

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 87/TT/2020.

Coram:

**Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member**

Date of Order : 05.06.2020

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and truing up of transmission tariff for 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 of combined assets associated with East-West Transmission Corridor Strengthening Scheme in Western Region consisting of Asset-1: 400 kV D/C Raigarh-Raipur Transmission Line along with associated bays; Asset-2: 400 kV D/C Ranchi-Rourkela Transmission Line and extension of Ranchi Sub-station; Asset-3: Provision of 40% fixed series compensation package at Raipur Sub-station; Asset-4: 400 kV D/C Rourkela-Raigarh Transmission Line and associated bays at Raigarh and Rourkela.

And in the Matter of:

Power Grid Corporation of India Ltd.
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

Versus

1. Madhya Pradesh Power Management Company Ltd.
Shakti Bhawan, Rampur
Jabalpur-482 008
2. Madhya Pradesh Power Transmission Company Ltd.
Shakti Bhawan, Rampur
Jabalpur-482 008
3. Madhya Pradesh Audyogik Kendra



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Vikas Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road, Indore-452 008

4. Maharashtra State Electricity Distribution Co. Ltd.
Hongkong Bank Building, 3rd Floor
M.G. Road, Fort, Mumbai-400 001.
5. Maharashtra State Electricity Transmission Co. Ltd.
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
BandraKurla Complex, Bandra (East) Mumbai-400 051.
6. Gujarat UrjaVikas Nigam Ltd.
Sardar Patel VidyutBhawan,
Race Course Road, Vadodara - 390 007
7. Electricity Department
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa - 403 001
8. Electricity Department
Administration of Daman & Diu
Daman-396 210
9. DNH Power Distribution Corporation Limited.
Vidyut Bhawan, 66kv Road, Near Secretariat Amla,
Silvassa - 396 230
10. Chhattisgarh State Power Transmission Co. Ltd.
State Load Despatch Building,
Dangania, Raipur – 492 013
11. Chhattisgarh State Power Distribution Co. Ltd.
P.O.Sunder Nagar, Dangania, Raipur
Chhattisgarh-492 013
12. Bihar State Power (Holding) Company Ltd
(Formerly Bihar State Electricity Board -BSEB)
Vidyut Bhawan, Bailey Road, Patna – 800 001
13. West Bengal State Electricity Distribution Company Limited
Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector-II, Salt Lake City
Calcutta - 700 091
14. Grid Corporation of Orissa Ltd.
Shahid Nagar, Bhubaneswar - 751 007



15. Jharkhand State Electricity Board
In Front of Main Secretariat
Doranda, Ranchi - 834002

16. Damodar Valley Corporation
DVC Tower, Maniktala
Civic Centre, VIP road, Calcutta - 700 054

17. Power Department
Government of Sikkim, Gangtok

...Respondent(s)

Parties present:

For Petitioner: Shri Ved Prakash Rastogi, PGCIL
Shri A.K. Verma, PGCIL
Shri Vipin J. Joseph, PGCIL
Shri S.S. Raju, PGCIL
Shri Zafrul Hasan, PGCIL
Shri Amit K. Jain, PGCIL

For Respondent: Shri Abhishek Vikas, Advocate, BSPHCL
Shri Navin Prakash, Advocate, BSPHCL
Shri Umang Anand, BSPHCL
Shri J.B. Nidhi, BSPHCL

ORDER

The present petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for true-up of tariff under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 and for determination of tariff under Regulation 8 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the period from 1.4.2019 to 31.3.2024 in respect of



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combined assets under East-West Transmission Corridor Strengthening Scheme in Western Region (here inafter collectively referred to as “the transmission assets/Combined Asset”) under the “East-West Transmission Corridor Strengthening Scheme in Western Region” (hereinafter referred to as the “transmission project”).

2. The Petitioner has made the following prayers:

i. Allow the add-cap for 2014-19 and 2019-24 tariff block as claimed

ii. Allow the initial spares for sub-station considering Project as a whole under Regulation: 8 of the 2009 CERC Regulation and Regulation- 13, Chapter- 4, of the CERC Regulations, 2014 claimed

iii. Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition

iv. Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, 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 as provided in Tariff Regulation 2014 and Tariff regulations 2019 for respective period.

v. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

vi. Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

vii. Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.

viii. Allow the Petitioner to file a separate petition before the Commission for claiming the overall security expenses and consequential IOWC on that security expenses

ix. Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.

x. Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.



and pass such other relief as Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”

Background

3. The brief facts of the case are as follows:

a) The investment approval for the transmission asset was accorded by Government of India, Ministry of Power vide its Letter No. 23.6.2006 at an estimated cost of ₹280370 lakh, which included IDC of ₹23695 lakh, based on 4th Quarter 2005 price level. East-West transmission corridor strengthening scheme has been agreed by all the constituents of Western Region during the 124th Western Regional Electricity Board meeting held on 9.7.2004 for inclusion in the existing BPTA dated 31.3.1999 of Western Region. The scope of work covered under East-West Transmission Corridor Strengthening Scheme in Western Region is as follows: -

Transmission line

- i. Rourkela - Raigarh
- ii. Raigarh -Raipur CKT I,II,III and IV
- iii. Ranchi- Rourkela
- iv. Ranchi- Rourkela (D/C on M/C tower)
- v. Rourkela-Raigarh

Sub-stations:

- i. Rourkela:Ranchi I and II bay
- ii. Rourkela:Raigarh I and II bay
- iii. Ranchi:Rourkela I and II bay
- iv. Raipur:Raigarh - 3 and 4 bay
- v. Raipur:40% FSC 1 and 2
- vi. Raigarh:Raipur - 3 and 4 bay
- vii. Raigarh:Rourkela I and II bay

b) The details of commercial operation of the assets covered in the instant petition are as follows:



Asset	Name of Assets	COD	Time over-run	Time over-run condoned
Asset 1	400 kV D/C Raigarh-Raipur transmission line along with associated bays	1.10.2010	15 Months	11 Months
Asset 2	400 kV D/C Ranchi-Rourkela transmission line and extension of Ranchi Sub-station	1.12.2010	No	-
Asset 3	Provision of 40% fixed series compensation package at Raipur Sub-station	1.4.2011	10 Months	1 Month
Asset 4	400 kV D/C Rourkela-Raigarh transmission line and associated bays at Raigarh and Rourkela	1.7.2011	24 Months	24 Months
Combined Asset		(Combined)		
Combined Asset		1.7.2011	-	-

c) The capital cost as on date of commercial operation and tariff for the period from the date of commercial operation to 31.3.2014 was approved for Asset 1 vide order dated 19.5.2014 in Petition No. 284/2010. Out of the time over-run of 15 months in case of Asset 1, 11 months time over-run was condoned. Accordingly, IDC and IEDC amounting to ₹217.72 lakh was disallowed.

d) Further, the Commission in its order dated 9.5.2013 in Petition No. 103/TT/2011 had disallowed IDC and IEDC of ₹29.56 lakh in case of Asset 3 on account of time over-run of 10 months out of which the Commission had condoned the time over-run of 1 month.

e) The transmission tariff was allowed for the instant assets for 2014-19 period vide order dated 18.3.2016 in Petition No. 21/TT/2015 and revised transmission tariff based on truing up claimed by the Petitioner is as follows:

(₹ in lakh)						
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<i>Combined Assets</i>	AFC approved vide order dated 18.3.2016	11141.79	11058.57	10892.10	10732.20	10579.37
	Revised AFC claimed based on truing up	11156.66	11143.62	11142.74	11041.61	11016.75



4. The instant petition is filed for truing up of transmission tariff of the 2014-19 period under Regulation 8 of the 2014 Tariff Regulations and determination of transmission tariff of 2019-24 period under Regulation 8 the 2019 Tariff Regulations.

5. The respondents are distribution licensees and power departments, who are procuring transmission service from the Petitioner, mainly beneficiaries of the Western Region.

6. The Petitioner has served the petition on the respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act 2003. No comments/ objections have been received from the public in response to the notice in newspaper. Reply to the petition has been filed by Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No.1, vide affidavit dated 13.2.2020 which has raised the issues of grossing up of RoE and the effect of CGST, and Maharashtra State Electricity Distribution Company Ltd. (MSEDCL), Respondent No. 4, vide affidavit dated 19.3.2020 which has raised the issues of grossing up of RoE, calculation of IoL and the effect of GST and additional taxes. The Petitioner vide affidavit dated 25.2.2020 has filed rejoinder to the reply of MPPMCL and vide affidavit dated 8.5.2020 has filed rejoinder to the reply of MSEDCL. Bihar State Power (Holding) Company Limited (BSP(H)CL), Respondent No.12, during the hearing on 26.2.2020 sought time to file reply and it was granted time upto 11.3.2020 to file its reply. However, no reply has been filed by BSPH(C)L.

7. The hearing in this matter was held on 26.2.2020 and the order was reserved.



8. This order is issued considering submissions made by the Petitioner in the petition dated 26.12.2019, MPPMCL's reply vide affidavit dated 13.2.2020, MSEDCL's reply vide affidavit dated 19.3.2020 and Petitioner's rejoinders vide affidavits dated 25.2.2020 and 8.5.2020. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

TRUING UP OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

9. The Petitioner has submitted the information as required under the 2014 Tariff Regulations for truing up of annual fixed charges for 2014-19 period. The tariff for 2014-19 tariff period has been trued up as discussed in the subsequent paragraphs.

10. The details of the transmission charges claimed by the Petitioner are as under:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3727.22	3757.18	3765.23	3765.23	3765.23
Interest on Loan	1728.09	1589.63	1529.70	1385.13	1302.30
Return on Equity	4160.34	4212.97	4219.86	4219.86	4231.21
Interest on Working Capital	290.42	291.44	292.77	291.89	292.77
O&M Expenses	1250.59	1292.40	1335.18	1379.50	1425.24
Total	11156.66	11143.62	11142.74	11041.61	11016.75

11. The details of the Interest on Working Capital claimed by the Petitioner are as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	104.22	107.70	111.27	114.96	118.77
Maintenance Spares	187.59	193.86	200.28	206.93	213.79
Receivables	1859.44	1857.27	1857.12	1840.27	1836.13
Total Working Capital	2151.25	2158.83	2168.67	2162.16	2168.69
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	290.42	291.44	292.77	291.89	292.77



Effective Date of Commercial Operation (E-COD)

12. The petitioner has stated that notional COD of the combined asset is considered as 1.7.2011. However, based on the trued up capital cost and actual COD of the individual assets, the E-COD has been worked out as 1.2.2011 and is shown below:-

Asset	Capital Cost as on 31.3.2014 (₹ in lakh)	COD	No. of days from COD of Asset from COD of Project	Weight of cost	Weighted days
Asset 1	24055.31	1.10.2010	273	34%	93.4829098
Asset 2	17188.35	1.12.2010	212	24%	51.8714832
Asset 3	3351.80	1.4.2011	91	5%	4.3418829
Asset 4	25653.74	1.7.2011	0	37%	0
Total	70249.21				149.696276
Effective COD		1.2.2011			

Weighted Average Life of the Assets

13. The Weighted Average Life (WAL) has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. Accordingly, the Weighted Average Life (WAL) of all the assets commissioned during 2009-14 period have been worked out as 34 years as shown below:-

Particulars	Combined Asset (₹ in lakh)	Life (in years)	Combined Cost (₹ in lakh)	Weighted Cost (₹ in lakh)
Land – Freehold	0.00	0	0.00	0.00
Land – Leasehold	0.00	0	0.00	0.00
Building Civil Works & Colony	320.87	25	320.87	8021.75
Transmission Line	61307.70	35	61307.70	2145769.50
Sub Station	8397.79	25	8403.46	209944.75
PLCC	222.85	15	222.85	3342.75
IT Equipment (Incl. Software)	0.00	6	0.00	0.00



Particulars	Combined Asset (₹ in lakh)	Life (in years)	Combined Cost (₹ in lakh)	Weighted Cost (₹ in lakh)
Total	70249.21		70254.88	2367078.75
	Weighted Avg. Life of Asset			34

Capital Cost as on 1.4.2014

14. The capital cost of the instant assets has been calculated in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 18.3.2016 in Petition No. 21/TT/2015 had approved the transmission tariff for the instant assets for the 2014-19 period based on the admitted capital cost of ₹70249.21 lakh as on 31.3.2014 and projected additional capital expenditure of ₹1184.58 lakh during 2014-19 for the Combined Asset.

(₹ in lakh)

Asset	Apportioned Approved Capital Cost	Admitted Capital Cost as on 1.4.2014	Additional Capitalisation during 2014-19	Total Capital Cost as on 31.3.2019
Combined Asset	80370.00	70249.21*	1184.58	71433.79

* After restriction of IDC and IEDC of ₹247.28 lakh on account of time over-run and ₹247.38 lakh restricted on account of excess initial spares.

Initial Spares

15. The Petitioner has claimed the following Initial Spares in respect of the instant assets for sub-stations and has further requested to revise the Initial Spares allowed earlier for the instant assets in order dated 18.3.2016 in Petition No.21/TT/2015 taking into consideration the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017.



Initial Spares claimed by the Petitioner						
Asset	Asset type	Capital Cost (₹ in lakh)	Spares claimed (₹ in lakh)	Limit	Allowable (₹ in lakh)	Allowed in order dated 18.3.2016 (₹ in lakh)
Asset 1	Sub-station	2836.83	178.85	2.50%	68.15	68.19
Asset 2	Sub-station	793.65	79.98	2.50%	18.30	19.77
Asset 3	Sub-station	3429.91	163.6	2.50%	83.75	83.80
Asset 4	Sub-station	2072.62	46.29	2.50%	51.96	49.58*
Total		9133.01	468.72		222.16	221.34

* Petitioner has inadvertently considered ₹49.58 lakh as initial spares approved for Asset-4 instead of ₹46.29lakh. The total initial spares approved in order dated 18.3.2016 in Petition No. 21/TT/2015 were ₹218.05 lakh.

16. We have considered the submissions of the Petitioner. As per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares are to be allowed as a percentage of the project cost. Regulation 3(29) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as the "the 2009 Tariff Regulations") defines "project cost" as the capital expenditure within the original scope of the project up to the cut-off date as under:

"(29) 'original project cost' means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;"

17. The instant assets were put into commercial operation in the 2009-14 period. Accordingly, the provisions of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as the 2009 Tariff Regulations) are applicable for the instant assets. Regulation 8(iv) of the 2009 Tariff Regulations specifies the norms for Initial Spares for transmission systems as under:

"(iv) Transmission system

(a) Transmission line - 0.75%

(b) Transmission Sub-station - 2.5%

(c) Series Compensation devices and HVDC Station - 3.5%



(d) Gas Insulated Sub-station (GIS) - 3.5%”

18. It is observed that the Petitioner has claimed the Initial Spares for the instant assets, which were put into commercial operation during the 2009-14 tariff period, at capital costs as on 31.3.2019 as provided in the Auditor certificates. Accordingly, the Initial Spares are allowed for the instant assets as a percentage of the capital expenditure as on the cut-off date as specified in Regulation 3(29) of the 2009 Tariff Regulations, as follows:

Asset	Total Capital Cost admitted as on 31.3.2014 (₹ in lakh)	Capital Cost as on cut-off considered for computing initials spares # (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009 Tariff Regulations	Initial Spares allowable as per Norms and APTEL judgment dated 14.9.2019 (₹ in lakh)	Allowed in Petition No. 21/TT/2015 (₹ in lakh)	Balance Initial Spares (₹ in lakh)
		A	B	C	D=(A-B)*C/(100-C)	E	D-E
		Sub-station					
Asset 1	24055.31	2836.83	177.25 [^]	2.50%	68.19	68.19	5.67
Asset 2	17188.35	851.13	79.98	2.50%	19.77	19.77	
Asset 3	3351.80	3429.91	161.9 [^]	2.50%	83.80	83.80	
Asset 4	25653.74	2072.62	46.29	2.50%	51.96	46.29	
Total	70249.21	9190.49	465.42		223.72	218.05	5.67

Considered for computation of initial spares in order dated 18.3.2016 in Petition No. 21/TT/2015.

[^] Proportionate Initial Spares claimed after deducting IDC as per order dated 18.3.2016 in Petition No. 21/TT/2015.

19. The balance Initial Spares of ₹5.67 lakh is added to the capital cost of the Combined Asset. The capital cost considered as on 1.4.2014 is given below:



(₹ in lakh)

Asset	Admitted Capital Cost as on 31.3.2014 in order dated 18.3.2016	Capital Cost as per AuditorCertificates	Balance Initial Spares allowable as per Norms and APTEL judgement dated 14.9.2019	Capital Cost considered after allowing balance Initial Spares as on 1.4.2014
Combined Asset	70249.21	70249.21	5.67	70254.88

Additional Capital Expenditure

20. The Commission had allowed additional capital expenditure of ₹1184.58 lakh for Combined Asset for the 2014-19 period towards undischarged liabilities in order dated 18.3.2016.

21. The Petitioner has claimed additional capital expenditure before cut-off and beyond cut-off date under Regulation 14(1)(i) and Regulation 14(1)(ii) respectively of the 2014 Tariff Regulations. The Petitioner has claimed following additional capital expenditure based on actual expenditure vide Auditor Certificates dated 2.8.2019:-

(₹ in lakh)

Asset	Approved Capital Cost	Actual Capital Cost as on 31.3.2014	Actual Additional Capital Expenditure		Total Capital Cost as on 31.3.2019
			2014-15	2015-16	
Combined Asset	80370.00	70250.03*	829.51	305.12	71384.66

*Including additional Initial Spares of ₹0.82 lakh for sub-station that are within specified limit considering Project as a whole under Regulation 8 of the 2009 Regulations and Regulation 13, Chapter- 4, of the 2014 Tariff Regulations.

22. The Petitioner has claimed the additional capital expenditure of ₹1134.63 lakh.

The details are as follows:



Period	Additional Capital Expenditure claimed (₹ in lakh)	Justification	Regulation
2014-15	27.73	Balance & Retention Payment	14(1)(i)
	801.78	Balance work / O&M additional capital	14(1)(ii)
2014-15 Total	829.51		
2015-16	87.28	Balance & Retention Payment	14(1)(i)
	217.84	Balance work / O&M additional capital	14(1)(ii)
2015-16 Total	305.12		
Total additional capital claimed in 2014-19 period	1134.63		

23. The ACE claimed of ₹1134.63 lakh is within the ACE of ₹1184.58 lakh approved in the order dated 18.3.2016. The additional capital expenditure claimed by the Petitioner has been allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations as it is towards balance and retention payments and balance work/ O&M additional capital expenditure. Accordingly, the capital cost considered for the tariff period 2014-19 is as follows:-

Asset	Revised admitted Capital Cost as on 1.4.2014	Additional Capital Expenditure		Total Capital Cost as on 31.3.2019
		2014-15	2015-16	
Combined Asset	70254.88	829.51	305.12	71389.51

Debt-Equity ratio

24. The debt-equity ratio has been considered in accordance with Regulation 19(1), (3) and (5) of the 2014 Tariff Regulations. The debt and equity allowed for individual assets for determination of tariff for the period ending 31.3.2014 has been combined and considered for deciding opening debt and equity of the project as on 1.4.2014.



The debt-equity ratio of 70:30 has been considered for the additional capital expenditure allowed during 2014-19 in accordance with Regulation 19(3) of the 2014 Tariff Regulations.

25. The details of the debt and equity as on 1.4.2014 and 31.3.2019 for the Combined Assets considered for the purpose of tariff for the 2014-19 period, are as follows:

Funding	Capital cost as on 1.4.2014 (₹ in lakh)	(%)	Additional Capital Expenditure during 2014-19 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	49178.42	70.00	794.24	70.00	49972.66	70.00
Equity	21076.46	30.00	340.39	30.00	21416.85	30.00
Total	70254.88	100.00	1134.63	100.00	71389.51	100.00

Interest on Loan (IoL)

26. MSEDCL has submitted that while calculating the interest on loan, weighted average rate of interest (WAROI) should be considered but the Petitioner has considered the rate of interest on loan on annual basis for the period under consideration. In response, the Petitioner has submitted that as evident from the forms submitted along with the instant petition for the 2019-24 period, the RoE has been correctly calculated @ 18.782% after grossing up the ROE with MAT rate of 17.472% (i.e. using the reduced Base MAT Rate of 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations.

27. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. The IoL has been calculated based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. The



details of weighted average rate of interest are placed in Annexure-1. The IoL allowed is as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	49178.42	49759.07	49972.66	49972.66	49972.66
Cumulative Repayments upto Previous Year	11407.77	15135.24	18892.67	22658.15	26423.63
Net Loan-Opening	37770.65	34623.83	31079.99	27314.51	23549.03
Additions	580.66	213.58	0.00	0.00	0.00
Repayment during the year	3727.47	3757.43	3765.48	3765.48	3765.48
Net Loan-Closing	34623.83	31079.99	27314.51	23549.03	19783.55
Average Loan	36197.24	32851.91	29197.25	25431.77	21666.29
Weighted Average Rate of Interest on Loan (%)	4.7746	4.8393	5.2398	5.4471	6.0115
Interest on Loan	1728.27	1589.80	1529.88	1385.30	1302.47

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 18.3.2016	1696.86	1506.28	1299.43	1097.40	900.82
Claimed by the Petitioner	1728.09	1589.63	1529.70	1385.13	1302.30
Allowed after true-up in this order	1728.27	1589.80	1529.88	1385.30	1302.47

The difference in the IoL approved earlier in order dated 18.3.2016 and now allowed after truing up is on account of lower total additional capital expenditure incurred, and change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.

Return on Equity (“ROE”)

28. The Petitioner is entitled for Return on Equity for the instant assets in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 period:



Year	Claimed effective tax (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

29. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the assessment orders for 2016-17 and 2017-18. For 2018-19, it has grossed up the RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. In response, the Petitioner vide affidavit dated 25.2.2020 submitted that effective rates of tax considered for 2014-15 and 2015-16 are based on Assessment Order issued by Income-Tax authorities, for the purpose of grossing up of ROE rate and that the effective rate of tax considered for 2016-17 and 2017-18 are based on the Income-tax returns filed, for the purpose of grossing up of ROE rate of respective years. Further, for 2018-19, effective tax rate is calculated based the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%), for the purpose of grossing up of ROE rate. The Petitioner also submitted a copy of the Assessment orders for 2014-15 to 2016-17.

30. MSEDCL has submitted that the Petitioner has mentioned the effective tax rate only for 2014-15 and 2015-16. However, the actual tax paid on income from other business activities of the Petitioner are required to be excluded for the computation of the effective tax rate which has not been done by the Petitioner. Thus, in accordance with the above Regulation, income from other business stream during the tariff block



2014-19 shall not be considered in calculation of effective tax rate. MSEDCL further submitted that the petitioner had submitted grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and the petitioner had not submitted the assessment order for 2014-15, 2015-16, 2016-17 and 2017-18. For 2018-19, the claimed grossed up RoE is not on the basis of actual taxes paid for the year.

31. In response to MSEDCL's reply, the Petitioner vide affidavit dated 8.5.2020 has clarified that it had submitted effective tax rates for all the years during the 2014-19 period. The Petitioner submitted that during 2014-15 to 2018-19, the petitioner was liable to pay tax under the provisions of Section 115JB of the Income tax Act, 1961, i.e., the entire income of the company was liable to be taxed at Minimum Alternate Tax ('MAT') rate. Therefore, all the income from all streams of business were taxable at a uniform tax rate. The Petitioner has submitted that while computing the adjusted book profits liable to be taxed as income under the MAT provisions, no specific deduction/ exemption/ relief was claimed/ allowable for any specific stream of income. Hence, inclusion/ exclusion of non-transmission income does not impact the computation of effective tax rate used for the purpose of grossing up ROE. The Petitioner has submitted that the Income Tax assessment of the Petitioner had been completed and Assessment Orders had been issued by the Income Tax Department in case of 2014-15, 2015-16 and 2016-17 and that the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. Basis of year-wise effective tax rate and grossed up RoE for the 2014-19 period had already been mentioned as a part of the instant petition. Further, assessment order of 2014-15 and 2015-16 had already been submitted in TV (technical validation) reply for Petition No.



20/TT/2020 and copy of assessment order of financial year 2016-17 was submitted along with the instant rejoinder.

32. We have considered the submissions of the Petitioner, MPPMCL, and MSEDCL. The Commission in order dated 27.4.2020 in Petition No.274/TT/2019 had arrived at the effective tax rate based on the notified MAT rates for the Petitioner and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations.

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	20.9605	15.50	19.611
2015-16	21.3416	15.50	19.705
2016-17	21.3416	15.50	19.705
2017-18	21.3416	15.50	19.705
2018-19	21.5488	15.50	19.758

33. The Petitioner has claimed ROE for the 2014-19 period after grossing up the ROE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. The ROE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as follows:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity					
Opening Equity	21076.46	21325.32	21416.85	21416.85	21416.85
Additions	248.85	91.54	0.00	0.00	0.00
Closing Equity	21325.32	21416.85	21416.85	21416.85	21416.85
Average Equity	21200.89	21371.08	21416.85	21416.85	21416.85
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	4157.59	4211.27	4220.29	4220.29	4231.44

(₹ in lakh)

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 18.3.2016	4167.92	4202.77	4202.77	4202.77	4202.77
Claimed by the Petitioner	4160.34	4212.97	4219.86	4219.86	4231.21
Allowed after true-up in this Order	4157.59	4211.27	4220.29	4220.29	4231.44

The RoE allowed in 2014-15 in the instant order is less than the RoE allowed for 2014-15, vide order dated 18.3.2016, due to spread of equity on account of spread in additional capitalisation over 2014-15 and 2015-16 and change in the applicable MAT rate for the purpose of grossing up of base rate of RoE.

Depreciation

34. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The depreciation allowed is as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	70254.88	71084.39	71389.51	71389.51	71389.51
Additional Capitalisation	829.51	305.12	0.00	0.00	0.00
Closing Gross Block	71084.39	71389.51	71389.51	71389.51	71389.51
Average Gross Block	70669.63	71236.95	71389.51	71389.51	71389.51
Rate of Depreciation (%)	5.27	5.27	5.27	5.27	5.27
Depreciable Value	63602.67	64113.25	64250.56	64250.56	64250.56
Balance useful life of the asset	31.00	30.00	29.00	28.00	27.00
Elapsed life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	48467.43	45220.59	41592.41	37826.93	34061.45
Depreciation during the year	3727.47	3757.43	3765.48	3765.48	3765.48
Cumulative depreciation (incl. of AAD)	15135.24	18892.67	22658.15	26423.63	30189.11



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 18.3.2016	3736.55	3767.82	3767.82	3767.82	3767.82
Claimed by the Petitioner	3727.22	3757.18	3765.23	3765.23	3765.23
Allowed after true-up in this order	3727.47	3757.43	3765.48	3765.48	3765.48

The depreciation allowed in the instant order is at variance with the depreciation allowed vide order dated 18.3.2016 due to spread of additional capitalisation for 2014-15 and 2015-16 and lower total additional capital expenditure incurred.

Operation & Maintenance Expenses (O&M Expenses)

35. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total O&M Expenses for the instant assets claimed by the Petitioner are as follows:-

(₹ in lakh)

O&M Expenses					
400 kV					
No. of bays	14	14	14	14	14
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Transmission line					
S/C (Twin/Triple Conductor)	0.653	0.653	0.653	0.653	0.653
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
D/C Twin/Triple Conductor	574.45	574.45	574.45	574.45	574.45
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expense (₹ in lakh)	1250.60	1292.40	1335.17	1379.5	1425.25

The O&M Expenses claimed by the Petitioner are as per the norms specified in the 2014 Tariff Regulations and hence, they are allowed as claimed.



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 18.3.2016	1250.60	1292.40	1335.17	1379.50	1425.25
Claimed by the Petitioner	1250.59	1292.40	1335.18	1379.50	1425.24
Allowed after true-up in this order	1250.60	1292.40	1335.17	1379.50	1425.25

The O&M Expenses now trued-up are same as approved vide order dated 18.3.2016.

Interest on Working Capital (IWC)

36. The IWC has been worked out as per the methodology provided in the Regulation 28 of the 2014 Tariff Regulations and allowed as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O & M Expenses	104.22	107.70	111.26	114.96	118.77
Maintenance Spares	187.59	193.86	200.28	206.93	213.79
Receivables	1859.05	1857.05	1857.27	1840.41	1836.24
Total Working Capital	2150.86	2158.61	2168.81	2162.30	2168.79
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	290.37	291.41	292.79	291.91	292.79

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 18.3.2016	290.08	289.52	287.12	284.92	282.92
Claimed by the Petitioner	290.42	291.44	292.77	291.89	292.77
Allowed after true-up in this order	290.37	291.41	292.79	291.91	292.79

Despite lesser overall additional capital, the IWC allowed in the instant order is at variance with the IWC allowed vide order dated 18.3.2016 due to change in weighted average rate of interest of loan during the 2009-14 tariff period.



APPROVED ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

37. The trued up annual fixed charges for the instant transmission assets for the tariff period 2014-19 are summarised below:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3727.47	3757.43	3765.48	3765.48	3765.48
Interest on Loan	1728.27	1589.80	1529.88	1385.30	1302.47
Return on Equity	4157.59	4211.27	4220.29	4220.29	4231.44
Interest on Working Capital	290.37	291.41	292.79	291.91	292.79
O & M Expenses	1250.60	1292.40	1335.17	1379.50	1425.25
Total	11154.29	11142.30	11143.62	11042.48	11017.42

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 PERIOD

38. The Petitioner has claimed the following tariff charges for the 2019-24 period:-

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	3765.23	3765.23	3765.23	3765.23	3765.23
Interest on Loan	1069.81	825.80	587.80	358.71	144.51
Return on Equity	4022.19	4022.19	4022.19	4022.19	4022.19
Interest on Working Capital	175.08	173.28	171.20	169.31	167.32
O&M Expenses	960.98	994.62	1029.39	1065.29	1102.34
Total	9993.29	9781.12	9575.81	9380.73	9201.59

39. The Petitioner has claimed the following Interest on Working Capital for the 2019-24 period: -

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	80.08	82.89	85.78	88.77	91.86
Maintenance Spares	144.15	149.19	154.41	159.79	165.35
Receivables	1228.68	1205.89	1180.58	1156.53	1131.34
Total Working Capital	1452.91	1437.97	1420.77	1405.09	1388.55
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on working capital	175.08	173.28	171.20	169.31	167.32

40. The tariff for the 2019-24 period is allowed as discussed in the subsequent paragraphs.



Capital Cost as on 1.4.2019

41. Regulation 19 of the 2019 Tariff Regulations provides as under:-

“19. (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for 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 a 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) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;

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

(e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;

(h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;

(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;

(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;

(n) Expenditure on account of change in law and force majeure events; and

(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(3) The Capital cost of an existing project shall include the following:



(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

(4) The capital cost in case of existing or new hydro generating station shall also include:

(a) cost of approved rehabilitation and resettlement (R&R) plan of the project inconformity with National R&R Policy and R&R package as approved; and

(b) cost of the developer's 10% contribution towards Rajiv Gandhi GrameenVidyutikaran Yojana (RGGVY) and DeendayalUpadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:

(a) The assets forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;

(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and

(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”



42. The Petitioner vide Auditor Certificates dated 6.8.2014, 5.9.2014, 13.7.2019, and 23.7.2019 and revised computations pursuant to APTEL judgment in Appeal No. 74 of 2017, has claimed capital cost of ₹71384.66 lakh as on 31.3.2019 for Combined Assets. Capital cost of ₹71389.51 lakh as on 31.3.2019 for Combined Assets has been worked out by the Commission and the same has been considered as opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure

43. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as under:-

“24. Additional Capitalisation within the original scope and upto the cut-off date

(1) The additional capital expenditure in respect of a 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:

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) The generating company or the transmission licensee, as the case may be shall submit 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.

25. Additional Capitalisation within the original scope and after the cut-off date:



(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

- a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
- b) Change in law or compliance of any existing law;
- c) Deferred works relating to ash pond or ash handling system in the original scope of work;
- d) Liability for works executed prior to the cut-off date;
- e) Force Majeure events;
- f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
- g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

44. The Petitioner has not claimed any additional capital expenditure for the instant assets during the 2019-24 period. The Petitioner has claimed capital cost as on 31.3.2024 as follows:

(₹ in lakh)				
Asset	Apportioned Approved Capital Cost (FR)	Capital Cost as on 31.3.2019	Projected Actual Additional Capital expenditure	Total estimated Capital Cost
			2019-24	
Combined Asset	80370.00	71384.66	0.00	71384.66



45. The Petitioner has not claimed any additional capital for the 2019-24 period. Accordingly, the Capital Cost as on 31.3.2024 is considered as follows:

(₹ in lakh)

Asset	Admitted Capital Cost as on 1.4.2019	Admitted Additional Capital Expenditure	Total Capital Cost as on 31.3.2024
		2019-24	
Combined Asset	71389.51	0.00	71389.51

Debt-Equity ratio

46. Regulation 18 of the 2019 Tariff Regulations provides as under:-

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. 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:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;



Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 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.”

47. The details of the debt and equity considered for the purpose of tariff for the 2019-24 tariff period is as follows:-

Particulars	Capital Cost as on 1.4.2019(₹ in lakh)	%	Additional Capital Expenditure for 2019-24(₹ in lakh)	%	Capital Cost as on 31.3.2024(₹ in lakh)	%
Debt	49972.66	70.00	0.00	70.00	49972.66	70.00
Equity	21416.85	30.00	0.00	30.00	21416.85	30.00
Total	71389.51	100.00	0.00	100.00	71389.51	100.00

Return on Equity (ROE)

48. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify as under:-

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of 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 return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to



Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% 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) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

31. Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rates shall be considered on the basis of actual tax paid in 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 paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded 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.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."

49. MSEDCL has submitted that the Petitioner, while calculating RoE has considered MAT at the rate of 18.5% for the period under consideration but it has been already declared that for 2019-20, the MAT rate is @ 15%. Thus it would change the Effective Tax Rate. This would, in turn, affect the Grossed up ROE rate and thereby the entire truing up for the period under consideration. In response, the Petitioner has submitted that as evident from the Forms submitted along with the instant petition for the 2019-24 period, the RoE has been correctly calculated @ 18.782% after grossing up the ROE with MAT rate of 17.472% (i.e. using the reduced Base MAT Rate of 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations.

50. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with



Regulation 31(3) of the 2019 Tariff Regulations. The ROE allowed for the instant assets is as follows:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	21416.85	21416.85	21416.85	21416.85	21416.85
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	21416.85	21416.85	21416.85	21416.85	21416.85
Average Equity	21416.85	21416.85	21416.85	21416.85	21416.85
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	4022.41	4022.41	4022.41	4022.41	4022.41

Interest on Loan (IoL)

51. Regulation 32 of the 2019 Tariff Regulations provides as under:-

“32. Interest on loan capital: (1) The loans arrived at in the manner indicated in regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization 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 de-capitalisation 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 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 changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”

52. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The details of weighted average rate of interest for 2019-24 tariff period are placed in Annexure-2 and the IoL allowed for the Combined Asset is as follows:-

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	49972.66	49972.66	49972.66	49972.66	49972.66
Cumulative Repayments upto Previous Year	30189.11	33954.59	37720.07	41485.55	45251.04
Net Loan-Opening	19783.55	16018.06	12252.58	8487.10	4721.62
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	3765.48	3765.48	3765.48	3765.48	863.61
Net Loan-Closing	16018.06	12252.58	8487.10	4721.62	3858.01
Average Loan	17900.81	14135.32	10369.84	6604.36	4289.81
Weighted Average Rate of Interest on Loan (%)	5.9773	5.8431	5.6695	5.4330	5.0934
Interest on Loan	1069.98	825.94	587.92	358.82	218.50

Depreciation

53. Regulation 33 of the 2019 Tariff Regulations provides as under:-

"33. Depreciation:(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission



system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communications 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:

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 a transmission system, weighted average life for the generating station or 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 the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also 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 unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or 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-I 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 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit therefor transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.”

54. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation worked out for the Combined Asset is as follows:-

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	71389.51	71389.51	71389.51	71389.51	71389.51
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	71389.51	71389.51	71389.51	71389.51	71389.51
Average Gross Block	71389.51	71389.51	71389.51	71389.51	71389.51
Rate of Depreciation (%)	5.27	5.27	5.27	5.27	spreading
Depreciable Value	64250.56	64250.56	64250.56	64250.56	64250.56
Balance useful life of the asset	26.00	25.00	24.00	23.00	22.00
Elapsed life	8.00	9.00	10.00	11.00	12.00
Remaining Depreciable Value	30295.97	26530.49	22765.00	18999.52	18135.91
Depreciation during the year	3765.48	3765.48	3765.48	3765.48	863.61
Cumulative depreciation	33954.59	37720.07	41485.55	45251.04	46114.65



Operation & Maintenance Expenses (O&M Expenses)

55. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

“35 (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500	1,696	1,756	1,817	1,881	1,947



<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000</i>	<i>2,563</i>	<i>2,653</i>	<i>2,746</i>	<i>2,842</i>	<i>2,942</i>
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Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.



(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

56. The total O&M Expenses for the instant assets claimed by the Petitioner are as follows:-

(₹ in lakh)

O&M Expenses					
400 kV					
No. of bays	14	14	14	14	14
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
Transmission line					
S/C (Twin/Triple Conductor)	0.653	0.653	0.653	0.653	0.653
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
D/C Twin/Triple Conductor	574.45	574.45	574.45	574.45	574.45
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
PLCC					
Original Capital Cost	222.85	222.85	222.85	222.85	222.85
Norms (₹ lakh)	2% on Original Capital Cost				
Total O&M Expense (₹ in lakh)	960.98	994.61	1029.39	1065.30	1102.34

The O&M Expenses claimed by the Petitioner are as per the norms specified in the 2019 Tariff Regulations and hence, they are allowed as claimed.

Interest on Working Capital (IWC)

57. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specifies as follows:

“34. Interest on Working Capital

(1)...

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

- i. Receivables equivalent to 45 days of fixed cost;
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- iii. Operation and maintenance expenses, including security 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 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3.Definitions ...

(7) ‘Bank Rate’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

58. The Petitioner has submitted that it has computed interest on working capital for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of interest on working capital as 12.05%. The interest on working capital is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of interest on working capital considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points). The components of the working capital and interest thereon have been worked out as follows:-

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	80.08	82.88	85.78	88.77	91.86
Maintenance Spares	144.15	149.19	154.41	159.79	165.35
Receivables	1228.76	1205.97	1180.65	1156.60	778.48
Total Working Capital	1452.99	1438.04	1420.84	1405.17	1035.70
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	175.09	173.28	171.21	169.32	124.80

ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

59. The transmission charges allowed for the instant transmission assets for the 2019-24 tariff period are as follows:-



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(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	3765.48	3765.48	3765.48	3765.48	863.61
Interest on Loan	1069.98	825.94	587.92	358.82	218.50
Return on Equity	4022.41	4022.41	4022.41	4022.41	4022.41
Interest on Working Capital	175.09	173.28	171.21	169.32	124.80
O & M Expenses	960.98	994.61	1029.39	1065.30	1102.34
Total	9993.92	9781.73	9576.41	9381.33	6331.66

Filing Fee and the Publication Expenses

60. 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 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

61. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

62. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further, additional taxes, if any, are to be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.



63. MPPMCL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempted from GST, hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

64. MSEDCL has submitted that the Petitioner has requested to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, the Petitioner has requested that any taxes including GST and duties including cess etc. imposed by any statutory/Government/municipal authorities shall be allowed to be recovered from the beneficiaries. MSEDCL submitted that the Petitioner's request at this stage is premature. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempted from GST, hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

65. We have considered the submission of the Petitioner, MSEDCL and MPPMCL. Since GST is not levied on transmission service at present, we are of the view that the Petitioner's prayer is premature.



Security Expenses

66. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential Interest on Working Capital. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis. We have considered the submissions of the Petitioner. Any application filed by the Petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2019 Tariff Regulations.

Capital Spares

67. The Petitioner has sought reimbursement of capital spares at the end of tariff block. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

68. 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 for the 2014-19 period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 period.

69. This order disposes of Petition No. 87/TT/2020.

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



ANNEXURE-1**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19****(₹ in lakh)**

Srl. No.	Particulars	Rate of Interest	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
1	BOND XXVIII -DOCO LOAN 1	9.33%	13459.00	0.00	5607.92	13459.00
2	BOND XXIX -DOCO LOAN 2	9.20%	4703.00	0.00	1959.58	4703.00
3	BOND XXX -DOCO LOAN 3	8.80%	316.00	0.00	131.67	316.00
4	IBRD IV -DOCO LOAN 13	1.61%	8923.83	0.00	2301.90	8923.83
5	IBRD IV -DOCO LOAN 14	1.61%	7521.76	0.00	1940.24	7521.76
6	IBRD IV -DOCO LOAN 15	1.61%	6304.31	0.00	1626.20	6304.31
7	IBRD IV -DOCO LOAN 16	1.61%	1137.99	0.00	293.54	1137.99
8	IBRD IV -DOCO LOAN 20	1.61%	174.80	0.00	45.08	174.80
9	IBRD IV -DOCO LOAN 21	1.61%	19.96	0.00	5.14	19.96
10	IBRD IV -DOCO LOAN 24	1.61%	25.40	0.00	6.56	25.40
11	IBRD IV ADDL -DOCO LOAN 17	1.63%	970.53	0.00	169.82	970.53
12	IBRD IV ADDL -DOCO LOAN 18	1.63%	92.27	0.00	16.15	92.27
13	IBRD IV ADDL -DOCO LOAN 19	1.63%	274.00	0.00	47.95	274.00
14	IBRD IV ADDL -DOCO LOAN 22	1.63%	897.76	0.00	157.09	897.76
15	IBRD IV ADDL -DOCO LOAN 23	1.63%	286.84	0.00	50.18	286.84
16	IBRD IV ADDL -DOCO LOAN 25	1.63%	122.21	0.00	21.38	122.21
17	IBRD IV ADDL -DOCO LOAN 27	1.63%	177.68	0.00	31.09	177.68
18	IBRD IV ADDL -DOCO LOAN 28	1.63%	101.29	0.00	17.72	101.29
19	BOND-XXXIV -DOCO LOAN 4	8.84%	2320.00	0.00	966.67	2320.00
20	BOND-XXXV -DOCO	9.64%	77.00	0.00	25.67	77.00



Srl. No.	Particulars	Rate of Interest	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
	LOAN 5					
21	BOND XXXVI -DOCO LOAN 6	9.35%	135.83	0.00	27.17	135.83
22	BOND XXXVII -DOCO LOAN 7	9.25%	248.00	0.00	82.67	248.00
23	SBI (2014-15) -ADD CAP LOAN 2014-15	10.25%	0.00	563.85	0.00	563.85
24	SBI (2014-15) -DOCO LOAN 8	10.25%	17.17	0.00	0.00	17.17
25	BOND XLVI -ADD CAP LOAN 2014-15	9.30%	0.00	16.81	0.00	16.81
26	BOND XLVI -DOCO LOAN 9	9.30%	97.00	0.00	0.00	97.00
27	BOND XLVIII -DOCO LOAN 10	8.20%	17.99	0.00	0.00	17.99
28	BOND LI -ADDCAP FOR 2015-2016	8.40%	0.00	213.58	0.00	213.58
29	BOND LVI -DOCO LOAN 11	7.36%	598.16	0.00	0.00	598.16
30	BOND LVII (57) -DOCO LOAN 12	7.20%	155.23	0	0	155.23
	TOTAL		49175.01	794.24	15531.37	49969.25

WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2014-19 TARIFF PERIOD

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross opening loan	49175.01	49755.67	49969.25	49969.25	49969.25
Cumulative repayments of loans up to previous year	3728.76	6710.29	9740.58	12844.58	16016.68
Net loans opening	45446.25	43045.38	40228.67	37124.67	33952.57
Add: drawl(s) during the year	580.66	213.58	0.00	0.00	0.00
Less: repayment(s) of loan during the year	2981.53	3030.29	3104.01	3172.10	3243.46
Net closing loan	43045.38	40228.67	37124.67	33952.57	30709.12
Average net loan	44245.82	41637.03	38676.67	35538.62	32330.85
Rate of interest on loan	4.7746%	4.8393%	5.2398%	5.4471%	6.0115%
Interest on loan	2112.55	2014.93	2026.59	1935.83	1943.57



ANNEXURE-2**DETAILS OF LOAN PORTFOLIO FOR 2019-24****(₹ in lakh)**

Srl. No.	Particulars	Rate of Interest	Loan deployed as on 1.4.2019	Additions during the tariff period	Repayment	Total
1	BOND XXVIII -DOCO LOAN 1	9.33%	13459.00	0.00	5607.92	13459.00
2	BOND XXIX -DOCO LOAN 2	9.20%	4703.00	0.00	1959.58	4703.00
3	BOND XXX -DOCO LOAN 3	8.80%	316.00	0.00	131.67	316.00
4	IBRD IV -DOCO LOAN 13	4.35%	8923.83	0.00	2975.72	8923.83
5	IBRD IV -DOCO LOAN 14	4.35%	7521.76	0.00	2508.19	7521.76
6	IBRD IV -DOCO LOAN 15	4.35%	6304.31	0.00	2102.23	6304.31
7	IBRD IV -DOCO LOAN 16	4.35%	1137.99	0.00	379.47	1137.99
8	IBRD IV -DOCO LOAN 20	4.35%	174.80	0.00	58.29	174.80
9	IBRD IV -DOCO LOAN 21	4.35%	19.96	0.00	6.66	19.96
10	IBRD IV -DOCO LOAN 24	4.35%	25.40	0.00	8.47	25.40
11	IBRD IV ADDL -DOCO LOAN 17	4.31%	970.53	0.00	181.46	970.53
12	IBRD IV ADDL -DOCO LOAN 18	4.31%	92.27	0.00	17.25	92.27
13	IBRD IV ADDL -DOCO LOAN 19	4.31%	274.00	0.00	51.22	274.00
14	IBRD IV ADDL -DOCO LOAN 22	4.31%	897.76	0.00	167.84	897.76
15	IBRD IV ADDL -DOCO LOAN 23	4.31%	286.84	0.00	53.62	286.84
16	IBRD IV ADDL -DOCO LOAN 25	4.31%	122.21	0.00	22.85	122.21
17	IBRD IV ADDL -DOCO LOAN 27	4.31%	177.68	0.00	33.22	177.68
18	IBRD IV ADDL -DOCO LOAN 28	4.31%	101.29	0.00	18.94	101.29
19	BOND-XXXIV -DOCO LOAN 4	8.84%	2320.00	0.00	966.67	2320.00
20	BOND-XXXV -DOCO	9.64%	77.00	0.00	32.08	77.00



Srl. No.	Particulars	Rate of Interest	Loan deployed as on 1.4.2019	Additions during the tariff period	Repayment	Total
	LOAN 5					
21	BOND XXXVI -DOCO LOAN 6	9.35%	135.83	0.00	45.28	135.83
22	BOND XXXVII -DOCO LOAN 7	9.25%	248.00	0.00	103.33	248.00
23	SBI (2014-15) -ADD CAP LOAN 2014-15	8.25%	563.85	0.00	281.93	563.85
24	SBI (2014-15) -DOCO LOAN 8	8.25%	17.17	0.00	8.59	17.17
25	BOND XLVI -ADD CAP LOAN 2014-15	9.30%	16.81	0.00	5.60	16.81
26	BOND XLVI -DOCO LOAN 9	9.30%	97.00	0.00	32.33	97.00
27	BOND XLVIII -DOCO LOAN 10	8.20%	17.99	0.00	9.00	17.99
28	BOND LI -ADDCAP FOR 2015-2016	8.40%	213.58	0.00	88.99	213.58
29	BOND LVI -DOCO LOAN 11	7.36%	598.16	0.00	0.00	598.16
30	BOND LVII (57) -DOCO LOAN 12	7.20%	155.23	0	155.23	155.23
	TOTAL		49969.25	0.00	18013.62	49969.25

WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2019-24 TARIFF PERIOD

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross opening loan	49969.25	49969.25	49969.25	49969.25	49814.02
Cumulative repayments of loans up to previous year	19260.13	22697.11	26171.16	29888.68	33379.43
Net loans opening	30709.12	27272.14	23798.09	20080.57	16434.59
Add: drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: repayment(s) of loan during the year	3436.98	3474.05	3717.52	3645.98	3739.10
Net closing loan	27272.14	23798.09	20080.57	16434.59	12695.50
Average net loan	28990.63	25535.11	21939.33	18257.58	14565.05
Rate of interest on loan	5.9773%	5.8431%	5.6695%	5.4330%	5.0934%
Interest on loan	1732.84	1492.04	1243.86	991.94	741.85

