CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 38/TT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member

Date of Hearing : 18.06.2015
Date of Order : 24.11.2015

In the matter of:

Approval of transmission tariff for Asset-1: 2 nos. Line bays alongwith 2 nos. 50 MVAR line Reactors (charged as Bus Reactor) (Interim contingency till readiness of 400 kV D/C MB TPS (Anuppur)-Jabalpur Pool Station TL (COD-1.1.2014) and Asset-2: 400 kV D/C (Triple Snowbird) MB TPS (Anuppur)-Jabalpur Pooling Station TL (Anticipated COD-1.3.2014) Under “Transmission System for connectivity of M.B. Power (M.P.) Limited in Western Region from COD to 31.3.2014 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.

And in the matter of:

Power Grid Corporation of India Limited
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001 **……Petitioner**

Vs

1. Madhya Pradesh Power Trading Company Limited,
   Shakti Bhawan, Rampur, Jabalpur-482 008

2. MB Power (Madhya Pradesh) Limited,
   Corporate Office, 235, Okhla Industrial Estate,
   Phase-III, New Delhi-110 020
3. Maharashtra State Electricity Distribution Company Limited,
   Prakashgad, 4th floor,
   Andheri (East), Mumbai-400 052

4. Gujarat Urja Vikas Nigam Limited,
   Sardar Patel Vidyut Bhawan,
   Race Course Road,
   Vadodara-390 007

5. Electricity Department,
Government of Goa,
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403 001

6. Electricity Department,
Administration of Daman and Diu,
Daman-396 210

7. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa-396 230

8. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania, Raipur
Chhattisgarh-492 013

9. Madhya Pradesh Audyogik Kendra
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road
Indore-452 008 **….Respondents**

For petitioner : Shri R.P. Padhi, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Mohd. Mohsin, PGCIL

For respondents : Shri Abhijeet Laala, Advocate for MBPL
Shri Molshree Bhatnagar, Advocate for MBPL
Shri Rajeev Lochan, MBPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (PGCIL) seeking approval of transmission tariff for Asset-1: 2 nos. Line bays alongwith 2 nos. 50 MVAR line Reactors (charged as Bus Reactor) (Interim contingency till readiness of 400 kV D/C MB TPS (Anuppur)-Jabalpur Pool Station TL and Asset-2: 400 kV D/C (Triple Snowbird) MB TPS (Anuppur)-Jabalpur Pooling Station TL (hereinafter referred to as “transmission asset”) under “Transmission System for connectivity of M.B.

Power (M.P.) Limited” in Western Region from COD to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 Tariff Regulations”).

2. The Investment Approval (IA) for the project of Transmission System for connectivity of MB Power (M.P.) Limited was accorded by the Board of Directors of the petitioner's company vide Memorandum No. C/CP/MB Power dated 5.8.2011 for ₹42551 lakh including IDC of ₹1759 lakh, based on 1st Quarter, 2011 price level. The project was scheduled to be commissioned within 25.5 months from the date of IA. Therefore, the scheduled date of commissioning (COD) of the transmission system works out to 19.9.2013 say 1.10.2013.

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

Transmission Lines:

1) MB TPS (Anuppur)-Jabalpur Pooling Station 400 kV D/C (Triple Snowbird) line
2) Jabalpur Pooling Station-Jabalpur (existing) sub-station 400 kV D/C (Triple Snowbird) line

Sub-stations:

1) Extension of 765/400 kV Jabalpur Pooling Station
2) Extension of 400 kV Jabalpur Sub-station (for interim arrangement)

4. The petitioner has been entrusted with the implementation of Transmission System for connectivity of MB Power (M.P.) in Western Region pursuant to Connectivity and Long Term Access (LTA) granted to M.B. Power (M.P.) Limited in the 30th Standing Committee Meeting of Power System

Planning held on 8.7.2010. The issue was also discussed and agreed in the 12th meeting of WR constituents and IPPs regarding Connectivity/MTOA/LTA applications also held on 8.7.2010. However, as per the 18th WR constituents meeting for LTA held on 9.7.2013, the scope of the project was revised as it was decided that the interim arrangement (till the availability of the dedicated transmission system, inter-connection through 400 kV D/C Jabalpur Pooling Sub-station-Jabalpur existing transmission line) as approved in the 12th Open Access Meeting of WR constituents is no longer needed as the generation project got delayed and it was observed that by the time the generation project comes into effect, Jabalpur PS shall be available considering the advance stage of completion of work. In view of above, the entire revised project gets covered with the commissioning of the instant assets. The details of the assets for which the petitioner has claimed tariff in the instant petition are as given below:-

Particulars	Scheduled COD	Actual/ Anticipated COD	Delay
Asset-1: 2 nos. Line bays alongwith 2 nos. 50 MVAR Line Reactors (charged as Bus Reactor) (Interim contingency till readiness of 400 kV D/C MB TPS (Anuppur)-Jabalpur Pool Station TL associated with MB Power (MP) Transmission system	1.10.2013	1.1.2014 (Actual)	3 months
Asset-2: 400 kV D/C (Triple Snowbird) MB TPS (Anuppur)-Jabalpur Pooling Station TL only associated with MB Power (M.P.) Transmission system	1.10.2013	1.3.2014 (Anticipated)	5 months (Anticipated)

5. This order has been issued after considering the petitioner's affidavits dated 7.3.2014, 30.5.2014, 14.7.2014, 30.3.2015 and 16.6.2015.

6. The petitioner initially claimed the transmission tariff for the assets as per the actual/anticipated COD. However, the petitioner vide affidavit dated 30.5.2014 has submitted the anticipated COD of Asset-2 is 1.7.2014 instead of 1.3.2014 as submitted in the petition originally and filed a separate Petition No. 141/TT/2015 under 2014 Tariff Regulations. Accordingly, the transmission tariff for Asset-1 only is allowed in the instant petition.

7. The details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Depreciation	25.50
Interest on Loan	33.10
Return on equity	26.14
Interest on Working Capital	3.67
O & M Expenses	32.73
Total	**121.14**

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

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Maintenance Spares	19.64
O & M expenses	10.91
Receivables	80.76
Total	**111.31**
Rate of Interest	13.20%
Interest	**3.67**

9. No comments have been received from the general public in response to the notices published in newspapers by the petitioner under Section 64 of the Electricity Act, 2003 (the Act). MB Power (Madhya Pradesh) Limited (MBPL), Respondent No. 2 has filed reply dated 13.10.2014. MBPL has submitted that the petitioner's submissions regarding delay in the commissioning the Asset-2 and attributing the same to the respondent are incorrect, false and do not hold any merit in view of non-availability/completion of many statutory requirements/compliances such as non-approval by the Electrical Inspector, non-issuance of valid certificate from the concerned Regional Load Despatch Centre i.e. WRLDC, non-installation of required special Energy Meters (SEMs) etc. In view of, non-commissioning of Asset-2, which is the only line associated with the transmission system between the Generation Project of the respondent, commissioning of Asset-1 does not serve any purpose and is of no use to the Generation Project, as the petitioner itself has acknowledged that Asset-1 would help in controlling the high voltages at Jabalpur end. Thus, it has no bearing on the Generation Project of the respondent and as such the respondent should not be burdened with any liability in terms of transmission charges for the intervening period between COD of Asset-1 and Asset-2. The petitioner has filed rejoinder dated 11.8.2015 to the reply of MBPL. The objections raised by the respondent and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

10. Having heard the representatives of the petitioner, respondent and perused the material on record, we proceed to dispose of the petition.

Capital cost

11. Regulation 7 of the 2009 Tariff Regulations provides as follows:-

"(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.

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff."

12. The Commission, vide letter dated 24.8.2015, had directed the petitioner to submit certain information for the purpose of determination of transmission tariff as per true up provisions of the 2009 Tariff Regulations. However, the petitioner has not submitted any such information. Accordingly, instead of truing up, final tariff is being determined in the instant petition for Asset-1 and the petitioner is once again directed to submit the information as per earlier letter dated 24.8.2015 along with the true up petition.

13. Further, the Auditors' Certificate dated 21.1.2014 submitted by the petitioner in support of the capital expenditure incurred, states "This is to certify that the above summary has been prepared on the basis of the information drawn from the Audited Statement of Accounts of Power Grid Corporation of India Ltd, Western Region-II up to 31.3.2013. Projected expenditure is based on details furnished by the management." Thus, it is not clear from the Auditors' Certificate whether the capital expenditure has been indicated on cash basis or accrual basis. Further, the petitioner vide Form-9 for "Statement of Additional Capitalisation after COD" has submitted the justification that the additional capital expenditure is in the nature of balance and retention payments. As such, the information submitted by the petitioner is not adequate for the purpose of determination of transmission tariff as per the true-up provisions of the 2009 Tariff Regulations. In view of above, we have no option but to proceed with the determination of the final tariff in the instant petition. As such, the petitioner is hereby directed to submit the capital cost statement on cash basis indicating element wise (i.e. Land, building and civil work, TL and sub-station etc.) and year wise actual expenditure incurred up to 31.3.2014 along with element wise details of undischarged liability as on COD and at the end of the financial year duly certified by the auditors along with the true-up petition.

14. The details of apportioned approved cost, cost as on date of commercial operation and estimated/projected additional capital expenditure incurred/to be incurred (as per the Auditors certificate as discussed at para-14) considered for the purpose of determination of transmission tariff for the instant asset are

as under:-

(₹ in lakh)

Apportioned approved cost	**Capital cost as on COD**	**Projected additional capital expenditure 2013-14**	**Total estimated cost as on 31.3.2014**	**Projected additional capital expenditure**		**Total estimated completion cost**
				2014-15	**2015-16**	
1724.37	1909.30	44.51	1953.81	296.75	38.96	2289.52

<u>Treatment of IDC & IEDC</u>

15. As per the Auditors Certificate dated 21.1.2014 submitted by the petitioner, an amount of ₹256.11 lakh on account of IDC has been capitalised. The petitioner vide letter dated 24.8.2015 was directed to submit computation of actual IDC on cash basis, which has not been responded by the petitioner. In view of, non-availability and non-submission of complete information by the petitioner, the claim of ₹256.11 lakh as on COD on account of IDC has been worked out as per available information as on COD on cash basis as ₹36.73 lakh and considered in the instant petition for the purpose of computation of tariff. However, the petitioner is directed to submit all relevant information as earlier directed vide letter dated 24.8.2015.

16. The petitioner has also claimed an amount of ₹5.22 lakh on account of Incidental Expenditure During Construction (IEDC) for the instant asset. The petitioner has not submitted detailed computations/supporting documents for the admissible IEDC. In the absence of non-submission of detailed computation/supporting documents of IEDC by the petitioner, the percentage on Hard Cost indicated in the Abstract Cost Estimate submitted by the petitioner is considered as the allowable limit of the IEDC. In the instant

petition, 5.00% of Hard Cost is indicated as IEDC and claimed by the petitioner in the abstract cost estimates. Thus, in the absence of sufficient details, IEDC claim is restricted to 5.00% of Hard Cost or as claimed, whichever is lower, upto date of commercial operation. The amount of IEDC claimed is below 5.00% of the Hard Cost as on COD in the instant petition. Hence, the amount of ₹5.22 lakh on account of IEDC has been considered and is considered for the purpose of tariff calculation in the instant petition.

17. Regulation 9 of the 2009 Tariff Regulations provides for the treatment of undischarged liabilities after the same are discharged. However, as the petitioner has not submitted the required information with regard to the IDC actually discharged, we are not inclined to allow the amount of IDC as claimed by the petitioner. The petitioner is directed to submit the amount of IDC paid and specific to the transmission asset considered in this petition upto date of commercial operation and balance IDC discharged after date of commercial operation. IDC/IEDC allowed will be reviewed at the time of truing up on submission of adequate and proper information by the petitioner in respect of interest during construction and incidental expenses during construction at the time of truing-up.

Cost over-run

18. The estimated completion cost upto 31.3.2014 is ₹1953.81 lakh and total estimated completion is ₹2289.52 lakh against the apportioned approved cost of ₹1724.37 lakh. As such, there is cost over-run in the commissioning of the asset in the instant petition. The petitioner was directed vide letter dated

24.8.2015 to submit revised apportioned approved cost based on approved revised cost estimates (RCE), if any, which has not been submitted by the petitioner. Accordingly, the capital cost claimed by the petitioner in the case of instant asset is restricted upto apportioned approved cost and considered for the purpose of computation of transmission charges. This approach has been upheld by the Appellate Tribunal for Electricity in its order dated 28.11.2013 in Appeal No. 165 of 2012. Subsequently, the Commission, in its order dated 18.2.2014 in Petition No. 216/TT/2012, has considered the apportioned approved cost of individual asset for restricting the capital expenditure due to cost over-run for the purpose of tariff determination. The same approach has been adopted in the present case and capital expenditure has been restricted to apportioned approved cost. The petitioner is directed to submit the reasons for cost over-run in case of instant asset at the time of truing up for review by the Commission.

Time over-run

19. As per the Investment Approval dated 5.8.2011, the original scope of work in the project was to be commissioned within 25.5 months from the date of investment approval and the date of scheduled completion works out to 1.10.2013. However, the instant asset was commissioned on 1.1.2014. Thus, there is time over-run of 3 months.

20. The petitioner has submitted that the marginal delay of 3 months in the commissioning of Asset-1 is mainly due to change in the scope of work on account of delay in the commissioning of the Generator, M.B. Power (M.P.)

Limited. The petitioner has submitted that extension of 765/400 kV Jabalpur Pooling Station was required for granting connectivity to M.B. Power (M.P.) Limited. However, the Jabalpur new Sub-station of 765/400 kV Pooling Station which was part of Orissa-B Project was expected to be commissioned in the month of December, 2013 (COD 1.1.2014). Therefore, the extension bays pertaining to 400 kV D/C MB Power TPS-Jabalpur PS could only be commissioned along with the new Sub-Station at Jabalpur PS.

21. The respondent, MBPL vide replies dated 13.10.2014 and 3.7.2015 in Petition No. 141/TT/2015 has submitted that Asset-2 did not achieve COD in accordance with the 2009 Tariff Regulations. MBPL has submitted that Asset-1 does not serve any purpose and is of no use to its generation project. MBPL has further submitted that the petitioner itself acknowledged that the commissioning of Asset-1 would help in controlling the high voltages being observed at Jabalpur end, which has no bearing on the generation project of MBPL. Accordingly, any liabilities in terms of transmission charges associated with Asset-1 for the intervening period between COD of Asset-1 and Asset-2 should not be passed on to MBPL till actual COD of Asset-2. Further, MBPL has stated that the petitioner also did not put proper metering system for Asset-2 i.e. Anuppur-Jabalpur PS Transmission Line.

22. The petitioner vide affidavit dated 11.8.2015 has submitted that metering system has been installed and delay in installing the panels is attributable to MBPL. The petitioner has submitted that works on the remaining metering

equipments could be undertaken on 7.11.2014 after the panel was made available by MBPL.

23. The Commission vide letter dated 9.6.2014 had directed the petitioner to submit the following information:-

i) Progress, if any alongwith the consent of WR constituents to share the transmission charges of bus reactors till their restoration as line reactors to be furnished, in view of in-principle approval of CEA vide letter No.26/10/2013/SP&PA/237 dated 23.1.2014 to treat the line reactors as bus reactors. The proposal was to be formulated in next WR Standing Committee Meeting on Power System Planning.

ii) A copy of BPTA signed with MBPL and any other agreement like Indemnification Agreement for bearing the transmission charges to be furnished.

24. In response, the petitioner, vide affidavit dated 30.3.2015, has submitted that in-principle approval was granted by CEA on 23.1.2014 for commissioning of 2X50 MVAR line reactors associated with MBP TPS-Jabalpur 400 kV D/C line at Jabalpur end as bus reactor till the commissioning of this line. The said decision was ratified/formalized in 37th Standing Committee Meeting (SCM) of WR constituents held on 5th September, 2014 at Mumbai. The relevant para of the minutes is extracted below:-

> "In order to control overvoltage condition at various sub-stations in the Western grid, CEA has given in principle approval for use of line reactors as bus reactors to POWERGRID till the associated line is commissioned."

25. The petitioner has submitted the status of the various schemes for which in principle approval was given by CEA, including 2x50 MVAR Line Reactor at Jabalpur 400 kV Sub-station. The petitioner has further submitted that 2x50 MVAR line reactor was commissioned on 1.1.2014 as Bus Reactor and restored as line reactor on 8.8.2014.

26. Thereafter, during the hearing on 18.6.2015 learned counsel for the petitioner submitted as under:-

a) The assets covered under both the petitions are ready, but the associated Anuppur Generating Station of MBPL is not ready;

b) The petitioner has installed Secure Make energy meter for 400 kV Anuppur-Jabalpur (Powergrid) Ckt.-1 and ckt.-2 panels. Energy meter recording will be started after light up of Power Plant/400 kV switchyard of MBPL. The said installation is capable of evacuating the power generated at the 1st Generating Unit of Anuppur Thermal Power Project of MBPL. PGCIL has filed affidavit dated 16.6.2015 in this regard;

c) As per proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations, in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but on account of the delay in commissioning of the concerned generating station, the Commission can approve its date of commercial operation, if such an application is made by the transmission licensee. This marks a departure from Regulation 3(12) (c) of the 2009 Tariff Regulations which required such an element of the transmission system to be ready for regular service in such cases.

27. We have considered the submissions made by the petitioner and MBPL. The main objection of MBPL is that the request of the petitioner to declare the commercial operation of the 400 kV D/C (Triple snowbird) MBTPS (Annupur)-Jabalpur Pooling Station Transmission Line with effect from 1.7.2014 in terms of Regulation 4(3)(ii) of 2014 Tariff Regulations. The other objection is that the Asset-I consisting of 2 line bays alongwith 2X50 MVA bus reactors which has been commissioned during 2009-14 as an interim contingency till the commissioning of Asset-II is of no use to MBPL and therefore, it should not be saddled with the transmission charges of Asset-I for the intervening period. As regards the first objection, we note that the petitioner has filed a separate petition (Petition No.145/TT/2015) in respect of Asset-II and therefore, the objection of MBPL will be considered and dealt with in the said petition. As regards the second objection pertaining to Asset-I, it is noticed that CEA has given in-principle approval for use of various line reactors of the petitioner (including the Asset-I) as bus reactors to control over-voltage condition at various sub-stations in the western grid till the associated lines are commissioned. The said decision of CEA has also been ratified in the Standing Committee Meeting on Power System Planning in Western Region held on 5.9.2014. Since the Asset-I is being used for benefit of all constituents of the Western Region, we accord the approval to the commercial operation of Asset-I with effect from 1.1.2014 in terms of 3(12)(c) of the 2009 Tariff Regulations. As regards MBPL's concern regarding incidence of transmission

charges, we would like to clarify that the transmission charges shall be borne by the beneficiaries in the Western Region as provided under the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010.

28. As regards the time over-run in case of Asset-I, it is observed that Asset-1 has been delayed due to change in the scope which required the extension of 765/400 kV Jabalpur PS for connectivity of MB power to Jabalpur Pooling station. 765/400 kV Jabalpur PS was part of Orissa-B project and as per schedule, the Jabalpur Pooling Station was expected in December, 2013. Accordingly, the Asset-1 was commissioned on 1.1.2014 to match with the commissioning of Jabalpur Pooling Station. Therefore, the delay of three months in commissioning of Asset-1 is condoned.

Initial spares

29. Regulation 8 of the 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

Transmission line	:	0.75%
Transmission sub-station	:	2.5%
Series compensation devices & HVDC Station	:	3.5%

30. The petitioner has claimed initial spares for an amount of ₹51.43 lakh pertaining to sub-station for Asset-1 in the instant petition. Initial spares so claimed are within the ceiling limit specified in the 2009 Tariff Regulations. The

details of initial spares claimed by the petitioner and allowed for the instant asset are as follows:-

(₹ in lakh)

Particulars	**Total estimated completion cost**	**Initial spares claimed**	**Initial spares**			
			Proportionate initial spares	**Ceiling limit**	**As worked out**	**Excess claimed**
Sub-station	2289.52	51.43	38.73	2.50%	43.22	-

31. The claim of initial spares has not been restricted now as the capital cost of Asset-1 has been restricted to the apportioned approved cost. However, in view of restriction of capital cost due to cost over-run as discussed at para-19 and disallowance of IDC at para-16, the claim of initial spares shall need to be proportionately reduced. The admissible initial spares shall be subject to review on submission of the detailed computations in support of the claim for IDC and RCE by the petitioner at the time of truing up.

<u>Additional Capital Expenditure</u>

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

33. Further, the 2009 Tariff Regulations define 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".

34. Accordingly, the cut-off date for the instant asset is 31.3.2017 i.e. tariff period 2014-19.

35. The petitioner has claimed additional capital expenditure of ₹44.51 lakh for the period 2013-14. The claim for additional capital expenditure is mainly on account of balance retention payment, which is admissible under Regulation 9(1) of the 2009 Tariff Regulations and is allowed. However, in view of, capital cost being restricted to apportioned approved cost on account of cost over-run, the additional capital expenditure has been restricted to ₹34.45 lakh during 2013-14. The claim of additional expenditure for the years 2014-15 and 2015-16 has not been considered being beyond the tariff period 2009-14.

Capital cost as on COD and as on 31.3.2014

36. The details of the capital cost considered as on COD and as on 31.3.2014 after being restricted to apportioned approved cost and the necessary adjustment in respect of IDC are as follows:-

(₹ in lakh)

Particulars	**Capital cost as on COD as per Auditors' certificate dated 21.1.2014**	**Admissible capital cost after adjustment of IDC on cash basis as on COD**	**Additional capital expenditure allowed for 2013-14**	**Admissible completion capital cost as on 31.3.2014**
Freehold Land	-	-	-	-
Leasehold Land	-	-	-	-
Building & Other Civil Works	-	-	-	-
Transmission Line	-	-	-	-

Sub-Station Equipments	1909.30	1689.92	34.45	1724.37
PLCC	-	-	-	-
Total	**1909.30**	**1689.92**	**34.45**	**1724.37**

Debt- Equity ratio

37. Regulation 12 of the 2009 Tariff Regulations provides as under:-

> "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."

38. The petitioner has claimed debt equity ratio of 70:30 as on COD of the instant asset and for additional capitalization which is in accordance with the above regulations. The debt: equity ratio of 70:30 has been considered to allow the tariff. The details of debt: equity ratio considered as on COD, for additional capital expenditure and as on 31.2014 are as overleaf:-

Particulars	As on COD	Add-Cap	As on 31.3.2014	%age
	Amount (₹ in lakh)			
Debt	1182.94	24.12	1207.06	70.00
Equity	506.97	10.34	517.31	30.00
Total	**1689.92**	**34.45**	**1724.37**	**100.00**

Return on Equity (RoE)

39. Regulation 15 of the 2009 Tariff Regulations provides that:-

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

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:

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

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

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

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

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

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

Provided further that Annual Fixed charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations".

40. The details of return on equity calculated are as under:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Opening Equity	506.97
Addition due to Additional Capitalization	10.34
Closing Equity	517.31
Average Equity	512.14
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2013-14 (MAT)	20.960%
Rate of Return on Equity (Pre Tax)	19.610%
Return on Equity (Pre Tax)	**25.11**

41. The petitioner has claimed additional RoE @ 0.5%. As there is time over-run in case of the instant asset, the petitioner's prayer for additional RoE is not allowed.

42. The petitioner has submitted that it may be allowed to recover the shortfall or refund the excess Annual Fixed Charges, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission under Regulation 15(5) of the 2009 Tariff Regulations. We would like to clarify that RoE has been computed @ 20.961% p.a for the year 2013-14 on average equity and allowed in the instant petition itself.

Interest on Loan

43. 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."

44. In view of provisions of the 2009 Tariff Regulations, interest on loan has been considered as detailed hereinafter:-

(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) 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 (a) above is applied on the notional average loan during the year to arrive at the interest on loan; and

(e) As per Regulation 16(5) only actual loans have been considered for computation of weighted average rate of interest.

45. The petitioner has prayed to be allowed to bill and adjust impact of Interest on loan due to change in interest rate on account of floating rate of interest applicable, if any, during the tariff period 2009-14 from the respondents. The interest on loan has been calculated on the basis of prevailing rate of actual loan applicable during 2013-14. Any change in rate of interest subsequent to the date of commercial operation will be considered at

the time of truing up.

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

47. Details of interest on loan calculated are as given under:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Gross Normative Loan	1182.94
Cumulative Repayment upto Previous Year	-
Net Loan-Opening	1182.94
Addition due to Additional Capitalization	24.12
Repayment during the year	22.53
Net Loan-Closing	1184.52
Average Loan	1183.73
Weighted Average Rate of Interest on Loan	9.8852%
Interest	**29.25**

<u>Depreciation</u>

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

> "17. Depreciation (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."

49. The instant asset has been put under commercial operation on 1.1.2014. Accordingly, the instant asset will complete 12 years beyond 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations.

50. Details of the depreciation worked out are as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Opening Gross Block	1689.92
Additional Capital Expenditure	34.45
Closing Gross Block	1724.37
Average Gross Block	1707.14
Rate of Depreciation	5.2800%
Depreciable Value	1536.43
Remaining Depreciable Value	1536.43
Depreciation	**22.53**

<u>Operation & Maintenance Expenses (O&M Expenses)</u>

51. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies norms for O&M Expenses for transmission system based on type of sub-

stations and the transmission line. Norms specified in respect of O&M Expenses for transmission asset covered in the instant petition are as follows:-

Elements	2011-12	2012-13	2013-14
400 kV bay (₹ lakh/bay)	58.57	61.92	65.46

52. Accordingly, the allowable O & M Expenses for the elements of the instant asset are as under:-

(₹ in lakh)

Elements	2013-14 (pro-rata)
2 nos., 400 kV bays (COD 1.1.2014)	32.73
Total	**32.73**

53. 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 and by escalating it by 5.72% per annum for arriving at norms for the years of tariff period. 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 may approach the Commission for suitable revision in norms for O&M Expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%.

54. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions etc. Such kinds of payments are generally included in the O & M Expenses. While specifying the norms for the O & M Expenses, the

Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

Interest on working capital

55. As per the 2009 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

(i) 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 petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(ii) O & M Expenses

Regulation 18 (1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M expenses for the instant asset and value of O & M expenses has accordingly been worked out by considering 1 month O&M Expenses.

(iii) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. 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.

(iv) **Rate of interest on working capital**

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.4.2009 shall be equal to State Bank of India Base Rate as applicable on 1st April of the year of commercial operation plus 350 bps. State Bank of India base interest rate on 1.4.2013 was 9.70%. Therefore, interest rate of 13.20% (9.70% plus 350 basis point) has been considered in respect of instant asset.

56. Necessary computations in support of interest on working capital are as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Maintenance Spares	19.64
O & M expenses	10.91
Receivables	75.41
Total	**105.96**
Rate of Interest	13.20%
Interest	**3.50**

Transmission charges

57. The transmission charges being allowed for the transmission asset are as under:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Depreciation	22.53
Interest on Loan	29.25
Return on equity	25.11
Interest on Working Capital	3.50
O & M Expenses	32.73
Total	**113.12**

Filing Fee and the Publication Expenses

58. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis in accordance with Regulation 42 of the 2009 Tariff Regulation.

Licence Fee

59. 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. The petitioner shall be entitled for reimbursement of licence fee in accordance with amended Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service Tax

60. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if

notification regarding granting of exemption to transmission service is withdrawn at a later date and it is subjected to such service tax in future the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

61. The transmission charges approved by the Commission in this order are payable by the beneficiaries in accordance with the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations). Accordingly, the billing, collection and disbursement of the transmission charges shall be governed by the provisions of 2010 Sharing Regulations, as amended from time to time.

62. This order disposes of Petition No. 38/TT/2014.

sd/-	**sd/-**	**sd/-**
(A.S. Bakshi)	**(A.K. Singhal)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Chairperson**

Annexure

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	**2013-14**
1	**Bond XXXVIII**	
	Gross loan opening	33.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	33.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	33.00
	Average Loan	33.00
	Rate of Interest	9.25%
	Interest	**3.05**
	Rep Schedule	Bullet Payment 9.3.2027
2	**Bond XLII**	
	Gross loan opening	113.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	113.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	113.00
	Average Loan	113.00
	Rate of Interest	8.80%
	Interest	**9.94**
	Rep Schedule	Bullet payment on 13.3.2023
3	**Bond XLI**	
	Gross loan opening	125.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	125.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	125.00
	Average Loan	125.00
	Rate of Interest	8.85%
	Interest	**11.06**
	Rep Schedule	12 Annual instalments from 19.10.2016
4	**Bond XXXVII**	
	Gross loan opening	35.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	35.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	35.00
	Average Loan	35.00
	Rate of Interest	9.25%
	Interest	**3.24**

	Rep Schedule	12 Annual instalments from 26.12.2015
5	**Bond XL**	
	Gross loan opening	85.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	85.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	85.00
	Average Loan	85.00
	Rate of Interest	9.30%
	Interest	7.91
	Rep Schedule	12 Annual instalments from 28.6.2016
6	**SBI**	
	Gross loan opening	945.51
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	945.51
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	945.51
	Average Loan	945.51
	Rate of Interest	10.25%
	Interest	96.91
	Rep Schedule	2 Annual instalments from 31.8.2016
	Total Loan	
	Gross loan opening	1336.51
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1336.51
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1336.51
	Average Loan	1336.51
	Weighted Average Rate of Interest	**9.8852%**
	Interest	**132.12**