

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 182/TT/2011**

**Coram:**

**Shri V.S. Verma, Member  
Shri Deena Dayalan, Member**

**Date of Hearing: 18.6.2012**

**Date of Order : 26.6.2013**

**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 from projected date of commercial operation, 1.1.2012 to 31.3.2014, for 400 kV D/C Bhiwadi-Neemrana line along with associated bays under the transmission system associated with Northern Region System Strengthening Scheme-XV (NRSSS-XV) for tariff block 2009-14 period in Northern Region.

**And**

**In the matter of:**

Power Grid Corporation of India Limited, Gurgaon

.....**Petitioner**

**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 Delhi

.....**Respondents**

**The following were present:**

1. Shri S.S Raju, PGCIL
2. Shri M.M. Mondal, PGCIL
3. Shri T.P.S. Bawa, PSPCL
4. Shri R.B. Sharma, Advocate, BRPL

**ORDER**

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of transmission tariff based on the anticipated date of commercial operation of 1.1.2012 to 31.3.2014 for 400 kV D/C Bhiwadi-Neemrana line along with associated bays under the transmission system (hereinafter referred to as "transmission asset") associated with Northern Region System Strengthening Scheme-XV (NRSSS-XV) in Northern Region under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The administrative approval and expenditure sanction to the transmission project was accorded by the Board of Directors of the petitioner vide letter C/CP/NRSS-XV dated 20.2.2009 for `52048 lakh including an IDC of `3445 lakh (Based on 4<sup>th</sup> quarter, 2008 price level).

3. The scope of work covered under the scheme is as follows:-



### **Transmission Lines**

- (i) Manesar –Neemrana 400kV D/C – 90 km
- (ii) Bhiwadi-Neemrana 400 kV D/C – 60 km
- (iii) LILO of Bhiwadi-Bassi (Jaipur) 400 kV S/C line at new 400/220kV Kotputli substation-15 km

### **Sub Stations**

- (i) New 2x315 MVA ,400/220 kV Neemrana Sub-station
- (ii) New 2x315 MVA, 400/220 kV Kotputli Sub-station
- (iii) Extension of 400/220 kV Bhiwadi Sub-station
- (iv) Extension of 400/220 kV Manesar Gas Insulated Sub-station
- (v) Extension of 400/220 kV Bassi(Jaipur) Sub-station

### **Reactive Compensation :**

SL.	Location	Approx line length (km)	Line Reactor from Bus	Line Reactor to bus
1	LILO of Bhiwadi-Bassi(Jaipur) 400kV S/C line at new 400/220kV Kotputli substation Bhiwadi-Kotputli section Kotputli Jaipur section	70 160	NIL NIL	NIL 50 MVAR*
2	80 MVAR Bus Reactor at Kotputli			
3	80 MVAR Bus Reactor at Neemrana			

(\* Existing bus reactor to be made switchable)

4. The petitioner has submitted the cost data, duly certified by the Auditor, on the basis of the anticipated date of commercial operation as 1.1.2012. Further, the petitioner, vide affidavit dated 26.3.2012, has submitted that the subject asset



was put under commercial operation on 1.1.2012. However, the petitioner has submitted neither the Auditor's certificate nor the Management Certificate regarding the actual date of commercial operation.

5. The Auditor's certificate dated 8.6.2011, submitted along with the original petition, depicts that the expenditure up to 31.3.2011 has been verified from the books of accounts of the petitioner and the estimated expenditure from the period of 1.4.2011 to 31.12.2011 is on the basis of details furnished by the Management Certificate of the petitioner. Therefore, instant petition covers determination of tariff based on actual expenditure incurred up to 31.3.2011, estimated expenditure from 1.4.2011 to 31.12.2011 and projected expenditure to be incurred from 1.1.2012 (date of commercial operation) to 31.3.2013.

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

( in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	105.79	456.13	469.81
Interest on Loan	133.85	550.21	525.53
Return on equity	112.14	481.90	495.82
Interest on Working Capital	10.24	43.32	44.16
O & M Expenses	67.06	283.57	299.76
Total	429.08	1815.13	1835.08

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



(` in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	40.24	42.54	44.96
O & M expenses	22.35	23.63	24.98
Receivables	286.05	302.52	305.85
<b>Total</b>	<b>348.64</b>	<b>368.69</b>	<b>375.79</b>
Interest	10.24	43.32	44.16
Rate of Interest	11.75%	11.75%	11.75%

8. 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. (JVNL), Respondent No. 4 - Jodhpur Vidyut Vitran Nigam Ltd. (Jd.VVNL), Respondent No. 6 - Punjab State Power Corporation Limited (PSPCL), Respondent No. 9 - Uttar Pradesh Power Corporation (UPPCL) and Respondent No.12 - BSES Rajdhani Power Ltd. (BRPL). The petitioner has filed the rejoinder to the reply filed by BRPL. The objections raised by the respondent and their clarifications are dealt in relevant paragraphs of this order.

9. The matter was heard on 19.6.2012 and order was reserved. As two of the Members of the Commission demitted the office, the matter was heard again on 18.6.2013. During the hearing, the representative of the petitioner submitted since the parties have already made their submissions, the Commission may proceed to issue the order in the matter. The representative of PSPCL raised the issue of effective utilisation of the subject asset and it is dealt in the relevant



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

### **Capital cost**

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

“(1) Capital cost for a project shall include:

“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.”

11. The details of apportioned approved cost, the actual / estimated expenditure as on date of commercial operation and details of estimated additional capital expenditure projected to be incurred on the transmission assets covered in the petition are summarized below:-

( ` in lakh)

<b>Apportioned/ Approved Cost (FR)</b>	<b>Expenditure as on date of commercial operation</b>	<b>2011-12</b>	<b>2012-13</b>	<b>Total expenditure</b>
9901.00	8181.72	741.05	531.06	9453.83



### **Time over-run, IEDC and IDC**

12. As per investment approval dated 20.2.2009, the transmission asset was scheduled to be commissioned within 33 months from the date of investment approval i.e. 1.12.2011. However, the asset has been put under commercial operation on 1.1.2012. Therefore, there is a delay of one month in commissioning of the transmission asset.

13. The petitioner, vide affidavit dated 26.3.2012, has submitted that the delay was mainly due to delay in approval of railway crossing by Railways. The proposal was given on 11.5.2010 and approval was obtained on 12.9.2011. The petitioner has submitted that most of the delay was covered by expediting the construction work but delay of one month could not be avoided. The petitioner has also submitted that the delay is beyond its control and has requested to condone the delay.

14. There is a railway crossing on the non-electrified track between Bawal-Majri Nangal Railway Station. It is observed that though the petitioner has applied for approval of railway crossing on 11.5.2010, the permission was granted only on 12.9.2011. The Railways took 16 months to grant approval. The petitioner has completed the line within three months after obtaining permission from the Railways. We are of the view that this delay of one month is primarily due to delay in granting approval by the Railways. Thus, as the delay is due to



Statutory/Government approvals, the delay of one month is condoned. Accordingly, IDC and IEDC for this period are allowed to be capitalised.

### **Cost over-run**

15. The total apportioned approved cost of the subject asset is ₹9901 lakh and the total completion cost is ₹9453.84 lakh. Though the completion cost is lower than the apportioned approved cost, there is cost-variation in some of the items. It is observed that the cost of the transmission line increased by ₹160 lakh, even though the length of the line reduced by 19%. It is further observed that there is 23% increase in the cost under the sub-head "Erection, stringing & civil works including foundation".

16. The respondents, AVVNL, JVVNL and Jd.VVNL have requested the Commission to direct the petitioner to explain whether the cost reduction is due to reduction in line length or on account of other factors. UPPCL, in its reply, has pointed out that there is cost over-run of various items and has requested the Commission to direct the petitioner to submit reasons for cost variation.

17. The BRPL has submitted that the estimated completion cost of the transmission asset is within the apportioned approved cost, resulting in a large savings to the petitioner and it makes it difficult to determine the cost overrun. There is cost variation in some items. BRPL has submitted that the reasons mentioned by the petitioner for variation are very casual and hence the cost variation may not be allowed by the Commission.





18. The petitioner, in its affidavit dated 26.3.2012, has submitted that the cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts. For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. In the instant case the variation is due to variation in estimated and awarded price. The estimated cost is based on the 2008 price level, whereas the actual cost is based on competitively awarded cost plus price variation.

19. There is no cost over-run in the instant case. However, there is cost variation in some of the items. The cost variation in the instant petition is allowed in view of the justification submitted by the petitioner. However, the petitioner is directed to adopt the best available practices while estimating the cost in all future cases.

#### **Treatment of initial spares**

20. BRPL has submitted that the petitioner has not furnished the amount of initial spares capitalized and the petitioner may be directed to furnish the amount of initial spares capitalized. The petitioner has clarified, in its rejoinder, that the details regarding initial spares capitalized has already been filed along with the petition and the initial spares claimed is within the norms specified in the 2009



Tariff Regulations. The initial spares claimed by the petitioner falls within the ceiling limits specified in the 2009 Tariff Regulations and hence it is allowed.

21. Accordingly, the capital cost considered for the purpose of tariff calculation after scrutiny of time over-run, cost over-run and initial spares is given hereunder:-

(` in lakh)

Capital cost considered for the purpose of tariff before adjustment of IEDC/IDC & initial spares as on date of commercial operation	Deduction in respect of excess IDC/IEDC	Deduction in respect of excess initial spares	Capital cost considered for the purpose of tariff after scrutiny of IEDC/IDC & initial spares as on date of commercial operation
8181.72	0.00	0.00	8181.72

**Projected additional capital expenditure**

22. With regard to additional capital expenditure, Regulation 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-

“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 incase 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”.



24. As per the above definition, cut-off date in respect of the transmission asset covered in the instant petition is 31.3.2015.

25. The petitioner has claimed additional capital expenditure as under:-

( ` in lakh)

Date of commercial operation	2011-12	2012-13
1.1.2012	741.05	531.06

26. The above amount is against the estimated balance and retention amount from 1.1.2012 to 31.3.2013. The additional capital expenditure claimed is within the cut-off date. Hence, the same has been considered for the purpose of tariff calculation.

### **Debt- equity ratio**

27. 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.”

28. Details of debt-equity in respect of the transmission assets considered for the purpose of tariff calculation as on the date of commercial operation is as follows:-

(` in lakh)

Capital cost as on 1.1.2012		
	Amount	%
Debt	5727.20	70.00
Equity	2454.52	30.00
<b>Total</b>	<b>8181.72</b>	<b>100.00</b>

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

(` in lakh)

Capital cost as on 31.3.2014		
Particulars	Amount	%
Debt	6617.68	70.00
Equity	2836.15	30.00
<b>Total</b>	<b>9453.83</b>	<b>100.00</b>

### **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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

Particulars	(` in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Opening Equity	2454.52	2676.83	2836.15
Addition due to Additional capital expenditure	222.32	159.32	0.00
Closing Equity	2676.83	2836.15	2836.15
Average Equity	2565.67	2756.49	2836.15
Return on Equity (Base Rate )	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax )	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	112.13	481.86	495.79



32. Return on equity has been calculated as per Regulation 15 of the 2009 Tariff Regulations with pre-tax return on equity of 17.481%. The petitioner's prayer to allow grossing up the base rate of return with the applicable tax rate as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 Tariff Regulations.

### **Interest on loan**

33. 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.”

34. In these calculations, interest on loan has been worked out as detailed are as follows:-

- (a) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per the details submitted alongwith the petition;
- (b) The yearly repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that year; and
- (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.

35. Accordingly, the interest on loan has been calculated on the basis of prevailing rate available as on date of commercial operation. Any change in rate of interest subsequent to date of commercial operation will be considered at the time of truing up.



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

37. Details of the interest on loan worked on the above basis are given hereunder:-

Particulars	(` in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	5727.20	6245.94	6617.68
Cumulative Repayment upto Previous Year	0.00	105.79	561.92
Net Loan-Opening	5727.20	6140.15	6055.76
Addition due to Additional capital expenditure	518.74	371.74	0.00
Repayment during the year	105.79	456.13	469.81
Net Loan-Closing	6140.15	6055.76	5585.95
Average Loan	5933.67	6097.95	5820.85
Weighted Average Rate of Interest on Loan	9.0232%	9.0232 %	9.0287%
Interest	<b>133.85</b>	<b>550.23</b>	<b>525.55</b>

### **Depreciation**

38. 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.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(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.”

39. The transmission asset in the petition was put under commercial operation as on 1.1.2012 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 the 2009 Tariff Regulation. Accordingly, depreciation has been worked out on the basis of capital expenditure as on date of commercial operation wherein depreciation for the first year has been calculated on *pro-rata* basis for the part of year.

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

Particulars	(` in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
As on date of commercial operation	8181.72	8922.77	9453.83
Addition during 2009-14 due to Projected additional capital expenditure	741.05	531.06	0.00
Gross Block	8922.77	9453.83	9453.83
Average Gross Block	8552.25	9188.30	9453.83
Rate of Depreciation	4.9481%	4.9642%	4.9696%
Depreciable Value	7215.51	7787.96	8026.94
Remaining Depreciable Value	7215.51	7682.17	7465.02
Depreciation	<b>105.79</b>	<b>456.13</b>	<b>469.81</b>



### Operation & maintenance charges

41. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenditure based on the type of sub-station and line. The norms for the assets covered in this petition are as follows:-

Elements	(` in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV (twin conductor) T/Line (` in lakh/ km)	0.627	0.663	0.701	0.741	0.783
400 kV bays (` in lakh/ km)	52.40	55.40	58.57	61.92	65.46

42. Based on the above norms, the following operation and maintenance expenses which are allowed:-

Elements	(` in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
48.428 km, 400 kV D/C (twin) conductor, Bhiwadi- Neemrana T/L line	8.49	35.89	37.92
4 nos. 400 kV Bays at Bhiwadi- Neemrana S/S	58.57	247.68	261.84
<b>Total O&amp;M Expenditure</b>	<b>67.06</b>	<b>283.57</b>	<b>299.76</b>

43. The petitioner has submitted that 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 further 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%.



44. The AVVNL, JVVNL, Jd.VVNL, PSPCL, UPPCL and BRPL submitted that the O&M charges should be allowed only as per the 2009 Tariff Regulations.

45. The Commission has given effect to the impact of pay revision in the 2009 Tariff Regulations by factoring 50% on account of pay revision of the employees of PSUs after extensive stakeholders' consultation. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. However, in case the petitioner approaches with any such application, the same shall be dealt with in accordance with law.

#### **Interest on working capital**

46. 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

Interest rate of 11.75% (SBI Base Rate 8.25% as on 1.4.2011 plus 350 bps) has been considered for calculating interest on working capital.

47. Details of interest on working capital allowed are appended herein below:-

Particulars	(` in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	40.24	42.54	44.96
O & M expenses	22.35	23.63	24.98
Receivables	286.05	302.52	305.84
<b>Total</b>	<b>348.64</b>	<b>368.68</b>	<b>375.79</b>
Interest	<b>10.24</b>	<b>43.32</b>	<b>44.16</b>

### Transmission Charges

48. The transmission charges allowed for the transmission assets are given hereunder:-

Particulars	(` in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	105.79	456.13	469.81
Interest on Loan	133.85	550.23	525.55
Return on equity	112.13	481.86	495.79
Interest on working Capital	10.24	43.32	44.16
O & M Expenses	67.06	283.57	299.76
<b>Total</b>	<b>429.07</b>	<b>1815.11</b>	<b>1835.07</b>



## **Other issues**

49. BRPL in its reply has submitted that the subject asset is not ready for regular service as the corresponding new Sub-station at Neemrana (2X315MVA, 400/220 kV) is not yet ready. It has been further submitted that there is no utility of the asset to the beneficiaries. The petitioner in its rejoinder has clarified that the ICT-II at Neemrana has already been commissioned on 1.1.2012 and the power is flowing through Bhiwadi-Neemrana 400 kV D/C line. The petitioner has further submitted that the ICT-II at Neemrana Sub-station is covered in Petition No.69/TT/2012. During the hearing on 18.6.2013, the representative PSPCL submitted that the declaration of date of commercial operation of the transmission assets should be done strictly as provided in the 2009 Tariff Regulations. Moreover, the petitioner should submit the month wise data of energy flow through the Bhiwadi-Neemrana transmission line from the date of commercial operation. In response, the representative of the petitioner submitted that there is no provision in the 2009 Tariff Regulations which makes it mandatory for the petitioner to submit the month wise data of energy flow. We have considered the submissions of the petitioner and the respondents. The Bhiwadi-Neemrana transmission line has been commissioned on 1.1.2012 and power is flowing through the line. As regards the request of PSPCL for month-wise date of energy, we direct the petitioner to share the data for a period of six months from the date of commercial operation regarding the power flow on the transmission lines with the respondents.



### **Filing fee and the publication expenses**

50. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The BRPL and UPPCL submitted that the filing fee shall be governed as per the Commission's order. In accordance with the Commission's 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 beneficiaries on *pro-rata* basis.

### **Licence fee**

51. 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.

52. BRPL and UPPCL has 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 has clarified that the licence fee has been a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (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. The BRPL and UPPCL have objected to recovery of service tax from the beneficiaries in future as CBEC has exempted service tax on transmission. Vide notification No. 11/2010-service tax dated 20.7.2010. The petitioner has clarified that if notifications regarding granting of exemption to transmission service are withdrawn at a later date, the beneficiaries shall have to share the service tax paid by the petitioner. We consider the prayer of the petitioner pre-mature and accordingly the petitioner's prayer is rejected.

### **Sharing of transmission charges**

54. 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.

55. This order disposes of Petition No. 182/TT/2011.

sd/-

**(M. Deena Dayalan)**  
**Member**

sd/-

**(V. S. Verma)**  
**Member**



## Annexure

### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(` in lakh)

	<b>Details of Loan</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXX</b>			
	Gross loan opening	<b>2200.00</b>	<b>2200.00</b>	<b>2200.00</b>
	Cumulative Repayment upto date of commercial operation/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	2200.00	2200.00	2200.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	183.33
	Net Loan-Closing	2200.00	2200.00	2016.67
	Average Loan	2200.00	2200.00	2108.33
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	193.60	193.60	185.53
	Rep Schedule	12 annual installments from 29.09.2013		
<b>2</b>	<b>Bond XXXI</b>			
	Gross loan opening	<b>2000.00</b>	<b>2000.00</b>	<b>2000.00</b>
	Cumulative Repayment upto date of commercial operation/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	2000.00	2000.00	2000.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	166.67
	Net Loan-Closing	2000.00	2000.00	1833.33
	Average Loan	2000.00	2000.00	1916.67
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	178.00	178.00	170.58
	Rep Schedule	12 annual installments from 25.02.2014		
<b>3</b>	<b>Bond XXXIII</b>			
	Gross loan opening	<b>150.00</b>	<b>150.00</b>	<b>150.00</b>
	Cumulative Repayment upto date of commercial operation/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	150.00	150.00	150.00
	Additions during the year	0.00	0.00	0.00





	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	150.00	150.00	150.00
	Average Loan	150.00	150.00	150.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	12.96	12.96	12.96
	Rep Schedule	12 annual installments from 08.07.2014		
<b>4</b>	<b>Bond XXXIV</b>			
	Gross loan opening	<b>68.00</b>	<b>68.00</b>	<b>68.00</b>
	Cumulative Repayment upto date of commercial operation/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	68.00	68.00	68.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	68.00	68.00	68.00
	Average Loan	68.00	68.00	68.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	6.01	6.01	6.01
	Rep Schedule	12 annual installments from 21.10.2014		
<b>5</b>	<b>Bond XXXV</b>			
	Gross loan opening	<b>1309.00</b>	<b>1309.00</b>	<b>1309.00</b>
	Cumulative Repayment upto date of commercial operation/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	1309.00	1309.00	1309.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1309.00	1309.00	1309.00
	Average Loan	1309.00	1309.00	1309.00
	Rate of Interest	9.64%	9.64%	9.64%
	Interest	126.19	126.19	126.19
	Rep Schedule	12 annual installments from 31.05.2015.		
	<b>Total Loan</b>			
	Gross loan opening	5727.00	5727.00	5727.00
	Cumulative Repayment upto date of commercial operation/previous year	0.00	0.00	0.00
	Net Loan-Opening	5727.00	5727.00	5727.00
	Additions during the year	0.00	0.00	0.00



Repayment during the year	0.00	0.00	350.00
Net Loan-Closing	5727.00	5727.00	5377.00
Average Loan	5727.00	5727.00	5552.00
Rate of Interest	<b>9.0232%</b>	<b>9.0232%</b>	<b>9.0287%</b>
<b>Interest</b>	516.76	516.76	501.28

