

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 530/TT/2014

Coram:

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

**Date of Hearing: 20.01.2015
Date of Order : 29.02.2016**

In the matter of:

Approval of transmission tariff for **Asset-I:** 220 kV D/C Rangpo-New Melli Line and associated bays at Rangpo and New Melli alongwith one no. 220 kV Bus Coupler Bay each at Rangpo and New Melli, **Asset-II:** 1 no. 31.5 MVAR Bus Reactor (1st) at New Melli and associated bay, **Asset-III:** 1 no. 31.5 MVAR Bus Reactor (2nd) at New Melli and associated bay, **Asset-IV:** 63 MVAR Line Reactor of Ckt.-I of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus reactor and **Asset-V:** 63 MVAR Line Reactor of Ckt.-II of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor under Transmission System for Transfer of Power from Generation Projects in Sikkim to NR/WR Part-B in Eastern Region for 2014-19 tariff block under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission(Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Power Grid Corporation of India Limited
“Soudamini”, Plot No. 2, Sector 29
Gurgaon -122001

....Petitioner

Vs

1. North Bihar Power Distribution Company Limited,
2nd Floor, Vidyut Bhawan, Bailey Road,
Patna-800 001
2. South Bihar Power Distribution Company Limited,
2nd Floor, Vidyut Bhawan, Bailey Road,
Patna-800 001



3. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City, Kolkatta-700 091
4. Grid Corporation of Orissa Limited,
Shahid Nagar,
Bhubaneswar-751 007
5. Damodar Valley Corporation,
DVC Tower, Maniktala
Civic Centre, VIP Road,
Kolkatta-700 054
6. Power Department,
Govt. of Sikkim, Gangtok-737 101
7. Jharkhand State Electricity Board,
In front of Main Secretariat,
Doranda, Ranchi-834 002

.....Respondents

For petitioner : Shri M.M. Mondal, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL

For respondents: None

ORDER

The present petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of transmission charges for **Asset-I:** 220 kV D/C Rangpo-New Melli Line and associated bays at Rangpo and New Melli alongwith one no. 220 kV Bus Coupler Bay each at Rangpo and New Melli, **Asset-II:** 1 no. 31.5 MVAR Bus Reactor (1st) at New Melli and associated bay, **Asset-III:** 1 no. 31.5 MVAR Bus Reactor (2nd) at New Melli and associated bay, **Asset-IV:** 63



MVAR Line Reactor of Ckt.-I of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor and **Asset-V**: 63 MVAR Line Reactor of Ckt.-II of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor (hereinafter referred to as “transmission assets”) under Transmission System for Transfer of Power from Generation Projects in Sikkim to NR/WR Part-B in Eastern Region, from the date of commercial operation to 31.3.2019 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

2. The petitioner was entrusted with the implementation of transmission system for transfer of power from generation projects in Sikkim to NR/WR Part-B. The system requirements alongwith Part-A and Part-C were discussed and agreed in the 27th SCM of NR held on 30.5.2009 and 29th SCM of WR held on 10.9.2009. Further, the scope of the system was also discussed in the 16th ERPC and TCC meeting held on 17/18.12.2010. The Investment Approval (IA) and expenditure sanction for the transmission system was accorded by the Board of Directors of the petitioner vide Memorandum No C/CP/Sikkim Generation Projects-Part-B dated 17.3.2011 at an estimated cost of ₹158512 lakh including an IDC of ₹10183 lakh (based on 3rd Qtr 2010 price level). The project was scheduled to be commissioned within 32 months from the date of IA. Therefore, the scheduled date of commissioning of the transmission system was 16.11.2013. The scope of work covered under the scheme is broadly as follows:-



Transmission Lines:

- a. LILO of Teesta III-Kishanganj 400 kV D/C line (quad) (line being constructed under JV route) at Rangpo :22.5 km (21 km D/C+1.5 km multi circuit portion)
- b. Rangpo-New Melli 220 kV D/c line (with twin Moose conductor) : 22 km {20.5 km D/C+1.5 km multi circuit portion (2 Ckts. of 220 kV Line with twin Moose and 2 Ckts. of 132 kV line i.e. portion of LILO of Gangtok-Rangit 132 kV S/C line at Rangpo)}
- c. LILO of Gangtok-Rangit 132 kV S/c line at Rangpo : 3 km and Termination of Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV line at Rangpo (with Zebra conductor)-1 km, Termination of Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV line at Rangpo (with Panther conductor)-0.5 km and Termination of Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV line at Rangpo multi circuit portion (2 Ckts. of 132 kV line with ACSR Zebra and 2 Ckts. of 132 kV line with ACSR Panther)-1 km (Gangtok-Rangpo/Chuzachen and Melli-Rangpo/Chuzachen 132 kV lines to be constructed under part-A through LILO of Gangtok-Melli 132 kV S/C line upto Rangpo
- d. LILO of Teesta IV-Siliguri 400 kV D/C line at Rangpo : 2.5 km (1km D/C+1.5 km Multi circuit portion)
- e. Kishanganj-Patna 400 kV D/C (quad) line :351 km

Sub-stations:

- a. Establishment of 400/220/132 kV GIS Sub-station at Rangpo with 16x105 MVA, 400/220 kV 1-Ø transformers and 3x100 MVA, 220/132 kV 1-Ø transformers
- b. Establishment of 220 kV Gas Insulated switching station at New Melli
- c. Extension of bays at Kishanganj 400/220 kV sub-station
- d. Extension of bays at Patna 400/220 kV sub-station



3. The petitioner initially in the petition claimed approval of the transmission charges from the anticipated dates of commercial operation (COD) of Asset-I, Asset-II, Asset-III and Asset-V and actual COD of Asset-IV. However, the petitioner vide affidavits dated 13.2.2015 and 26.3.2015 submitted the revised anticipated/actual dates of commercial operation of the instant transmission assets. The revised dates of commercial operation, submitted vide affidavit dated 26.3.2015, and the details of the instant assets are as under:-

Particulars	Anticipated/ actual COD	Revised Anticipated/ actual COD
Asset-I: 220 kV D/C Rangpo-New Melli Line and associated bays at Rangpo and New Melli alongwith one no. 220 kV Bus Coupler Bay each at Rangpo and New Melli	31.12.2014 (Anticipated)	30.4.2015 (Anticipated)
Asset-II: 1 no. 31.5 MVAR Bus Reactor (1 st) at New Melli and associated bay	31.12.2014 (Anticipated)	30.4.2015 (Anticipated)
Asset-III: 1 no. 31.5 MVAR Bus Reactor (2nd) at New Melli and associated bay	31.12.2014 (Anticipated)	30.4.2015 (Anticipated)
Asset-IV: 63 MVAR Line Reactor of Ckt.-I of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor	2.10.2014 (Actual)	2.10.2014 (Actual)
Asset-V: 63 MVAR Line Reactor of Ckt.-II of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor	28.11.2014 (Anticipated)	29.11.2014 (Actual)

4. The petitioner was directed by the Commission to submit certain information. However, the petitioner has neither submitted the revised Auditors' Certificates/Management Certificates nor any revised tariff forms as directed vide RoP dated 20.1.2015. The petitioner vide affidavits dated 13.2.2015 and 26.3.2015 has submitted that Assets IV and V were commissioned and Assets I, II and III are anticipated to be commissioned and prayed that the tariff be allowed on pro-rata basis from actual/revised anticipated COD based upon the cost and tariff as submitted in the original petition. The petitioner has not submitted the revised



Auditors Certificates/Management Certificates for expenditure and revised tariff forms as directed in RoP dated 20.1.2015. The instant petition was filed on 5.12.2014. As per the 2014 Tariff Regulations, a petition can be filed 180 days before the anticipated date of commissioning of assets. In case of Assets-I, II and III, 180 days expired on 5.6.2015 and these assets are yet to be commissioned and accordingly tariff is not allowed for these assets in the instant petition. Tariff is granted for Asset-IV and Asset-V in the instant petition and the petitioner is directed to file a fresh petition after the commissioning of Asset-I, Asset-II and Asset-III as per Regulation 7(ii) of the 2014 Tariff Regulations.

5. AFC was granted for the above mentioned transmission assets vide order dated 15.4.2015 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations, subject to proviso (iii) and (iv) of the said Regulation. However, in terms of proviso (ii) under Regulation 7(7) of the 2014 Tariff Regulations, if the COD is delayed beyond 180 days from the date of issue of order, the tariff granted shall be deemed to have been withdrawn and the transmission licensee shall be required to file a fresh petition after the date of commercial operation. Accordingly, the tariff granted for Assets-I, II and III, under proviso (ii) to Regulation 7(7) of the 2014 Tariff Regulations, is directed to be withdrawn from the PoC calculation, if not already withdrawn.



6. The details of the assets covered in the instant petition are as follows:-

S. No.	Asset	Name of the Asset
1	Asset-I	63 MVAR Line Reactor of Ckt.-I of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor
2	Asset- II	63 MVAR Line Reactor of Ckt.-II of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus Reactor

7. In case of Asset-IV, the petitioner initially claimed the tariff on the anticipated COD of 1.10.2014 and submitted the Auditor's Certificate for expenditure alongwith tariff forms. Asset-IV was put into commercial operation on 2.10.2014. Accordingly, the petitioner has claimed tariff for Asset-IV for the period 2014-15 on the basis of actual COD by taking pro-rata of tariff calculated on the basis of the anticipated COD as per Auditor's Certificate. Similarly, in case of Asset-V, initially tariff was claimed on the basis of anticipated COD of 28.11.2014 and the petitioner has submitted the Auditor's Certificate for expenditure alongwith tariff forms on the basis of anticipated COD. The anticipated COD of Asset-V was revised to 1.11.2014 and the petitioner has claimed the tariff for the period 2014-15 by taking pro-rata of tariff calculated on the basis of the anticipated COD as per the Auditor's Certificate. The Asset-IV and Asset-V are being renumbered as Asset-I and Asset-II in the instant order. The details of the transmission charges claimed by the petitioner for the instant assets are as under:-

Particulars	Asset-I				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	23.49	53.18	58.48	61.13	61.13

(₹ in lakh)



Interest on Loan	26.15	55.99	57.15	55.02	49.80
Return on Equity	26.06	58.96	64.82	67.75	67.75
Interest on Working Capital	3.41	7.31	7.71	7.91	7.91
O & M Expenses	30.15	62.30	64.37	66.51	68.71
Total	109.26	237.74	252.53	258.32	255.30
Particulars	Asset-II				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	20.44	54.49	59.13	61.44	61.44
Interest on Loan	23.28	58.83	59.18	56.57	51.25
Return on Equity	22.68	60.40	65.53	68.09	68.09
Interest on Working Capital	2.92	7.44	7.79	7.96	7.96
O & M Expenses	25.13	62.30	64.37	66.51	68.71
Total	94.45	243.46	256.00	260.57	257.45

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

(₹ In lakh)

Particulars	Asset-I				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
O & M expenses	5.03	5.19	5.36	5.54	5.73
Receivables	36.42	39.62	42.09	43.05	42.55
Total	50.50	54.16	57.11	58.57	58.59
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	3.41	7.31	7.71	7.91	7.91
Particulars	Asset-II				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
O & M expenses	5.03	5.19	5.36	5.54	5.73
Receivables	37.78	40.58	42.67	43.43	42.91
Total	51.86	55.12	57.69	58.95	58.95
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	2.92	7.44	7.79	7.96	7.96

9. 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. None of the respondents have filed any reply.



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

Capital cost

11. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”

(2) The Capital Cost of a new project shall include the following:

(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (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 funds deployed;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39

(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.

12. The details of the apportioned approved capital cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred



or projected to be incurred for the instant transmission assets as submitted by the petitioner and considered for the purpose of tariff are as follows:-

(₹ in lakh)

Particulars	AppORTIONED approved cost	Cost as on COD	Additional capital expenditure Incurred/Projected			Total estimated completion cost upto 31.3.2018
			2014-15	2015-16	2016-17	
Asset-I*	1213.47	819.58	132.82	99.62	99.61	1151.63
Asset-II**	1213.47	866.95	116.22	87.17	87.15	1157.49

*Based on expected COD (1.10.2014) considered as per auditors' certificate dated 17.9.2014 in the original petition.

**Based on expected COD (1.11.2014) considered as per auditors' certificate dated 17.9.2014 in the original petition.

Cost over-run

13. The total estimated completion cost is ₹1151.63 lakh and ₹1151.49 lakh against the appORTIONED approved cost of ₹1213.47 lakh each for Asset-I and Asset-II respectively. Thus, there is no cost over-run in the case of instant transmission assets.

Time over-run

14. The project was scheduled to be commissioned within 32 months from the date of investment approval of 17.3.2011. Accordingly, the scheduled COD works out to 16.11.2013. Asset-I and Asset-II were commissioned on 2.10.2014 and 29.11.2014 respectively. Thus, there is time over-run of 320 days and 378 days in the commissioning of Asset-I and Asset-II respectively.

15. During the hearing on 20.1.2015, the petitioner was directed to submit the details of time over-run and chronology of the activities.



16. As regards time over-run, the petitioner has submitted that for termination of 400 kV D/C Kishanganj-Patna line at Patna Sub-station, provision for 2 nos. of 63 MVAR line reactors have been kept. However, the completion of Patna-Kishanganj line and completion of Kishanganj Sub-station is delayed. The land for sub-station at Karandighi in West Bengal was agreed in Standing Committee Meeting held on 28.12.2010 but, the land could not be acquired at Karandighi in spite of persistent efforts and persuasion with West Bengal Government. In the SCM held on 5.1.2013, the land in Kishanganj area in Bihar was agreed and CEA had agreed in principle for locating the sub-station in Kishanganj in Bihar which was subsequently ratified in TCC/ERPC meeting held on 26/27.4.2013. This process took more than three years and considerably delayed the Kishanganj Sub-station and Patna-Kishanganj line. In view of the delay, in finalization of suitable land in West Bengal, the petitioner explored for alternate land in nearby area in Bihar. The petitioner submitted that due to persistent over voltage at 400 kV Patna Sub-station and the delay in commissioning of line reactors alongwith reactors at Kishanganj were anticipated to be commissioned in August 2014, it was discussed in the 99th OCC meeting of ERPC that 2 line reactors at Patna may be connected as Bus Reactors to contain the voltage problem. It was agreed by ERLDC in OCC of Eastern Region held on 18.7.2014 and referred to 28th TCC/ ERPC meeting held on 12.9.2014. The petitioner has further submitted that the delay in completion of the line is attributable to various factors and the delay was beyond the control of the petitioner. The petitioner has requested to condone the time over-run in commissioning of the instant assets.



17. We have perused the minutes of the 99th OCC meeting held on 18.7.2014 as submitted by the petitioner and note that it provides as follows:-

“Item no. D.3.1... Commissioning of 2x63 MVAR Line Reactor connected in 400 kV Kishenganj D/C Line at Patna sub-station as Bus Reactor:

The voltage of 400 kV Patna substation remains high in the range of 418-422 kV. Further, the two nos. 50 MVAR line reactors connected in 400 kV Patna-Barh Ckt-I & II at Patna sub-station are going to be dismantled and shifted to Balia shortly. This will further worsen the voltage profile at Patna substation. At Patna sub-station, the bays for 400 kV Patna-Kishenganj D/C line with the 63 MVAR line reactors are going to be ready in the month of August, 2014. Till the 400 kV Patna-Kishenganj D/C line is ready, to control the voltage at Patna substation, it is proposed to connect the 63 MVAR reactors of Kishenganj D/C line at Patna sub-station as bus reactors.
Members may kindly discuss”

18. In our opinion, the above does not conclude that the members agreed for installation of line reactors as bus reactors in the 99th meeting of OCC held on 19.7.2014. We have also perused the minutes for 28th TCC/ERPC meeting held on 12.9.2014 and the installation of line reactors as bus reactors has been agreed in this meeting. It is observed that the petitioner has failed to enclose the relevant documents of approval, rather it casually enclosed minutes of the 99th meeting of OCC, which were not relevant.

19. The IDC and IEDC during the period of time over-run are to be treated as provided under Regulations 11 and 12 of the 2014 Tariff Regulations. Regulations 11 and 12 of the 2014 Tariff Regulations provides as follows:-

“11.....Interest during construction (IDC), Incidental Expenditure during Construction (IEDC)

(A) Interest during Construction (IDC):



(1) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds upto SCOD.

(2) In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or the transmission licensee as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds:

Provided that if the delay is not attributable to the generating company or the transmission licensee as the case may be, and is due to uncontrollable factors as specified in Regulation 12 of these regulations, IDC may be allowed after due prudence check: Provided further that only IDC on actual loan may be allowed beyond the SCOD to the extent, the delay is found beyond the control of generating company or the transmission licensee, as the case may be, after due prudence and taking into account prudent phasing of funds.....”

“12.....Controllable and Uncontrollable factors:

The following shall be considered as controllable and uncontrollable factors leading to cost escalation impacting Contract Prices, IDC and IEDC of the project:

- (1) The “**controllable factors**” shall include but shall not be limited to the following:
 - a) Variations in capital expenditure on account of time and/or cost overruns on account of land acquisition issues;
 - b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or force majeure events; and
 - c) Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee.”

20. The petitioner has attributed the time over-run in commissioning in case of instant reactors to the delay in finding suitable land for Kishanganj Sub-station. As per Regulations 11 and 12 (i) (a) of the 2014 Tariff Regulations, IDC and IEDC is allowable only for uncontrollable factors and not for controllable factors. Time over-run due to land acquisition issues is a controllable factor and hence IDC and IEDC



for the period of time over-run in the instant case are not allowable. However, the petitioner may justify time over-run due to land acquisition at the time of truing-up alongwith documentary evidence. However, we would like to make it clear that the petitioner will not be eligible for any interest for the increase in capital cost due to condonation of time over-run and allowance of IDC and IEDC, as the petitioner has not sufficiently shown that the reasons for time over-run are beyond its control.

Treatment of IDC and IEDC

21. The petitioner has claimed Interest During Construction (IDC) of ₹75.55 lakh and ₹80.16 lakh for Asset-I and Asset-II respectively. The petitioner has not submitted details of IDC on cash basis and as such IDC on cash basis has been worked out based on the loans deployed for the instant assets as per Form-9C assuming that the petitioner has not made any default in the payment of interest. Further, as the delay in the commissioning of the instant transmission assets has not been condoned, IDC for the delayed period has been disallowed. Thus, IDC on cash basis up to the scheduled date of commercial operation i.e. 16.11.2013 allowed in respect of Asset-I and Asset-II has been considered at ₹30.67 lakh and ₹33.06 lakh respectively. The amount of IDC accrued as on COD and to be discharged after COD has not been considered in the capital cost due to non availability of adequate information. The un-discharged liability pertaining to IDC would be considered once it is paid, subject to submission of adequate information and prudence check at the time of truing-up. The petitioner is directed to submit detailed working of undischarged liability pertaining to IDC alongwith



detailed calculations/working corresponding at the time of truing-up.

22. The petitioner has claimed ₹16.41 lakh and ₹17.66 lakh for Asset-I and Asset-II respectively as Incidental Expenditure During Construction (IEDC) as having being paid upto COD. The petitioner has not submitted the detailed working of IEDC, however, the IEDC amount claimed is within the percentage on Hard Cost as submitted in the Abstract Cost Estimate. Thus, after pro-rata deduction for the delay which has not been condoned, the balance amount of ₹12.37 lakh and ₹12.74 lakh has been allowed for Asset-I and Asset-II respectively, for the purpose of tariff in this order.

Initial Spares

23. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

“13. Initial Spares

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(d) Transmission system

(i) Transmission line - 1.00%

(ii) Transmission Sub-station (Green Field) - 4.00%

(iii) Transmission Sub-station (Brown Field) - 6.00%

(iv) Series Compensation devices and HVDC Station - 4.00%

(v) Gas Insulated Sub-station (GIS)-5.00%

(vi) Communication system-3.5%

Provided that:



(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

(ii) -----

(iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application.”

24. The petitioner has claimed initial spares amounting to ₹24.86 lakh each, corresponding to sub-station, in respect of Asset-I and Asset-II. Initial spares in respect of the instant transmission assets are within the ceiling limit as specified in the 2014 Tariff Regulations and thus considered for the purpose of tariff in this order.

25. Accordingly, capital cost as on the date of commercial operation for the instant transmission assets after adjustment of IDC/IEDC is considered as per Regulation 9(2) of the 2014 Tariff Regulations as given under:-

(₹ in lakh)			
S. No.	Particulars	Asset-I	Asset-II
(i)	Capital cost claimed as on COD	819.58	866.95
(ii)	(-) IDC claimed on accrual basis	75.55	80.16
(iii)	(+) IDC worked out and allowed	30.67	33.06
(iv)	(-) IEDC disallowed due to time over-run	4.04	4.92
(v)	(-) Excess Initial spares disallowed	-	-
(vi)	Total capital cost allowed as on COD	770.66	814.93



Additional Capitalisation and De-capitalisation

26. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“ (1) The capital expenditure in respect of the new project or an existing project 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 recognised to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law or compliance of any existing law.”

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

27. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” date as under:

“cut-off date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part 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 three years of the year of commercial operation”.

28. The cut-off date in the case of instant transmission assets is 31.3.2017.

29. The additional capital expenditure during 2014-15, 2015-16 and 2016-17 claimed by the petitioner is given at para-13 above. The additional capital expenditure incurred or projected to be incurred and claimed by the petitioner in respect of the instant transmission assets totaling to ₹332.05 lakh and ₹290.54



lakh for Asset-I and Asset-II respectively is within the cut-off date and is on account of balance payments. Thus, the additional capital expenditure claimed in respect of the instant transmission assets is allowed. The additional capital expenditure approved is as under:-

(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	Total
Asset-I	132.82	99.62	99.61	332.05
Asset-II	116.22	87.17	87.15	290.54

30. Based on the above, gross block has been considered as per details given below:-

(₹ in lakh)					
Particulars	Cost as on COD	Additional Capital Expenditure Incurred/Projected			Total capital cost as on 31.3.2019
		2014-15	2015-16	2016-17	
Asset-I	770.66	132.82	99.62	99.61	1102.71
Asset-II	814.93	116.22	87.17	87.15	1105.47

Debt- Equity ratio

31. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered”

32. The capital cost on the dates of commercial operation arrived at as above and additional capitalization allowed have been considered in the normative debt-equity ratio of 70:30. The details of debt-equity as on dates of commercial operation and 31.3.2019 considered on normative basis are as follows:-



Asset-I	As on COD		As on 31.3.2019	
Particulars	Amount (₹in lakh)	% age	Amount (₹in lakh)	% age
Debt	539.46	70.00	771.90	70.00
Equity	231.19	30.00	330.80	30.00
Total	770.65	100.00	1102.70	100.00
Asset-II	As on COD		As on 31.3.2019	
Particulars	Amount (₹in lakh)	% age	Amount (₹in lakh)	% age
Debt	570.46	70.00	773.84	70.00
Equity	244.47	30.00	331.64	30.00
Total	814.93	100.00	1105.47	100.00

Return on equity

33. Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

- (i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:
- (ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
- (iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
- (iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor



Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

- (v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:
- (vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

(2) Rate of return on equity shall be rounded off to three decimal places and shall 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 effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

34. The petitioner has submitted that RoE has been calculated at the rate of after grossing up the RoE with MAT rate as per the above Regulations. The petitioner has further submitted that the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted



for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

35. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

36. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE allowed is as given under:-

Particulars	(₹ in lakh)				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	231.19	271.04	300.93	330.81	330.81
Addition due to Additional Capitalization	39.85	29.89	29.88	-	-
Closing Equity	271.04	300.93	330.81	330.81	330.81



Average Equity	251.12	285.98	315.87	330.81	330.81
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	24.42	56.08	61.94	64.87	64.87
Particulars	Asset-II				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	244.47	279.34	305.49	331.64	331.64
Addition due to Additional Capitalization	34.87	26.15	26.15	-	-
Closing Equity	279.34	305.49	331.64	331.64	331.64
Average Equity	261.91	292.42	318.56	331.64	331.64
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	17.31	57.34	62.47	65.03	65.03

Interest on loan

37. Regulation 26 of the 2014 Tariff Regulations are provides as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting 65 the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(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 depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:



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 66 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.”

38. The petitioner's entitlement to interest on loan has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:-

(a) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per the petition;

(b) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year;

(c) 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.

39. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on respective CODs and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/ adjusted over the tariff block 2014-19. We would like to clarify that the interest on loan has been calculated on the basis of rate prevailing as on the date



of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up.

40. Detailed calculations in support of interest on loan have been calculated as given at Annexure I to Annexure II of this order.

41. The details of Interest on Loan calculated are as under:-

Particulars	(₹in lakh)				
	Asset-I				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	539.46	632.43	702.17	771.90	771.90
Cumulative Repayment upto Previous Year	-	22.02	72.60	128.49	187.02
Net Loan-Opening	539.46	610.42	629.57	643.41	584.87
Addition due to Additional Capitalisation	92.97	69.73	69.73	-	-
Repayment during the year	22.02	50.58	55.89	58.54	58.54
Net Loan-Closing	610.42	629.57	643.41	584.87	526.34
Average Loan	574.94	619.99	636.49	614.14	555.60
Weighted Average Rate of Interest on Loan	8.5967%	8.5949%	8.5899%	8.5914%	8.5970%
Interest on Loan	24.51	53.29	54.67	52.76	47.77
Particulars	Asset-II				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	570.46	651.81	712.83	773.84	773.84
Cumulative Repayment upto Previous Year	-	15.61	67.33	123.70	182.38
Net Loan-Opening	570.46	636.20	645.50	650.14	591.46
Addition due to Additional Capitalisation	81.35	61.02	61.01	-	-
Repayment during the year	15.61	51.73	56.36	58.68	58.68
Net Loan-Closing	636.20	645.50	650.14	591.46	532.77
Average Loan	603.33	640.85	647.82	620.80	562.12
Weighted Average Rate of Interest on Loan	8.7675%	8.7670%	8.7639%	8.7639%	8.7748%
Interest on Loan	17.83	56.18	56.77	54.41	49.32



Depreciation

42. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as follows:-

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. 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.

(3) 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 station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

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

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

4) 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.



(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** 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 the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

43. The petitioner has claimed actual depreciation as a component of annual fixed charges. In our calculations, depreciation has been calculated in accordance with Regulation 27 of the 2014 Tariff Regulations extracted above.

44. The instant transmission assets were put under commercial operation during 2014-15. Accordingly, they will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

45. The details of the depreciation worked out are as under:-

Particulars	Asset-I				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	770.66	903.48	1003.10	1102.71	1102.71
Addition during 2014-19 due to Projected Additional Capitalisation	132.82	99.62	99.61	-	-
Gross Block as on 31 st March	903.48	1003.10	1102.71	1102.71	1102.71
Average Gross Block	837.07	953.29	1052.90	1102.71	1102.71
Rate of Depreciation	5.3041%	5.3063%	5.3078%	5.3084%	5.3084%
Depreciable Value	753.36	857.96	947.61	992.44	992.44
Remaining Depreciable Value	753.36	835.94	875.01	863.95	805.41

(₹ in lakh)



Depreciation	22.02	50.58	55.89	58.54	58.54
Particulars	Asset-II				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross Block as on COD	814.93	931.15	1018.32	1105.47	1105.47
Addition during 2014-19 due to Projected Additional Capitalisation	116.22	87.17	87.15	-	-
Gross Block as on 31 st March	931.15	1018.32	1105.47	1105.47	1105.47
Average Gross Block	873.04	974.74	1061.90	1105.47	1105.47
Rate of Depreciation	5.3048%	5.3066%	5.3078%	5.3084%	5.3084%
Depreciable Value	785.54	877.26	955.71	994.92	994.92
Remaining Depreciable Value	785.54	861.66	888.38	871.23	812.55
Depreciation	15.61	51.73	56.36	58.68	58.68

Operation & maintenance expenses (O&M Expenses)

46. Regulation 29(4) (a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-

Elements	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV bays (₹ lakh per bay)	60.30	62.30	64.37	66.51	68.71

47. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M Expenses have been worked out as given overleaf:-



S. No.	Name of Element	Description
Asset-I	63 MVAR Line Reactor of Ckt-I of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus reactor	1 No. 400kV Line Reactor-I as bus reactor of Patna-Kishanganj line at Patna S/S(COD: 2.10.2014)
Asset-II	63 MVAR Line Reactor of Ckt-II of 400 kV D/C Patna-Kishanganj line at Patna Sub-station as Bus reactor	1 No. 400kV Line Reactor-II as bus reactor of Patna-Kishanganj line at Patna S/S(COD: 29.11.2014)

48. The allowable O&M Expenses for the instant transmission assets are as under:-

Particulars	(₹ in lakh)				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Asset-I					
1 no. 400 kV bay	30.09	62.30	64.37	66.51	68.71
Asset-II					
1 no. 400 kV bay	20.43	62.30	64.37	66.51	68.71

49. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

50. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage



revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

Interest on working capital

51. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the 72 transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

52. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The interest on working capital determined is as overleaf:-



(₹ in lakh)

Particulars	Asset-I				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	9.10	9.35	9.66	9.98	10.31
O & M expenses	5.06	5.19	5.36	5.54	5.73
Receivables	35.07	38.23	40.73	41.74	41.27
Total	49.22	52.77	55.75	57.25	57.30
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	3.30	7.12	7.53	7.73	7.74
Particulars	Asset-II				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	9.09	9.35	9.66	9.98	10.31
O & M expenses	5.05	5.19	5.36	5.54	5.73
Receivables	36.33	39.13	41.26	42.07	41.59
Total	50.48	53.67	56.28	57.59	57.62
Interest Rate	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	2.30	7.25	7.60	7.77	7.78

Transmission charges

53. The transmission charges allowed for the instant transmission assets are summarized as under:-

(₹ in lakh)

Particulars	Asset-I				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	22.02	50.58	55.89	58.54	58.54
Interest on Loan	24.51	53.29	54.67	52.76	47.77
Return on Equity	24.42	56.08	61.94	64.87	64.87
Interest on Working Capital	3.30	7.12	7.53	7.73	7.74
O & M Expenses	30.09	62.30	64.37	66.51	68.71
Total	104.33	229.38	244.40	250.41	247.62
Particulars	Asset-II				
	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	15.61	51.73	56.36	58.68	58.68
Interest on Loan	17.83	56.18	56.77	54.41	49.32
Return on Equity	17.31	57.34	62.47	65.03	65.03
Interest on Working Capital	2.30	7.25	7.60	7.77	7.78
O & M Expenses	20.43	62.30	64.37	66.51	68.71
Total	73.47	234.80	247.58	252.41	249.53



Filing Fee and the Publication Expenses

54. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. 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 clause (1) of Regulation 52 of the 2014 Tariff Regulations.

Licence Fee and RLDC fees and Charges

55. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

56. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if service tax on transmission is withdrawn from negative list at any time in future. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.



Deferred Tax Liability

57. The petitioner has sought recovery of deferred tax liability accrued before 1.4.2009 from the beneficiaries or long term consumers/DICs as and when materialized under Regulation 49 of the 2014 Tariff Regulations. However, the instant assets were commissioned on 2.10.2014 and 29.11.2014 and hence the petitioner's prayer is infructuous.

Sharing of Transmission Charges

58. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations.

59. This order disposes of Petition No. 530/TT/2014.

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B Pradhan)
Chairperson



(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	Bond XXXIV					
	Gross loan opening	50.00	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	0.00	4.17	8.33	12.50	16.67
	Net Loan-Opening	50.00	45.83	41.67	37.50	33.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.17	4.17	4.17	4.17	4.17
	Net Loan-Closing	45.83	41.67	37.50	33.33	29.17
	Average Loan	47.92	43.75	39.58	35.42	31.25
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	4.24	3.87	3.50	3.13	2.76
	Rep Schedule	12 annual instalments from 21.10.2014				
2	SBI					
	Gross loan opening	20.00	20.00	20.00	20.00	20.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.82	3.64
	Net Loan-Opening	20.00	20.00	20.00	18.18	16.36
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.82	1.82	1.82
	Net Loan-Closing	20.00	20.00	18.18	16.36	14.55
	Average Loan	20.00	20.00	19.09	17.27	15.45
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	2.05	2.05	1.96	1.77	1.58
	Rep Schedule	22 half yearly instalment from 31.08.2016				
3	Bond XL					
	Gross loan opening	10.00	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.83	1.67
	Net Loan-Opening	10.00	10.00	10.00	9.17	8.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.83	0.83	0.83
	Net Loan-Closing	10.00	10.00	9.17	8.33	7.50
	Average Loan	10.00	10.00	9.58	8.75	7.92
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	0.93	0.93	0.89	0.81	0.74
	Rep Schedule	12 annual instalments from 28.06.2016				
4	Bond XLII					
	Gross loan opening	10.00	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	10.00	10.00	10.00	10.00	10.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00



	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	10.00	10.00	10.00	10.00	10.00
	Average Loan	10.00	10.00	10.00	10.00	10.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	0.88	0.88	0.88	0.88	0.88
	Rep Schedule	Bullet payment on 13.03.2023				
5	Bond XLIII					
	Gross loan opening	200.00	200.00	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	16.67
	Net Loan-Opening	200.00	200.00	200.00	200.00	183.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	16.67	16.67
	Net Loan-Closing	200.00	200.00	200.00	183.33	166.67
	Average Loan	200.00	200.00	200.00	191.67	175.00
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	15.86	15.86	15.86	15.20	13.88
	Rep Schedule	12 annual instalments from 28.05.2017				
6	Bond XLIV					
	Gross loan opening	200.00	200.00	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	200.00	200.00	200.00	200.00	200.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	66.67
	Net Loan-Closing	200.00	200.00	200.00	200.00	133.33
	Average Loan	200.00	200.00	200.00	200.00	166.67
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	17.40	17.40	17.40	17.40	14.50
	Rep Schedule	Redeemable at par in 3 equal instalments on 15.07.2018, 15.07.2023 & 15.07.2028				
7	Bond XLVI					
	Gross loan opening	83.70	83.70	83.70	83.70	83.70
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	83.70	83.70	83.70	83.70	83.70
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	83.70	83.70	83.70	83.70	83.70
	Average Loan	83.70	83.70	83.70	83.70	83.70
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	7.78	7.78	7.78	7.78	7.78
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
	Total Loan					
	Gross loan opening	573.70	573.70	573.70	573.70	573.70



Cumulative Repayment upto DOCO/previous year	0.00	4.17	8.33	15.15	38.64
Net Loan-Opening	573.70	569.53	565.37	558.55	535.06
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	4.17	4.17	6.82	23.48	90.15
Net Loan-Closing	569.53	565.37	558.55	535.06	444.91
Average Loan	571.62	567.45	561.96	546.81	489.99
Rate of Interest	8.5967%	8.5949%	8.5899%	8.5914%	8.5970%
Interest	49.14	48.77	48.27	46.98	42.12



Annexure-II

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	Bond XXXIV					
	Gross loan opening	50.00	50.00	50.00	50.00	50.00
	Cumulative Repayment upto DOCO/previous year	-	4.17	8.34	12.50	16.67
	Net Loan-Opening	50.00	45.83	41.66	37.50	33.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.17	4.17	4.17	4.17	4.17
	Net Loan-Closing	45.83	41.66	37.50	33.33	29.16
	Average Loan	47.92	43.75	39.58	35.41	31.25
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	4.24	3.87	3.50	3.13	2.76
	Rep Schedule	12 annual instalments from 21.10.2014				
2	SBI					
	Gross loan opening	20.00	20.00	20.00	20.00	20.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.82	3.64
	Net Loan-Opening	20.00	20.00	20.00	18.18	16.36
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.82	1.82	1.82
	Net Loan-Closing	20.00	20.00	18.18	16.36	14.55
	Average Loan	20.00	20.00	19.09	17.27	15.45
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	2.05	2.05	1.96	1.77	1.58
	Rep Schedule	22 half yearly instalment from 31.08.2016				
3	Bond XL					
	Gross loan opening	10.00	10.00	10.00	10.00	10.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.83	1.67
	Net Loan-Opening	10.00	10.00	10.00	9.17	8.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.83	0.83	0.83
	Net Loan-Closing	10.00	10.00	9.17	8.33	7.50
	Average Loan	10.00	10.00	9.58	8.75	7.92
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	0.93	0.93	0.89	0.81	0.74
	Rep Schedule	12 annual instalments from 28.06.2016				
4	Bond XLII					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	100.00	100.00	100.00	100.00	100.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00



	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	100.00	100.00	100.00	100.00	100.00
	Average Loan	100.00	100.00	100.00	100.00	100.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	8.80	8.80	8.80	8.80	8.80
	Rep Schedule	Bullet payment on 13.03.2023				
5	Bond XLIII					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	8.33
	Net Loan-Opening	100.00	100.00	100.00	100.00	91.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	8.33	8.33
	Net Loan-Closing	100.00	100.00	100.00	91.67	83.33
	Average Loan	100.00	100.00	100.00	95.83	87.50
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	7.93	7.93	7.93	7.60	6.94
	Rep Schedule	12 annual instalments from 28.05.2017				
6	Bond XLIV					
	Gross loan opening	220.00	220.00	220.00	220.00	220.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	220.00	220.00	220.00	220.00	220.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	73.33
	Net Loan-Closing	220.00	220.00	220.00	220.00	146.67
	Average Loan	220.00	220.00	220.00	220.00	183.33
	Rate of Interest	8.70%	8.70%	8.70%	8.70%	8.70%
	Interest	19.14	19.14	19.14	19.14	15.95
	Rep Schedule	Redeemable at par in 3 equal instalments on 15.07.2018, 15.07.2023 & 15.07.2028				
7	Bond XLVI					
	Gross loan opening	106.86	106.86	106.86	106.86	106.86
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	106.86	106.86	106.86	106.86	106.86
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	106.86	106.86	106.86	106.86	106.86
	Average Loan	106.86	106.86	106.86	106.86	106.86
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	9.94	9.94	9.94	9.94	9.94
	Rep Schedule	Redeemable at par in 3 equal instalments on 04.09.2019, 04.09.2024 & 04.09.2029				
	Total Loan					
	Gross loan opening	606.86	606.86	606.86	606.86	606.86



Cumulative Repayment upto DOCO/previous year	0.00	4.17	8.34	15.15	30.31
Net Loan-Opening	606.86	602.69	598.52	591.71	576.56
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	4.17	4.17	6.82	15.15	88.48
Net Loan-Closing	604.78	598.52	591.71	576.56	488.07
Average Loan	602.69	600.61	595.11	584.13	532.31
Rate of Interest	8.7675%	8.7670%	8.7639%	8.7639%	8.7748%
Interest	53.02	52.66	52.15	51.19	46.71

