

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 83/TT/2012

Coram:

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

Date of Hearing: 18.6.2013

Date of Order : 21.6.2013

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 for 400 kV D/C Nabinagar-Sasaram Transmission Line and associated 400 kV line bays at Sasaram S/S (anticipated DOCO 1.4.2012) associated with Transmission System for "immediate Evacuation System for Nabinagar TPS" in ER from Anticipated DOCO (1.4.2012) to 31.3.2014.

And

In the matter of:

Power Grid Corporation of India Limited, Gurgaon

.....**Petitioner**

Vs

Bharatiya Rail Bijlee Company Limited, Patna
East Central Railway, Patna
Bihar State Electricity Board, Patna

....**Respondents**

The following were present:

1. Shri M. M. Mondal, PGCIL
2. Shri S.S Raju, PGCIL
3. Shri Prashant Sharma, PGCIL
4. Shri D. G. Salpekar, NTPC
5. Shri B. S. Rajput, NTPC
6. Shri Dadan Singh, BRBCL
7. Shri Naresh Anand, NTPC
8. Shri Ajay Jha, NTPC
9. Shri Sandeep Naik, NTPC



10. Shri Ajay Mehta, NTPC

ORDER

This petition has been filed by Powergrid Corporation of India Ltd (hereinafter referred as “petitioner”) for determination of transmission tariff for “400 kV D/C Nabinagar- Sasaram Transmission Line and associated 400 kV line bays at Sasaram Sub-station” (hereinafter referred as to “transmission asset”) from the anticipated date of commercial operation i.e. 1.4.2012 to 31.3.2014 under Eastern Region based on Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations’ 2009 (hereinafter referred to as "2009 Tariff Regulations).

2. Investment approval for the "Immediate Evacuation System for Nabinagar TPS (100 MW)" scheme was accorded by the petitioner’s board vide their letter no. C/CP/Nabinagar TPS dated 8.2.2010 at an estimated cost of ₹21586 lakh including IDC of ₹1561 lakh (based on 3rd Quarter ‘2009 price level). The scope of work covered under the project is as follows:-

Transmission Lines

- (i) Nabinagar –Sasaram 400kV D/C line with twin lapwing conductor:
87 km.

Sub-station

- (i) 400 kV sub-station at Nabinagar by the construction of 2 nos. of 400 kV line bays (to be covered under the scope of generation switchyard)



(ii) Extension of 400 kV sub- station at Sasaram by the construction of 2 nos. of 400 kV line bays.

3. The petitioner has claimed the transmission tariff for the subject asset with the anticipated date of commercial operation as 1.4.2012. Later, vide affidavit dated 15.6.2012, has submitted that the transmission asset is anticipated to commissioned by 1.7.2012 and submitted the Management Certificate and revised tariff forms. Subsequently, the petitioner vide affidavit dated 3.8.2012 has submitted that the asset has been put under commercial operation on 1.7.2012 and furnished revised Management Certificate and tariff forms based on the capital expenditure incurred or to be incurred upto the date of commercial operation and estimated additional capital expenditure from the date of the commercial operation to 31.3.2014.

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

(` in lakh)

Particulars	2012-13	2013-14
Depreciation	763.48	1029.84
Interest on Loan	890.96	1120.91
Return on equity	781.94	1054.71
Interest on Working Capital	63.70	84.53
O & M Expenses	138.00	194.49
Total	2638.08	3484.48

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

(in lakh)

Particulars	2012-13	2013-14
Maintenance Spares	27.60	29.17
O & M expenses	15.33	16.21
Receivables	586.24	580.75
Total	629.17	626.13
Interest	63.70	84.53
Rate of Interest	13.50%	13.50%

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. Reply to the petition has been filed Bhartiya Rail Bijlee Company Limited (BRBCL), Respondent No.1 and Bihar State Electricity Board (BSEB), Respondent No.3. BRBCL, vide its affidavits dated 2.5.2012 and 20.11.2012 has raised the issue of date of commercial operation, sharing of transmission charges, licence fee and filing fee. BSEB, vide its affidavit dated 13.6.2012, has raised the issue of additional return on equity, initial spares, application filing fee and publication expenses, licence fee, service tax and O&M expenses. The petitioner has filed its rejoinder to the replies filed by the respondents, vide affidavits dated 26.6.2012, 4.10.2012 and 31.12.2012. The objections raised by the respondent and their clarifications are dealt in relevant paragraphs of this order.

7. BRBCL has raised the issue of date of commercial operation of the transmission asset and we would like to deal with that issue before we proceed further with the order. During the course of the hearing on

11.1.2012, the representative of BRBCL submitted that the petitioner did not fulfill the conditions for declaration of date of commercial operation including prior approval of the Commission as specified in Regulation 3(12)(c) of the 2009 Tariff Regulations. It was further submitted that the petitioner cannot now seek approval of the Commission ex-post facto. A letter was written by BRBCL on 9.7.2012 to the petitioner stating that stringing near Son River is not complete and stringing work is still pending. In response, the representative of the petitioner clarified that the transmission asset was put under commercial operation on 1.7.2012 as per the request of BRBCL and it obtained the clearance from CEA and approval of ERPC before declaring the commercial operation of the asset. The petitioner further clarified that it replied to BRBCL's letter wherein it was stated that certain rectification work was carried out in some punch points.

8. Regulation 3 (12)(c) of the 2009 Tariff Regulations provides as follows:-

"(c) in relation to the transmission system, the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful charging and trial operation:

Provided that the date shall be the first day of a calendar month and transmission charge for the element shall be payable and its availability shall be accounted for, from the date:

Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service."

9. As per the second proviso to sub-clause (c) of clause (12) of Regulation 3 of the 2009 Tariff Regulations the petitioner should have obtained the prior approval of the Commission before declaring the commercial operation of the subject transmission asset. The petitioner has declared the commercial operation of the asset without obtaining the prior approval of the Commission. As such, the petitioner was directed to amend the prayer to include a prayer for permission under the second proviso to Regulation 3(12)(c). Accordingly, the petitioner amended the petition by including a prayer to approve the date of commercial operation as provided under Regulation 3(12)(c), vide affidavit dated 5.11.2012.

10. During the hearing on 22.11.2012, the representative of BRBCL submitted that the petitioner cannot seek ex-post approval of date of commercial operation. BRBCL further submitted that stringing near Son River crossing and bays near Sasaram were not completed. BRBCL raised similar objections vide its affidavit dated 20.11.2012 and requested to reject petitioner's prayer for approval of 1.7.2012 as the date of commercial operation. In response, the petitioner vide affidavit dated 31.12.2012 has submitted that it informed BRBCL that the transmission line was test charged on 30.6.2012 after obtaining CEA clearance and after obtaining the requisite code from ERLDC for charging the transmission system. The petitioner has further submitted that works like extra soil removal, extra filling, re-positioning of phase plates and danger plates etc. were taken up, which neither affected the safety nor the performance of the transmission system. If the switchgear

and generation unit at the BRBCL end was ready the transmission system could have been put into regular service.

11. We have considered the submissions of the petitioner and BRBCL. It is observed that the Regional Inspectorial Organization, CEA, has approved the energisation of the transmission asset on 29.6.2012 based on the inspection carried out on 28.6.2012 and the asset was put under commercial operation on 1.7.2012. The commissioning of the transmission asset was discussed and agreed in the 22nd TCC and ERPC meetings held on 24th and 25th August, 2012, which was attended by NTPC besides others. As regards the pending works, it has been submitted by the petitioner that miscellaneous works like extra soil removal, extra filling, repositioning of phase plates and danger plates, etc were pending which did not affect the safety and performance of the transmission asset. From the foregoing, it appears that the transmission asset was ready on 1.7.2012 and the date of commercial operation had the approval of both the CEA and the ERPC. It further appears that had the switchgear and generation unit at BRBCL end been ready, the transmission system could have been put into regular service. As such, we are inclined to approve the date of commercial operation as 1.7.2012 as prayed by the petitioner. In all future cases, the petitioner is directed to seek the prior approval of the Commission whenever the transmission system is ready for regular service but is prevented from doing so for reasons not attributable to it, as provided under the second proviso to Regulation 3(12)(c).



This relief is granted to the petitioner in the instant as a one time relief and it shall not be quoted as a precedent.

Capital cost

12. 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:

(a) 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;”

13. Details of apportioned approved cost, capital cost as on the date of commercial operation and estimated additional capital expenditure projected to be incurred for the asset covered in this petition are summarized below:-

(₹ in lakh)

Apportioned approved cost as per FR	Actual cost incurred as on DOCO	Projected additional capital expenditure		Total estimated completion cost
		2012-13	2013-14	
21586.25	19113.19	293.59	154.55	19561.33

Cost over-run

14. The estimated completed cost of the project is ₹19561.33 lakh as against the apportioned estimated cost of ₹21586.25 lakh. BSEB has submitted that there is over-estimation in the approval of the project by the petitioner and thus it is not possible to exactly determine the cost over-run

of the transmission asset. The petitioner has clarified that the decrease in actual cost vis-à-vis estimated cost is due to awarded rates.

15. As we have observed in similar other petitions, the cost estimates of the petitioner are not realistic. In our view the petitioner should adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic. We direct the petitioner to be more prudent while estimating the cost in all future cases.

Treatment of initial spares

16. The capital cost claimed by the petitioner is inclusive of initial spares amounting to ₹54.00 lakh and ₹93.53 lakh pertaining to sub-station and transmission line respectively. Initial spares claimed for transmission line falls within ceiling limit. However, initial spares claimed for sub-station exceeds the ceiling limit. The petitioner's claim of initial spares for the sub-station exceeds the ceiling limit specified in the 2009 Tariff Regulations by ₹25.01 lakh. BSEB has requested to reject the petitioner's request for higher initial spares.

17. The petitioner has submitted that the asset under consideration is a sub-station and it is an extension of existing substation. The petitioner has also submitted that normally, a large number of bays and other substation equipments like ICTs, Reactors, other substation structures/establishment/facilities & various auxiliaries etc are commissioned in the green field sub-station resulting into higher capital costs but in this case, only two nos. of 400 KV bays are to be commissioned

at Madurai S/S, which is an extension of existing substation. Even though similar type of spares have been procured for this system as is normally done for green field sub-station, the percentage of initial spares w.r.t. the capital cost for this sub-station expansion project is higher because of less capital cost due to less population of equipments and other facilities as compared to projects having large asset in green field substations.

18. We have considered the submissions of the petitioner and BSEB. There is no provision in the 2009 Tariff Regulations for higher ceiling norms for the initial spares of extension of sub-station. We are of the considered view that no case has been made out for allowing higher initial spares in the instant case. Therefore, in line with our earlier decisions in similar cases, the petitioner's prayer for higher initial spares is rejected and initial spares for the sub-station is allowed in accordance with ceiling norms specified in the 2009 Tariff Regulations.

19. The details of the initial spares claimed by the petitioner for the sub-station and the initial spares allowed are as follows:-

Capital cost up to cut-off date	Initial spares claimed	Ceiling limits as per Regulation 8 of 2009 Tariff Regulations	Initial spares worked out	Excess initial spares
(a)	(b)	(c)	$(d) = \{(a)-(b)\} * (c) / \{100\% - (c)\}$	$(e) = (d) - (b)$
1184.52	54.00	2.50%	28.99	(25.01)

20. The petitioner has claimed capital cost of ₹19113.19 lakh as on the date of commercial operation, vide Management Certificate dated 30.7.2012. Capital cost of ₹19088.18 lakh, excluding excess initial spares, has been considered as the opening capital cost for the purpose of tariff calculations.

Projected additional capital expenditure

21. 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.”

22. The 2009 Tariff Regulations further defines cut-off date as-

“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”.

23. As per the above definition, cut-off date of the transmission asset covered in the instant petition is 31.3.2015. The petitioner has claimed projected additional capital expenditure for the year 2012-13. Additional

capital expenditure claimed falls within the cut-off date. Hence, it has been considered for the purpose of tariff calculation.

24. Element wise detail of projected additional capital expenditure is as follows:-

(` in lakh)

Year	Work proposed to be added after COD upto cut off date	Amount to be capitalized /proposed to be capitalized	Justification
DOCO to 31.3.2013	Transmission Line	254.66	Balance /Retention Payments
	Sub station	31.09	
	PLCC	7.84	
	Sub Total	293.59	
2013-14	Transmission Line	128.12	
	Sub station	26.43	
	Sub Total	154.55	

Debt- equity ratio

25. 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.”

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

(` in lakh)

Capital cost as on the date of commercial operation		
Particulars	Amount	%
Debt	13361.72	70.00
Equity	5726.45	30.00
Total	19088.18	100.00

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

(` in lakh)

Capital cost as on 31.3.2014		
Particulars	Amount	%
Debt	13675.42	70.00
Equity	5860.90	30.00
Total	19536.32	100.00

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

(` in lakh)

Additional capital expenditure for 2012-13		
	Normative	
Particulars	Amount	%
Debt	205.51	70.00
Equity	88.08	30.00
Total	293.59	100.00

Additional capital expenditure for 2013-14		
	Normative	
Particulars	Amount	%
Debt	108.19	70.00
Equity	46.37	30.00
Total	154.55	100.00

Return on equity

29. 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."

30. The petitioner has initially claimed additional return on equity of 0.5% as the transmission asset was expected to be commissioned on 1.4.2012. However, the asset was commissioned on 1.7.2012, which is beyond the qualifying period for allowing additional return on equity and accordingly the petitioner withdrew its prayer for additional return on equity, vide its rejoinder to the BSEB's reply. Thus, the petitioner's prayer for additional return on equity is not considered.

31. The following return on equity has been allowed:-

(` in lakh)

Return on Equity	2012-13	2013-14
Opening Equity	5726.45	5814.53
Addition due to Additional Capitalisation	88.08	46.37
Closing Equity	5814.53	5860.90
Average Equity	5770.49	5837.71
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%
Return on Equity (Pre Tax)	756.55	1020.49

32. The petitioner's prayer to allow grossing up the base rate of return with applicable tax rate as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 Tariff Regulations. Pre-tax

return on equity of 17.481% has been considered for the purpose of tariff calculations.

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 hereunder:-

- (a) Gross amount of loan, repayment of instalments & 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) Notwithstanding 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.
- (d) Weighted average rate of interest on actual average loan worked out as per (i) above is 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 the date of commercial operation. Any change in the rate of interest subsequent to the date of commercial operation shall 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 as under:-

Particulars	(` in lakh)	
	2012-13	2013-14
Gross loan opening	13361.72	13567.24
Cumulative repayment upto DOCO/previous year	0.00	762.49
Net loan-opening	13361.72	12804.75
Additions during the year	205.51	108.19
Repayment during the year	762.49	1028.52
Net loan-closing	12804.75	11884.41
Average loan	13083.24	12344.58
Rate of interest	9.0681%	9.0685%
Interest	889.81	1119.47

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 has been put under commercial operation on 1.7.2012 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 2009 Tariff Regulation.

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

(` in lakh)

Particulars	2012-13	2013-14
Opening gross block	19088.18	19381.77
Addition during 2009-14 due to projected additional capital expenditure	293.59	154.55
Closing gross block	19381.77	19536.32
Average gross block	19234.97	19459.04
Rate of depreciation	5.2854%	5.2856%
Depreciable value	17311.48	17513.14
Remaining depreciable value	17311.48	16750.65
Depreciation	762.49	1028.52

Operation & maintenance expenses

41. 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 given overleaf:-

(` in lakh)

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV S/C twin conductor, T/Line (` lakh/ kms.)	0.358	0.378	0.400	0.423	0.447
400 kV D/C twin conductor T/L (` lakh/kms.)	0.627	0.663	0.701	0.741	0.783
400 kV bay (` lakh/ bay.)	52.40	55.40	58.57	61.92	65.46

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

(` in lakh)

Element	2012-13 (Pro-rata)	2013-14
1.02 kms, 400kV, S/C, twin conductor T/Line	0.32	0.46
80.605 kms, 400 kV, D/C, twin conductor T/Line	44.79	63.11
2 nos. 400 kV bay	92.88	130.92
Total O&M Expenses	137.99	194.49

43. The petitioner has submitted that O & M expenses for the year 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M expenses for the 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 with effect from 1.1.2007 is more than 50%.

44. BSEB has submitted that the Commission has already covered the increase in employee cost on account of pay revision of the employee cost on account of pay revision of the employees of PSUs by rationalizing the O&M expenses by 50% increase in employee cost. Any further increase in the employee cost should be taken care by the petitioner by improving their productivity levels and the beneficiaries should not be unduly burdened over and above the provisions made in the 2009 Tariff Regulations. The petitioner has clarified that per Ckt Km and per bay O&M rates considered in the instant petition are based on the 2009 Tariff Regulations. While framing the 2009 Tariff Regulations, the petitioner had furnished the actual O&M cost, line and bay details of its transmission system for the 5 years period i.e, 2003-04, 2004-05, 2005-06, 2006-07 and 2007-08, without taking into account expected manpower cost implications on account of wage revision due with effect from 1.1.2007. The Commission has considered 50% in the wage hike so as to stipulate the norms for 2009-10.

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. The 2009 Tariff Regulations provides for the components of the working capital and the interest thereon as under:-

(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 10.00% as on 14.02.2011 plus 350 bps) has been considered for calculating interest on working capital.

47. Details of interest on working capital allowed are given hereunder:-

(` in lakh)		
Particulars	2012-13	2013-14
Maintenance Spares	27.60	29.17
O & M expenses	15.33	16.21
Receivables	579.98	574.44
Total	622.91	619.82
Interest	63.07	83.68

Transmission Charges

48. The transmission charges allowed for the subject transmission asset is given hereunder:-

(` in lakh)		
Particulars	2012-13	2013-14
Depreciation	762.49	1028.52
Interest on Loan	889.81	1119.47
Return on equity	756.55	1020.49
Interest on working Capital	63.07	83.68
O & M Expenses	137.99	194.49
Total	2609.91	3446.65

Filing fee and the publication expenses

49. The petitioner has sought reimbursement of fee paid by it for filing the petition and expenses related to publication of notices. BRBCL has submitted that it is not a long term customer of the transmission asset and the asset will be used for drawl of startup power for a short duration till the date of commercial operation of the first unit of Nabinagar TPS and as such it is not

liable to pay filing fee and publication expenses. BSEB has submitted that the petitioner's prayer for filing fee and publication expenses should be governed as per the Commission's order dated 11.9.2008 in Petition No. 129/2005. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of 2009 Tariff Regulations.

50. The transmission asset would be used by BRBCL for drawing the start-up power till commissioning of the Nabinagar TPS and BRBCL has agreed to pay the transmission charges accordingly. We are of the view that BRBCL has to share the expenses related to filing of the petition seeking determination of the transmission charges and accordingly BRBCL shall reimburse the filing fee and the publication expenses made by the petitioner in filing the instant petition. As regards BSEB'S objection, we would like to clarify that order dated 11.9.2008 in Petition No. 129/2005 pertains to 2004-09 period. 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. BRBCL

has submitted that it is not liable to pay licence fee as it is not a long time customer/user of the transmission line. BRBCL shall reimburse the licence fee on pro-rata basis as per its usage of the transmission asset.

52. BSEB has submitted that the petitioner's request for reimbursement for licence fee should be rejected. The petitioner has clarified that the licence fee shall be recoverable as per Regulation 42A (1)(b) of the 2009 Tariff Regulations. 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. BSEB has 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 petitioner has submitted that the transmission charges for the subject asset shall be recovered on monthly basis in accordance with

Regulation 23 from BRBCL till the same is paid by the beneficiaries and it will be shared by the beneficiaries in accordance with the Regulation 33 of the 2009 Tariff Regulations after commissioning of the Nabinagar TPS. BRBCL in its reply has submitted that the transmission charges shall be paid by it only till the commissioning of the Nabinagar TPS and not till the same is paid by beneficiaries as contended by the petitioner.

55. We have considered the submissions of the petitioner and BRBCL. The transmission charges shall be borne by BRBCL, as per the arrangement entered into by BRBCL with the petitioner, till the commissioning of the Nabinagar TPS and thereafter 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 from time to time.

56. This order disposes of Petition No. 83/TT/2012.

(M. Deena Dayalan)
Member

(V. S. Verma)
Member



Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(' in lakh)

Details of Loan		2012-13	2013-14
1	Bond XXXI		
	Gross loan opening	708.00	708.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	708.00	708.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	59.00
	Net Loan-Closing	708.00	649.00
	Average Loan	708.00	678.50
	Rate of Interest	8.90%	8.90%
	Interest	63.01	60.39
	Rep Schedule	12 Annual instalments from 25.2.2014	
2	Bond XXXIII		
	Gross loan opening	1450.00	1450.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	1450.00	1450.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1450.00	1450.00
	Average Loan	1450.00	1450.00
	Rate of Interest	8.64%	8.64%
	Interest	125.28	125.28
	Rep Schedule	12 Annual instalments from 8.7.2014	
3	Bond XXXIV		
	Gross loan opening	4880.00	4880.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	4880.00	4880.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	4880.00	4880.00
	Average Loan	4880.00	4880.00
	Rate of Interest	8.84%	8.84%
	Interest	431.39	431.39
	Rep Schedule	12 Annual instalments from 21.10.2014	



4	Bond XXXV		
	Gross loan opening	735.00	735.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	735.00	735.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	735.00	735.00
	Average Loan	735.00	735.00
	Rate of Interest	9.64%	9.64%
	Interest	70.85	70.85
	Rep Schedule	12 Annual instalments from 31.5.2015	
5	Bond XXXVI		
	Gross loan opening	720.00	720.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	720.00	720.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	720.00	720.00
	Average Loan	720.00	720.00
	Rate of Interest	9.35%	9.35%
	Interest	67.32	67.32
	Rep Schedule	12 Annual instalments from 29.8.2016	
6	Bond XXXVII		
	Gross loan opening	1275.00	1275.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	1275.00	1275.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1275.00	1275.00
	Average Loan	1275.00	1275.00
	Rate of Interest	9.25%	9.25%
	Interest	117.94	117.94
	Rep Schedule	12 Annual instalments from 26.12.2015	
7	Bond XXXVIII		
	Gross loan opening	783.00	783.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	783.00	783.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00



	Net Loan-Closing	783.00	783.00
	Average Loan	783.00	783.00
	Rate of Interest	9.25%	9.25%
	Interest	72.43	72.43
	Rep Schedule	Bullet payment as on 9.3.2027	
8	Bond XXXIX		
	Gross loan opening	2000.00	2000.00
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	2000.00	2000.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	2000.00	2000.00
	Average Loan	2000.00	2000.00
	Rate of Interest	9.40%	9.40%
	Interest	188.00	188.00
	Rep Schedule	Bullet payment as on 29.3.2027	
9	Bond XL		
	Gross loan opening	828.23	828.23
	Cumulative Repayment upto DOCO/ previous year	0.00	0.00
	Net Loan-Opening	828.23	828.23
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	828.23	828.23
	Average Loan	828.23	828.23
	Rate of Interest	9.30%	9.30%
	Interest	77.03	77.03
	Rep Schedule	12 Annual instalments from 28.6.2016	
	Total Loan		
	Gross loan opening	13379.23	13379.23
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	13379.23	13379.23
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	59.00
	Net Loan-Closing	13379.23	13320.23
	Average Loan	13379.23	13349.73
	Weighted Average Rate of Interest	9.0681%	9.0685%
	Interest	1213.25	1210.62

