35. The methodology followed for the calculation of weighted average rate of interest in case of floating interest loans in Petition No. 132/2010 the same has been adopted in the instant petition. Accordingly, the interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009/date of commercial operation. Any change in the rate of interest subsequently to 1.4.2009/ date of commercial operation will be considered at the time of truing up.
- 36. Detailed calculations of the weighted revised average rate of interest have been given in Annexure to this order.
- 37. Details of the interest on loan worked on the above basis are given overleaf:-

2009-10

2010-11 2011-12 2012-13 2013-14 (pro-rata) Gross Normative Loan 1223.10 1492.00 1540.86 1540.86 1540.86 Cumulative Repayment upto 357.89 0.00 60.50 158.64 258.27 Previous Year 1223.10 1431.51 1382.21 1282.59 1182.96 Net Loan-Opening Addition due to Additional 268.91 48.85 0.00 0.00 0.00 Capitalisation 60.50 98.14 99.62 99.62 99.62 Repayment during the year Net Loan-Closing 1431.51 1382.21 1282.59 1182.96 1083.34

Average Loan 1327.30 1406.86 1332.40 1232.78 1133.15 Weighted Average Rate of 9.4047 9.4043 9.4067% 9.4088% 9.4086% Interest on Loan % Interest 83.26 132.37 125.33 115.94 106.57

## **DEPRECIATION**

38. Petitioner has claimed actual depreciation as a component of Annual Fixed Charges. However, 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. Asset in the current petition was put under commercial operation as on 1.8.2009 and accordingly will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix –III of 2009 regulations.
- 40. Details of the depreciation worked out are given hereunder:-

	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	1747.06	2131.21	2201.00	2201.00	2201.00
Addition during 2009-14 due to Projected Additional Capitalisation	384.15	69.79	0.00	0.00	0.00
Closing Gross Block	2131.21	2201.00	2201.00	2201.00	2201.00
Average Gross Block	1939.13	2166.10	2201.00	2201.00	2201.00
Rate of Depreciation	4.6798%	4.5309%	4.5263%	4.5263%	4.5263%
Depreciable Value	1649.55	1806.57	1837.98	1837.98	1837.98
Remaining Depreciable Value	1649.55	1746.07	1679.33	1579.71	1480.09
Depreciation	60.50	98.14	99.62	99.62	99.62



## **OPERATION & MAINTENANCE EXPENSES**

41. Clause (9) of Regulation 19 of the 2009 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 petitioner are as under:-

Element	2009-10	2010-11	2011-12	2012-13	2013-14
220 kV, bay (₹in lakh / bay)	36.68	38.78	41.00	43.34	45.82
132 kV & below bay (₹ in lakh/bay.)	26.20	27.70	29.28	30.96	32.73

42. As per the above mentioned norms the allowable O&M expenses for the assets covered in the petition works out are given hereunder:-

					(₹ in lakh)
Element	2009-10 (Pro-rata for 8 months)	2010-11	2011-12	2012-13	2013-14
220 kV bay	24.45	38.78	41.00	43.34	45.82
132 kV bays	52.40	83.10	87.84	92.88	98.19
O&M expenditure	76.85	121.88	128.84	136.22	144.01

43. The Petitioner has stated that O&M expenditure 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 charges for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%. It is clarified that, if any, application for revision of

norms of O&M expenditure is filed by the petitioner in future, it will be dealt with in accordance with law.

# **INTEREST ON WORKING CAPITAL**

- 44. 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: Maintenance spares have worked on the based on 15% of Operation and Maintenance expenses specified in Regulation 19 of the 2009.
  - (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 these calculations, SBI PLR as on 1.4.2009, i.e., interest rate of 12.25%, has been considered for calculating interest on working capital in accordance with the 2009 regulations.
- 45. Necessary computations in support of interest on working capital are appended overleaf:-



(₹ in lakh)

	2009-10 (Pro-rata for eight months)	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	17.29	18.28	19.33	20.43	21.60
O & M expenses	9.61	10.16	10.74	11.35	12.00
Receivables	74.16	79.87	80.46	80.15	79.92
Total	101.06	108.31	110.52	111.93	113.52
Interest	8.25	13.27	13.54	13.71	13.91

# TRANSMISSION CHARGES

46. The transmission charges allowed for the transmission lines are summarized hereunder:-

(₹ in lakh)

					(
	2009-10 (Pro-rata for eight months)	2010-11	2011-12	2012-13	2013-14
Depreciation	60.50	98.14	99.62	99.62	99.62
Interest on Loan	83.26	132.37	125.33	115.94	106.57
Return on equity	67.78	113.57	115.40	115.40	115.40
Interest on Working Capital	8.25	13.27	13.54	13.71	13.91
O & M Expenses	76.85	121.88	128.84	136.22	144.01
Total	296.63	479.23	482.74	480.89	479.50

## FILING FEE AND THE PUBLICATION EXPENSES

47. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. 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 beneficiaries. Accordingly, expenses incurred by the petitioner on application filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiaries on pro-rata basis.

#### **LICENCE FEE**

48. The petitioner has prayed to bill and recover the license fee separately from the respondents. 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**

49. 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. We consider the prayer of the petitioner pre-mature and accordingly this prayer is rejected.

## **SHARING OF TRANSMISSION CHARGES**

- 50. 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.
- 51. This order disposes of Petition No. 117/2010.

Sd/- Sd/- Sd/-

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



## **ANNEXURE**

## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

	(₹ in laki					
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond-XXI					
	Gross loan opening	10.00	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.83	1.67	2.50
	Net Loan-Opening	10.00	10.00	9.17	8.33	7.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.83	0.83	0.83	0.83
	Net Loan-Closing	10.00	9.17	8.33	7.50	6.67
	Average Loan	10.00	9.58	8.75	7.92	7.08
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	0.87	0.84	0.76	0.69	0.62
	Rep Schedule			nstalments from		
	The Communication of the Commu					
2	Bond-XXII					
	Gross loan opening	27.00	27.00	27.00	27.00	27.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	2.25	4.50	6.75
	Net Loan-Opening	27.00	27.00	24.75	22.50	20.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	2.25	2.25	2.25	2.25
	Net Loan-Closing	27.00	24.75	22.50	20.25	18.00
	Average Loan	27.00	25.88	23.63	21.38	19.13
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	2.34	2.25	2.05	1.86	1.66
	Rep Schedule		12 Annual ir	nstalments from	07.12.2010	
3	Bond-XXIV					
	Gross loan opening	63.00	63.00	63.00	63.00	63.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	5.25	10.50	15.75
	Net Loan-Opening	63.00	63.00	57.75	52.50	47.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	5.25	5.25	5.25	5.25
	Net Loan-Closing	63.00	57.75	52.50	47.25	42.00
	Average Loan	63.00	60.38	55.13	49.88	44.63
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%
	Interest	6.27	6.01	5.48	4.96	4.44
	Rep Schedule	12 Annual instalments from 26.03.2011				
4	Bond- XXVII					
_4	DOING- AAVII					



	Gross loan opening	700.00	700.00	700.00	700.00	700.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	58.33	116.67
	Net Loan-Opening	700.00	700.00	700.00	641.67	583.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	58.33	58.33	58.33
	Net Loan-Closing	700.00	700.00	641.67	583.33	525.00
	Average Loan	700.00	700.00	670.83	612.50	554.17
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%
	Interest	66.29	66.29	63.53	58.00	52.48
	Rep Schedule		12 Annual ir	nstalments from	31.03.2012	
5	Bond- XXVIII					
	Gross loan opening	427.00	427.00	427.00	427.00	427.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	35.58
	Net Loan-Opening	427.00	427.00	427.00	427.00	391.42
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	35.58	35.58
	Net Loan-Closing	427.00	427.00	427.00	391.42	355.83
	Average Loan	427.00	427.00	427.00	409.21	373.63
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	39.84	39.84	39.84	38.18	34.86
	Rep Schedule		15.12.2012			
6	Bond- XXIX					
	Gross loan opening	80.35	80.35	80.35	80.35	80.35
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	6.70
	Net Loan-Opening	80.35	80.35	80.35	80.35	73.65
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	6.70	6.70
	Net Loan-Closing	80.35	80.35	80.35	73.65	66.96
	Average Loan	80.35	80.35	80.35	77.00	70.31
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	7.39	7.39	7.39	7.08	6.47
	Rep Schedule		12 annuai ir	natalments from	12.03.2013	
	Total Loan					
	Gross loan opening	1307.35	1307.35	1307.35	1307.35	1307.35
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	8.33	75.00	183.95
	Net Loan-Opening	1307.35	1307.35	1299.02	1232.35	1123.40
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	66.67	108.95	108.95
П	Net Loan-Closing	1307.35	1299.02	1232.35	1123.40	1014.46
	Average Loan	1307.35	1303.18	1265.68	1177.88	1068.93
	Rate of Interest	9.4088%	9.4086%	9.4067%	9.4047%	9.4043%
	Interest	123.01	122.61	119.06	110.78	100.53

