

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 05/TT/2018

Coram:

**Shri P. K. Pujari, Chairperson
Dr. M. K. Iyer, Member**

Date of Order: 22.2.2019

In the matter of:

Approval under Regulation 86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from DOCO to 31.03.2019 for 14 numbers OPGW links (1513.362 kms) (DOCO - 22.09.2015), 27 numbers OPGW links (1892.58 kms) (DOCO - 21.10.2016), 21 numbers OPGW links (2217.94 kms) (Ant. DOCO - 01.10.2017) under Central Sector, 10 numbers OPGW links (258.37 kms) (Ant. DOCO - 01.10.2017) under State Sector (MPPTCL) and 9 numbers OPGW links (1326.19 kms) (Ant. DOCO - 01.11.2017) under Central Sector under "Establishment of Fibre Optic Communication System under Master Communication Plan in Western Region" tariff block 2014-19 period.

And in the matter of:

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

.....Petitioner

Vs

1. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur, Jabalpur - 482 008.
2. Madhya Pradesh Power Transmission Company Ltd.,
Shakti Bhawan, Rampur, Jabalpur - 482 008.
3. Maharashtra State Electricity Distribution Co. Ltd.,
Hongkong Bank Building, 3rd Floor, M.G. Road, Fort,



Mumbai - 400 001.

4. Gujarat Urja Vikas Nigam Ltd.,
Sardar Patel Vidyut Bhawan, Race Course Road,
Vadodara - 390 007.
5. Electricity Department,
Government of Goa, Vidyuti Bhawan, Panaji, Goa - 403 001.
6. Electricity Department,
Administration of Daman & Diu, Daman - 396 210.
7. Electricity Department,
Administration of Dadra Nagar Haveli, U.T., Silvassa - 396 230.
8. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh - 492 013.
9. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.,
3/54, Press Complex, Agra-Bombay Road, Indore - 452 008.

.....**Respondents**

Parties present : Shri Ravin Dubey, Advocate, CSPTCL
Shri Zafrul Hasan, PGCIL
Shri Pankaj Sharma, PGCIL
Shri S. K. Venkatesan, PGCIL
Shri S. S. Raju, PGCIL
Shri V. P. Rastogi, PGCIL

ORDER

The petitioner, Power Grid Corporation of India Limited (PGCIL) has filed the instant petition for approval of transmission tariff for OPGW links under "Establishment of Fibre Optic Communication System under Master Communication Plan in Western Region" based on actual commercial operation date (COD) of Asset-1 (i.e. 22.9.2015), Asset-2 (21.10.2016), anticipated COD of Asset-3 (i.e. 1.10.2017), Asset-4 (i.e. 1.10.2017) and



Asset-5 (i.e. 1.11.2017), in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations"). Subsequently, the petitioner vide affidavits dated 28.2.2018, 25.4.2018, 18.10.2018 and 30.11.2018 submitted the revised COD details of Asset-3, Asset-4 and Asset-5.

2. The petitioner was entrusted with the implementation of "Establishment of Fibre Optic Communication System under Master Communication Plan in Western Region". The scheme was discussed and deliberated in the 14th, 18th and 21st WRPC meetings held on 19.8.2010, 1.10.2011 and 9.11.2012, respectively.

3. The Investment Approval (IA) for implementation of the project was accorded by the Board of Directors of the petitioner company in its 267th meeting held on 8.2.2012 (communicated vide Memorandum Ref.: C/CP/Master Comm. in WR dated 9.2.2013), at an estimated cost of ₹218.07 Crores including IDC of ₹13.05 Crores, based on 4th Quarter, 2011 price level. As per IA, the project was scheduled to be commissioned within 30 months from the date of IA, i.e. by 8.8.2014.

4. The scope of work covered under the instant project is as follows:



- (i) Installation of OPGW fiber optic cable on the existing EHV transmission line of POWERGRID and constituents, the estimated length of such cable is approximately 5536 Kms.
- (ii) Installation of OPGW fiber optic cable on the new EHV transmission line of POWERGRID, the estimated length of such cable is approximately 1355 Kms.
- (iii) Utilization of six (6) nos. of fibres from existing OPGW cable of POWERGRID Telecom network (535 Kms) for 2 nos. of links on cost sharing basis.
- (iv) 72 nos. of terminal equipment for communication based upon Synchronous Digital Hierarchy (SDH) technology shall be installed in the substations of POWERGRID mostly and few on the constituents. The project would also involve installation of 117 nos. of Multiplexer (Mux.) / Drop & Insert (D&I) / Digital Access Cross Connect Switch (DACCS) at wideband nodes. To monitor the network, Network Management System (NMS) is also envisaged.
- (v) For MPPTCL, 15 nos. of terminal equipment for communication based upon SDH technology, 14 nos. of Mux / D&I at and one set of NMS system is also envisaged.



(vi) Presently DC Power Supply has been envisaged at all the wideband locations. However, the requirement shall be optimized during detailed engineering.

5. The item wise break-up of the scope of the work for Central Sector & MPPTCL is as follows:

S. No.	Description	Central Sector	State Sector (MPPTCL)
1	OPGW cable on existing lines (in Kms)	5297	239
2	OPGW cable on new lines (in Kms)	1355	NIL
3	SDH Equipment (in Nos.)	72	15
4	Mux/D&I/DACS (Nos.)	117	14
5	DC Power Supply (Nos.)	72	NIL

6. The instant petition covers OPGW of 6950.072 Kms of Central sector portions and 258.37 Kms of MPPTCL (State portion). The details of assets covered are as shown below:

Name of Assets	Actual COD	Anticipated COD
Asset-1: 14 numbers OPGW links (1513.362 kms) under Central Sector	22.9.2015	-
Asset-2: 27 numbers OPGW links (1892.58 kms) under Central Sector	21.10.2016	-
Asset-3: Asset-3A: 14 OPGW links (1423.69 km) under Central Sector; Asset-3B: 3 OPGW links (123.33 km) under Central Sector; and Asset-3C: 4 OPGW links (670.92 km) under Central Sector.	30.11.2017 1.7.2018	1.1.2019
Asset-4: Asset-4A: 2 OPGW links (9.22 km) under State Sector (MPPTCL); Asset-4B: 6 OPGW links (249.15 km) under State	30.11.2017	-



Sector (MPPTCL); and Asset-4C: 2 OPGW links (249.15 km) under State Sector (MPPTCL).	1.7.2018	1.1.2019
Asset-5: Asset-5A: 3 OPGW links (392.63 km) under Central Sector; Asset-5B: 2 OPGW links (546 km) under Central Sector; Asset-5C: 2 OPGW links (274 km) under Central Sector; and Asset-5D: 2 OPGW links (113.56 km) under Central Sector.	1.5.2017 1.9.2017 1.3.2018	1.1.2019

7. Annual Fixed Charges (AFC) was allowed for the Asset-1, Asset-2, Asset-3 and Asset-5 vide order dated 28.3.2018 under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC. Since, Asset-4 is a State Sector asset (whose AFC is bilaterally billed to State out of billing and settlement procedure of PoC) its AFC was not allowed. The AFC on pro-rata basis considering COD of Asset-1 as 22.9.2015, Asset-2 as 21.10.2016 and Asset-3 & Asset-5 as 31.3.2018 is as under:

(₹ in lakh)				
Asset	2015-16	2016-17	2017-18	2018-19
Asset-1	210.61	420.85	469.58	497.38
Asset-2	0.00	361.02	877.52	933.06
Asset-3	0.00	0.00	1.80	718.25
Asset-5	0.00	0.00	1.64	672.91

8. The details of the transmission charges claimed by the petitioner for Asset-1, Asset-2, Asset-3A, Asset-3B, Asset-4A, Asset-4B, Asset-5A, Asset-5B and Asset-5C, are as under:



(₹ in lakh)

Asset-1				
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	62.67	129.47	153.03	167.83
Interest on Loan	60.68	115.38	124.50	124.81
Return on Equity	58.24	120.32	142.23	155.98
Interest on Working Capital	8.24	16.39	17.91	18.85
O&M Expenses	73.43	144.50	149.30	154.26
Total	263.26	526.06	586.97	621.73

(₹ in lakh)

Asset-2			
Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	109.11	276.70	305.62
Interest on Loan	104.33	246.06	248.44
Return on Equity	101.41	257.16	284.04
Interest on Working Capital	13.30	31.91	33.68
O&M Expenses	123.12	285.07	294.54
Total	451.27	1096.90	1166.32

(₹ in lakh)

Asset-3A		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	74.27	188.45
Interest on Loan	65.88	156.05
Return on Equity	69.03	175.14
Interest on Working Capital	9.93	27.87
O&M Expenses	105.73	324.99
Total	324.84	872.50

(₹ in lakh)

Asset-3B	
Particulars	2018-19 (pro-rata)
Depreciation	15.25
Interest on Loan	15.17
Return on Equity	14.18
Interest on Working Capital	1.85
O&M Expenses	20.19
Total	66.64



(₹ in lakh)

Asset-4A		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	1.26	4.24
Interest on Loan	1.10	3.48
Return on Equity	1.18	3.94
Interest on Working Capital	0.15	0.49
O&M Expenses	1.49	4.58
Total	5.18	16.73

(₹ in lakh)

Asset-4B	
Particulars	2018-19 (pro-rata)
Depreciation	25.24
Interest on Loan	21.25
Return on Equity	23.46
Interest on Working Capital	2.82
O&M Expenses	27.55
Total	100.32

(₹ in lakh)

Asset-5A		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	40.44	44.80
Interest on Loan	35.26	35.28
Return on Equity	37.58	41.63
Interest on Working Capital	4.49	5.46
O&M Expenses	49.16	55.41
Total	166.93	182.58

(₹ in lakh)

Asset-5B		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	44.68	80.04
Interest on Loan	39.58	65.70
Return on Equity	41.53	74.39
Interest on Working Capital	5.38	9.46
O&M Expenses	52.01	92.12
Total	183.18	321.71



(₹ in lakh)

Asset-5C		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	3.83	47.16
Interest on Loan	3.40	39.63
Return on Equity	3.56	43.83
Interest on Working Capital	0.46	5.61
O&M Expenses	4.74	48.97
Total	15.99	185.21

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. The Respondent No. 1 (MPPMCL) and Respondent No. 2 (CSPTCL) have filed their replies vide affidavit dated 4.1.2018 and 10.5.2018, respectively and the petitioner vide affidavit dated 28.2.2018 has filed its rejoinder to the reply filed by MPPMCL only.

10. The petition was heard on 23.10.2018 and the Commission observed that the tariff for the links which have been put into commercial operation will be granted and directed the petitioner to file petition after the commercial operation of remaining links. The Commission also directed the petitioner to file certain additional information and reserved the order in the petition. In compliance with the above directions, the petitioner vide affidavit dated 30.11.2018 has filed the additional information.

11. Based on the documents available on record and after considering the submission of the parties, we dispose of the claim of the petitioner in the present petition in terms of the provisions of the 2014 Tariff Regulations,



as stated in the subsequent paragraphs.

Date of Commercial operation

12. Regulation 4(3) of the 2014 Tariff Regulations provides as follows:

“4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxx]

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

(i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations:

(ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.”

13. The petitioner has submitted following documents in support of COD of assets covered under the instant petition:

Name of Assets	COD	Document submitted	Submitted vide affidavit dated
Asset-1: 14 numbers OPGW links (1513.362 kms) under Central Sector	22.9.2015	RLDC certificate dated 29.9.2015; Self declared COD letter dated 23.9.2015.	28.8.2017



Asset-2: 27 numbers OPGW links (1892.58 kms) under Central Sector	21.10.2016	RLDC certificate dated 21.10.2016; Self declared COD letter dated 7.11.2016.	28.8.2017
Asset-3A: 14 OPGW links (1423.69 km) under Central Sector	30.11.2017	RLDC certificate dated 30.6.2017, 17.10.2017 & 30.11.2017; Self declared COD letter dated 30.12.2017.	25.4.2018
Asset-3B: 3 OPGW links (123.33 km) under Central Sector	1.7.2018	RLDC certificate dated 17.10.2017 & 11.1.2018; Self declared COD letter dated 10.7.2018.	18.10.2018
Asset-3C: 4 OPGW links (670.92 km) under Central Sector	1.1.2019 *	-	30.11.2018
Asset-4A: 2 OPGW links (9.22 km) under State Sector (MPPTCL)	30.11.2017	RLDC certificate dated 17.10.2017; Self declared COD letter dated 30.12.2017.	25.4.2018
Asset-4B: 6 OPGW links (249.15 km) under State Sector (MPPTCL)	1.7.2018	RLDC certificate dated 11.1.2018 & 24.4.2018; Self declared COD letter dated 10.7.2018.	18.10.2018
Asset-4C: 2 OPGW links (249.15 km) under State Sector (MPPTCL)	1.1.2019 *	-	30.11.2018
Asset-5A: 3 OPGW links (392.63 km) under Central Sector	1.5.2017	RLDC certificate dated 18.10.2017; Self declared COD letter dated 9.4.2018.	25.4.2018
Asset-5B: 2 OPGW links (546 km) under Central Sector	1.9.2017	RLDC certificate dated 18.10.2017; Self declared COD letter dated 9.4.2018.	25.4.2018
Asset-5C: 2 OPGW links (274 km) under Central Sector	1.3.2018	RLDC certificate dated 4.4.2018; Self declared COD letter dated 9.4.2018.	25.4.2018
Asset-5D: 2 OPGW links (113.56 km) under Central Sector	1.1.2019 *	-	30.11.2018

* *anticipated COD.*

14. The petitioner vide affidavit dated 25.4.2018 submitted that CEA certificate under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 and CMD certificate as required under the Grid Code is not applicable for the assets covered under the instant



petition.

15. With regard to CMD certificate, Commission vide order dated 7.7.2017 in petition no. 53/TT/2016 has observed as under:

"...it is observed that as per the 2014 Tariff Regulations, the CMD's approval is not required in the case of communication system."

16. In view of above, CMD certificate is not applicable for the assets covered under the instant petition.

17. With regard to CEA certificate, the petitioner is directed to submit, at the time of truing up, confirmation from CEA that there is no requirement for certification by CEA in case of OPGW links, under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010.

18. Accordingly, taking into consideration the RLDC certificates pertaining to successful commissioning of assets and Notification of DOCO letters issued by the petitioner for the instant assets, the COD of Asset-1, Asset-2, Asset-3A, Asset-3B, Asset-4A, Asset-4B, Asset-5A, Asset-5B and Asset-5C is considered as 22.9.2015, 21.10.2016, 30.11.2017, 1.7.2018, 30.11.2017, 1.7.2018, 1.5.2017, 1.9.2017 and 1.3.2018, respectively for the purpose of tariff in the instant petition. And the petitioner is directed to submit fresh petition for determination of tariff of Asset-3C, Asset-4C and Asset-5D after date of their actual commercial operation.



Time over-run

19. As stated above, the transmission asset was scheduled to be commissioned within 30 months from the date of IA. Accordingly, the scheduled commissioning date (SCOD) of the assets works out to 8.8.2014. The details of time over-run for each assets is as under:

Name of Assets	SCOD	Actual COD	Delay (in days)
Asset-1: 14 numbers OPGW links (1513.362 kms) under Central Sector	8.8.2014	22.9.2015	410
Asset-2: 27 numbers OPGW links (1892.58 kms) under Central Sector	8.8.2014	21.10.2016	805
Asset-3A: 14 OPGW links (1423.69 km) under Central Sector	8.8.2014	30.11.2017	1210
Asset-3B: 3 OPGW links (123.33 km) under Central Sector	8.8.2014	1.7.2018	1423
Asset-4A: 2 OPGW links (9.22 km) under State Sector (MPPTCL)	8.8.2014	30.11.2017	1210
Asset-4B: 6 OPGW links (249.15 km) under State Sector (MPPTCL)	8.8.2014	1.7.2018	1423
Asset-5A: 3 OPGW links (392.63 km) under Central Sector	8.8.2014	1.5.2017	997
Asset-5B: 2 OPGW links (546 km) under Central Sector	8.8.2014	1.9.2017	1120
Asset-5C: 2 OPGW links (274 km) under Central Sector	8.8.2014	1.3.2018	1301

20. The petitioner, in its response to MPPMCL's reply on time over-run, vide its affidavit dated 28.2.2018 has submitted that the delay in commissioning of the assets under instant petition is mainly due to addition of extra links; delay in issuance of permit to work at certain sites/locations; rescheduling of outages on various occasions; and RoW issues at various sites/locations, which were beyond the control of the petitioner. The petitioner further submitted that the detailed justification of the delay along with documentary supporting evidences, PERT and CPM analysis chart has already been submitted in the petition. Subsequently, the petitioner



vide affidavit dated 30.11.2018 has submitted the asset-wise reasons for delay as shown under:

Activity	Period of activity				Reason (s) for delay
	Planned		Achieved		
	From	To	From	To	
Asset-1					
LOA	6.4.2012		28.5.2012		ROW issues on 400kV Bhopal-Damoh.
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	3.1.2013	27.4.2015	
SAT	6.5.2013	7.8.2014	11.6.2014	22.9.2015	
Asset-2					
LOA	6.4.2012		28.5.2012		OPGW Network Changes due to denying Permission by M/s Reliance Power Transmission Limited on their ISTS Lines i.e Solapur – Kolhapur, Solapur – Parli & Pune 400 – Pune 765. Pursuant to continuous follow up, M/s Reliance agreed for laying of OPGW on Transmission Lines owned by them. Solapur – Parli, Pune 400 – Pune 765 which are very much needed on way to WRLDC for Data Transfer & Voice Transfer upto WRLDC from remaining Part of Network i.e Chhattisgarh Area.
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	12.12.2012	4.10.2016	
SAT	6.5.2013	7.8.2014	18.12.2015	19.10.2016	
Asset-3A					
LOA	6.4.2012		28.5.2012		Severe ROW issues on Mundra-Bhachau, Bhachau-Ranchhodpura & Agra-Gwalior.
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	8.1.2013	27.4.2015	
SAT	6.5.2013	7.8.2014	11.6.2014	30.11.2017	
Asset-3B					
LOA	6.4.2012		28.5.2012		Severe ROW issues on Vindhyachal Pooling-Sasan.
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	28.1.2013	25.11.2017	
SAT	6.5.2013	7.8.2014	15.8.2017	1.7.2018	



Asset-4A					
LOA	6.4.2012		28.5.2012		Shutdown issues on multiple line crossings.
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	31.1.2013	5.10.2017	
SAT	6.5.2013	7.8.2014	25.10.2013	30.11.2017	
Asset-4B					
LOA	6.4.2012		28.5.2012		Shutdown issues on multiple line crossings on Indore-Barwaha, Khandwa-Chhegaon
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	25.1.2013	20.11.2017	
SAT	6.5.2013	7.8.2014	15.10.2017	1.7.2018	
Asset-5A					
LOA	6.4.2012		28.5.2012		Severe RoW Issues in Solapur – Kolhapur Line. Delay in Construction of Transmission Line. Kolhapur (MSETCI) – Kolhapur (PG) which forms after LILO of Kolhapur – Mapusa. LILO of Kolhapur – Mapusa is Under Construction Line.
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	13.1.2013	15.9.2017	
SAT	6.5.2013	7.8.2014	30.12.2016	29.4.2017	
Asset-5B					
LOA	6.4.2012		28.5.2012		Severe RoW Issues in Wardha – Aurangabad Link. Sever RoW Issues in 12 km Section of Wardha – Seoni (Upto Repeater).
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	13.1.2013	11.8.2016	
SAT	6.5.2013	7.8.2014	15.5.2017	29.8.2017	
Asset-5C					
LOA	7.3.2012		28.5.2012		Delay in Construction of Transmission Lines.
Supplies	6.12.2012	7.3.2014	18.11.2012	14.12.2015	
Installation	5.2.2013	6.6.2014	13.1.2013	11.8.2016	
SAT	6.5.2013	7.8.2014	1.2.2018	27.6.2018	

21. As stated above, SCOD of the assets is 08.08.2014 and considering the actual COD's the delay in commissioning of assets ranges from 410 days to 1423 days for assets under consideration. Though the petitioner vide affidavit dated 30.11.2018 has submitted the asset-wise details of reasons for delay, however it has not stated the actual periodicity being



affected by such events causing the delay, so as to prudently analyse the admissibility of time over-run. As such, for the present no delay has been allowed for the purpose of tariff. However, the petitioner is at liberty to approach the Commission, at the time of truing up, with proper details as to time over-run like periods being affected by each events causing the delay.

Capital Cost

22. 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;



(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.”

23. The details of capital cost claimed by the petitioner in terms of the Chartered Accountant's certificate dated 24.5.2017 (for Asset-2), 7.6.2017 (for Asset-1), 2.5.2018 (for Asset-5B), 15.5.2018 (for Asset-3A & Asset-4A), 18.10.2018 (for Asset-3B & Asset-4B) and 21.11.2018 (for Asset-5A & Asset-5C) as on actual COD along with the actual / estimated additional capital expenditure to be incurred for the said transmission asset is summarized below:

Asset	Apportioned approved cost	Expenditure up to COD	Expenditure during		Estimated expenditure			Estimated completion cost
			2015-16	2016-17	2017-18	2018-19	2019-20	
Asset-1	4280.29	1884.49	34.17	265.22	467.43	0.00	0.00	2651.31
Asset-2	6066.52	3715.34	-	358.54	621.90	264.59	0.00	4960.37
Asset-3A	4280.29	4212.11	-	-	-1416.19	370.53	0.00	3166.45
Asset-3B	767.20	361.86	-	-	0.00	-76.54	0.00	285.32
Asset-4A	157.68	61.14	-	-	0.00	13.09	0.00	74.23
Asset-4B	623.05	506.09	-	-	0.00	67.73	0.00	573.82
Asset-5A	830.70	731.99	-	-	-53.08	57.76	20.70	757.37
Asset-5B	1446.01	1206.75	-	-	27.13	63.58	28.81	1326.27
Asset-5C	844.86	758.95	-	-	-29.70	49.50	11.94	790.69
Total	19296.60	13438.72	34.17	623.76	-382.51	810.24	61.45	14585.83

Note: The apportioned approved cost of ₹1372.94 lakh, ₹7.69 lakh and ₹1129.44 lakh corresponding to Asset-3C, Asset-4C and Asset-5D, respectively has not been shown above as the tariff is not being allowed for these assets in the instant petition.

24. As stated above, the approved estimated cost, by the Board of petitioner company, for the entire project is ₹218.07 Crores (i.e. 21807.00 lakh). However, considering the fact that tariff for Asset-3C, Asset-4C and



Asset-5D is not being approved in the instant petition due to non-commissioning of the same till date of last hearing i.e. 23.10.2018, the balance approved estimated cost for Asset-1, Asset-2, Asset-3A, Asset-3B, Asset-4A, Asset-4B, Asset-5A, Asset-5B and Asset-5C works out to ₹19296.60 lakh and the corresponding estimated completed cost up to 31.3.2020 for these assets is ₹14585.83 lakh. On bare reading of the above table it is observed that the asset-wise estimated completed cost is well within the approved apportioned cost ceiling limit and as such there is no cost over-run involved for the above assets. However, on detailed scrutiny of the estimated completed cost, it is observed that the estimated completed cost of ₹14585.83 lakh has been arrived after netting of net cash outflow amounting to ₹ (₹1501.55 lakh for Asset-1, ₹561.12 lakh for Asset-2, ₹1416.19 lakh for Asset-3A, ₹137.32 lakh for Asset-3B, ₹139.15 lakh for Asset-5A and ₹37.70 lakh for Asset-5C) transferred to Telecom towards sharing of Fiber Cable OPGW. It is noteworthy that the approved apportioned cost pertains to complete assets under the project scope and not for the assets after adjustments for sharing. Accordingly, for the purpose of analysing cost over-run the approved apportioned cost should be compared with the estimated completed cost before any cost adjustments as shown below:



(₹ in lakh)

Asset	AppORTIONED approved cost (A)	Estimated completion cost claimed (B)	Net cash outflow transferred to Telecom towards sharing of Fibre Cable OPGW (C)	Adjusted estimated completed cost, for cost comparison (D=B+C)	Cost over-run {E=Max of (D-A) or Zero}
Asset-1	4280.29	2651.31	1501.55	4152.86	0.00
Asset-2	6066.52	4960.37	561.12	5521.49	0.00
Asset-3A	4280.29	3166.45	1416.19	4582.64	302.35
Asset-3B	767.20	285.32	137.32	422.64	0.00
Asset-4A	157.68	74.23	0.00	74.23	0.00
Asset-4B	623.05	573.82	0.00	573.82	0.00
Asset-5A	830.70	757.37	139.15	896.52	65.82
Asset-5B	1446.01	1326.27	0.00	1326.27	0.00
Asset-5C	844.86	790.69	37.70	828.39	0.00
Total	19296.60	14585.83	3793.03	18378.86	368.17

25. In view of above, cost over-run of ₹302.35 lakh and ₹65.82 lakh corresponding to Asset-3A and Asset-5A, respectively, is being disallowed for the purpose of tariff, subject to truing up. However, since the estimated completed cost for Asset-5A includes additional capital expenditure (ACE) amounting to ₹20.70 lakh projected to be incurred during FY 2019-20 which is beyond the scope of the instant tariff period 2014-19, the net cost over-run to be disallowed works out to ₹302.35 lakh and ₹45.12 lakh for Asset-3A and Asset-5A, respectively, the same has been adjusted from the admissible ACE for the FY 2018-19.

26. Since, the petitioner has adjusted only net cash outflow corresponding to shared Fibre Cable OPGW, the petitioner is hereby directed to certify that no corresponding discharges has been claimed as ACE in the petition and to furnish following details, separately in respect of each assets, at the time of truing up:



(₹ in lakh)

Particulars	Total Assets			Cost of shared assets			Assets for which tariff is being claimed in petition		
	Accrual	Liabilities	Cash	Accrual	Liabilities	Cash	Accrual	Liabilities	Cash
As on COD									
ACE post COD (year-wise)									
Discharges (year-wise)									
Closing capital cost									

27. Further, the petitioner submitted that the scrap value of Earth Wire realized after dismantling shall be credited to the cost of subject asset at the time of truing up. The petitioner further submitted that credit to be given to the beneficiaries by the scrap value of Earth Wire removed is fair compensation and tariff for old investments can be continued without change as the decision for technological up-gradation was taken by the various controlling authorities forum like RPC, CEA and as per provision of Grid Code and not be the petitioner alone, and accordingly it deserves to get return on capital deployed.

28. Sub-clause Clause (6) of Regulation 9 of the 2014 Tariff Regulations provides as follows:

"(6) The following shall be excluded or removed from the capital cost of the existing and new project:

(a) The assets forming part of the project, but not in use;"

29. From the above, it is clear that once the asset is not in use it shall not be allowed to be part of capital cost for the purpose of tariff. Scrap value of



an asset is normally much lesser than the original cost which is considered for the purpose of tariff. Accordingly, the petitioner is directed to furnish the following details in respect of Earth Wire removed, at the time of truing up:

- (a) Original cost;
- (b) Year of capitalisation & de-capitalisation;
- (c) Detail of petition where the said asset was capitalised originally; and
- (d) Detail of petition, if any, where such asset has been de-capitalised.

IDC and IEDC

30. The Interest during Construction (IDC) for various assets as claimed by the petitioner is as under:

Asset	IDC on accrual basis as per auditor certificate as on COD	IDC discharged				
		upto COD	2015-16	2016-17	2017-18	2018-19
Asset-1	167.44	147.74	7.71	11.99	0.00	0.00
Asset-2	297.01	260.50	0.00	9.47	27.04	0.00
Asset-3A	572.88	554.83	0.00	0.00	9.81	8.24
Asset-3B	45.86	42.87	0.00	0.00	0.00	1.41
Asset-4A	8.74	6.74	0.00	0.00	0.60	1.40
Asset-4B	63.02	46.72	0.00	0.00	0.00	16.15
Asset-5A	60.82	43.93	0.00	0.00	16.67	0.22
Asset-5B	112.82	94.78	0.00	0.00	15.59	2.40
Asset-5C	70.28	52.41	0.00	0.00	0.00	17.87

31. The petitioner has further submitted the statement showing IDC discharged up to COD for the asset in which the loan wise drawl date has also been mentioned. For the purpose of determining IDC, the loan wise drawl date as furnished by the petitioner has been considered as the date of infusion of debt fund for the concerned loan. Accordingly, the allowable



IDC has been worked out as under:

(₹ in lakh)

Asset	Allowable IDC as on COD		
	On Accrual basis	Un-discharged	Discharged
Asset-1	167.05	19.42	147.63
Asset-2	296.98	36.61	260.36
Asset-3A	536.54	45.57	490.97
Asset-3B	42.25	2.99	39.26
Asset-4A	8.74	2.00	6.74
Asset-4B	62.87	16.29	46.59
Asset-5A	60.70	16.85	43.85
Asset-5B	108.66	17.98	90.67
Asset-5C	70.27	17.87	52.40

32. However, considering the fact that time over-run has not been allowed to the petitioner for all the assets under consideration the allowable IDC upto SCOD i.e. 8.8.2014 works out as under:

(₹ in lakh)

Asset	Allowable IDC as on COD		
	On Accrual basis	Un-discharged	Discharged
Asset-1	46.24	0.00	46.24
Asset-2	13.74	0.00	13.74
Asset-3A	54.08	0.00	54.08
Asset-3B	0.00	0.00	0.00
Asset-4A	1.69	0.00	1.69
Asset-4B	6.94	0.00	6.94
Asset-5A	0.10	0.00	0.10
Asset-5B	3.15	0.00	3.15
Asset-5C	9.51	0.00	9.51

33. The IDC as shown above has been considered for the purpose of tariff. Further, as un-discharged liabilities considered for the purpose of tariff is nil, as such no discharges of IDC has been considered as ACE for the purpose of tariff.



34. The Incidental Expenditure During Construction (IEDC) for various as assets claimed by the petitioner is as under:

(₹ in lakh)

Asset-1	Asset-2	Asset-3A	Asset-3B	Asset-4A	Asset-4B	Asset-5A	Asset-5B	Asset-5C
79.63	11.96	262.34	14.35	2.82	23.35	9.93	18.24	22.09

35. However, considering the fact that time over-run has not been allowed for all the assets the allowable IEDC upto SCOD i.e. 8.8.2014 works out as under:

(₹ in lakh)

Asset-1	Asset-2	Asset-3A	Asset-3B	Asset-4A	Asset-4B	Asset-5A	Asset-5B	Asset-5C
54.93	6.35	112.75	5.60	1.21	9.12	4.74	8.19	9.10

Initial spares

36. 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:

xxx]

(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) where the generating station has any transmission equipment forming part of the generation project, the ceiling norm for initial spares for such equipments shall be as per the ceiling norms specified for transmission system under these regulations:

(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 break-up of head wise IDC & IEDC in its tariff application.

37. The initial spares for various assets as claimed by the petitioner is as under:

(₹ in lakh)

Asset-1	Asset-2	Asset-3A	Asset-3B	Asset-4A	Asset-4B	Asset-5A	Asset-5B	Asset-5C
80.65	102.32	78.74	7.88	2.12	17.06	0.00	10.28	0.00

38. However, considering the ceiling norm of 3.5% for communication system the allowable initial spares works out as under, which has been considered for the purpose of tariff:

(₹ in lakh)

Asset-1	Asset-2	Asset-3A	Asset-3B	Asset-4A	Asset-4B	Asset-5A	Asset-5B	Asset-5C
80.65	102.32	70.43	7.88	2.12	17.06	0.00	10.28	0.00



Capital cost as on COD

39. The detail of the capital cost considered as on COD after adjustment of IDC, IEDC, cost over-run and initial spares is as under:

(₹ in lakh)

Name of Assets	Capital cost as on COD (on accrual basis) (A)	Items disallowed (B)				Items corresponding to admitted capital cost as on COD (C)		Capital cost allowed as on COD (D=A-B-C)
		IDC	IEDC	Cost over-run	Initial spares	Un-discharged IDC	Balance & retention payments	
Asset-1	2705.88	121.20	24.70	0.00	0.00	0.00	821.39	1738.59
Asset-2	4593.19	283.27	5.61	0.00	0.00	0.00	877.85	3426.47
Asset-3A	4308.32	518.80	149.59	0.00	8.31	0.00	96.22	3535.40
Asset-3B	407.37	45.86	8.75	0.00	0.00	0.00	45.50	307.25
Asset-4A	69.25	7.05	1.61	0.00	0.00	0.00	8.11	52.48
Asset-4B	556.99	56.08	14.23	0.00	0.00	0.00	50.90	435.78
Asset-5A	872.99	60.72	5.19	0.00	0.00	0.00	141.00	666.08
Asset-5B	1302.52	109.67	10.05	0.00	0.00	0.00	95.77	1087.03
Asset-5C	820.40	60.77	12.99	0.00	0.00	0.00	61.45	685.19

Additional capital expenditure

40. 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.

41. 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”.

42. Accordingly, the cut-off date for the above mentioned assets is as under:

Asset-1	Asset-2	Asset-3A	Asset-3B	Asset-4A	Asset-4B	Asset-5A	Asset-5B	Asset-5C
31.3.2018	31.3.2019	31.3.2020	31.3.2021	31.3.2020	31.3.2021	31.3.2020	31.3.2020	31.3.2021

43. The details of additional capital expenditure (ACE) claimed by the petitioner under Regulation 14(1) of 2014 Tariff Regulations are as under:

Particulars	(₹ in lakh)				
	2015-16	2016-17	2017-18	2018-19	2019-20
Asset-1					
ACE to the extent of unexecuted work	0.00	0.00	0.00	0.00	0.00
Discharges of un-discharged IDC as on COD	7.71	11.99	0.00	0.00	0.00
Discharges towards balance & retention payments	34.17	265.22	467.43	0.00	0.00
ACE claimed	41.88	277.21	467.43	0.00	0.00
Asset-2					
ACE to the extent of unexecuted work	0.00	16.67	85.92	264.59	0.00
Discharges of un-discharged IDC as on COD	0.00	9.47	27.04	0.00	0.00
Discharges towards balance & retention payments	0.00	341.87	535.98	0.00	0.00
ACE claimed	0.00	368.01	648.94	264.59	0.00
Asset-3A					
ACE to the extent of unexecuted work	0.00	0.00	-1416.19	274.32	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	9.81	8.24	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	96.22	0.00
ACE claimed	0.00	0.00	-1406.38	378.78	0.00



Asset-3B					
ACE to the extent of unexecuted work	0.00	0.00	0.00	-122.03	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	1.41	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	45.50	0.00
ACE claimed	0.00	0.00	0.00	-75.12	0.00
Asset-4A					
ACE to the extent of unexecuted work	0.00	0.00	0.00	4.98	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	0.60	1.40	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	8.11	0.00
ACE claimed	0.00	0.00	0.60	14.49	0.00
Asset-4B					
ACE to the extent of unexecuted work	0.00	0.00	0.00	16.83	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	16.15	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	50.90	0.00
ACE claimed	0.00	0.00	0.00	83.88	0.00
Asset-5A					
ACE to the extent of unexecuted work	0.00	0.00	-139.15	2.83	20.70
Discharges of un-discharged IDC as on COD	0.00	0.00	16.67	0.22	0.00
Discharges towards balance & retention payments	0.00	0.00	86.07	54.93	0.00
ACE claimed	0.00	0.00	-36.41	57.98	0.00
Asset-5B					
ACE to the extent of unexecuted work	0.00	0.00	0.00	0.00	23.75
Discharges of un-discharged IDC as on COD	0.00	0.00	15.59	2.40	0.00
Discharges towards balance & retention payments	0.00	0.00	27.13	63.58	5.06
ACE claimed	0.00	0.00	42.72	65.98	28.81
Asset-5C					
ACE to the extent of unexecuted work	0.00	0.00	-29.70	0.00	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	17.87	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	49.50	11.94
ACE claimed	0.00	0.00	-29.70	67.37	11.94

44. Since, FY 2019-20 falls beyond tariff period 2014-19, and is, therefore, not covered under 2014 Tariff Regulations, the projected ACE claimed by the petitioner for FY 2019-20 has been ignored for the purpose of tariff and will be dealt during the next tariff period based on basis of the then prevailing Tariff Regulations and corresponding claim by the petitioner. The ACE incurred by the petitioner and projected to be incurred



by the petitioner for the above mentioned assets is on the account of works deferred for execution, balance and retention payments and discharges of un-discharged liabilities corresponding to IDC. Further, the same is within the approved apportioned cost, except for Asset-3A and Asset-5A as stated above, and is within the cut-off date. However, considering the fact that un-discharged liabilities corresponding to admitted IDC as on COD of the asset is 'nil' petitioner's claim towards discharges of IDC has been ignored for the purpose of tariff. Further, as stated above the cost over-run amounting to ₹302.35 lakh and ₹45.12 lakh for Asset-3A and Asset-5A, respectively, has been adjusted from the admissible ACE for FY 2018-19.

45. Based on the above, the additional capital expenditure allowed, subject to truing up, for the period 2015-19 is as under:

(₹ in lakh)				
Particulars	2015-16	2016-17	2017-18	2018-19
Asset-1				
ACE to the extent of unexecuted work	0.00	0.00	0.00	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	34.17	265.22	467.43	0.00
ACE claimed	34.17	265.22	467.43	0.00
Asset-2				
ACE to the extent of unexecuted work	0.00	16.67	85.92	264.59
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	341.87	535.98	0.00
ACE claimed	0.00	358.54	621.90	264.59
Asset-3A				
ACE to the extent of unexecuted work	0.00	0.00	-1416.19	274.32
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	96.22
Cost over-run	0.00	0.00	0.00	-302.35
ACE claimed	0.00	0.00	-1416.19	68.19
Asset-3B				



ACE to the extent of unexecuted work	0.00	0.00	0.00	-122.03
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	45.50
ACE claimed	0.00	0.00	0.00	-76.53
Asset-4A				
ACE to the extent of unexecuted work	0.00	0.00	0.00	4.98
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	8.11
ACE claimed	0.00	0.00	0.00	13.09
Asset-4B				
ACE to the extent of unexecuted work	0.00	0.00	0.00	16.83
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	50.90
ACE claimed	0.00	0.00	0.00	67.73
Asset-5A				
ACE to the extent of unexecuted work	0.00	0.00	-139.15	2.83
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	0.00	86.07	54.93
Cost over-run	0.00	0.00	0.00	-45.12
ACE claimed	0.00	0.00	-53.08	12.64
Asset-5B				
ACE to the extent of unexecuted work	0.00	0.00	0.00	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	0.00	27.13	63.58
ACE claimed	0.00	0.00	27.13	63.58
Asset-5C				
ACE to the extent of unexecuted work	0.00	0.00	-29.70	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00	0.00	0.00
Discharges towards balance & retention payments	0.00	0.00	0.00	49.50
ACE claimed	0.00	0.00	-29.70	49.50

Capital cost for the tariff period 2014-19

46. Accordingly, the capital cost considered for the tariff period 2014-19, subject to truing up, is as under:

(₹ in lakh)				
Particulars	2015-16	2016-17	2017-18	2018-19
Asset-1				
Opening Capital Cost	1738.59	1772.76	2037.98	2505.41
Add: ACE	34.17	265.22	467.43	0.00
Closing Capital Cost	1772.76	2037.98	2505.41	2505.41



Average Capital Cost	1755.68	1905.37	2271.70	2505.41
Asset-2				
Opening Capital Cost	-	3426.47	3785.01	4406.91
Add: ACE	-	358.54	621.90	264.59
Closing Capital Cost	-	3785.01	4406.91	4671.50
Average Capital Cost	-	3605.74	4095.96	4539.20
Asset-3A				
Opening Capital Cost	-	-	3535.40	2119.21
Add: ACE	-	-	-1416.19	68.19
Closing Capital Cost	-	-	2119.21	2187.40
Average Capital Cost	-	-	2827.30	2153.30
Asset-3B				
Opening Capital Cost	-	-	-	307.25
Add: ACE	-	-	-	-76.53
Closing Capital Cost	-	-	-	230.72
Average Capital Cost	-	-	-	268.99
Asset-4A				
Opening Capital Cost	-	-	52.48	52.48
Add: ACE	-	-	0.00	13.09
Closing Capital Cost	-	-	52.48	65.57
Average Capital Cost	-	-	52.48	59.02
Asset-4B				
Opening Capital Cost	-	-	-	435.78
Add: ACE	-	-	-	67.73
Closing Capital Cost	-	-	-	503.51
Average Capital Cost	-	-	-	469.64
Asset-5A				
Opening Capital Cost	-	-	666.08	613.00
Add: ACE	-	-	-53.08	12.64
Closing Capital Cost	-	-	613.00	625.64
Average Capital Cost	-	-	639.54	619.32
Asset-5B				
Opening Capital Cost	-	-	1087.03	1114.16
Add: ACE	-	-	27.13	63.58
Closing Capital Cost	-	-	1114.16	1177.74
Average Capital Cost	-	-	1100.59	1145.95
Asset-5C				
Opening Capital Cost	-	-	685.19	655.49
Add: ACE	-	-	-29.70	49.50
Closing Capital Cost	-	-	655.49	704.99
Average Capital Cost	-	-	670.34	680.24



Debt-Equity Ratio

47. Clauses 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. 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.

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 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.”

48. Considering the details of debt and equity as on COD as submitted by the petitioner, the debt-equity ratio as on COD works out to 70:30 and the same is allowed. Further, the admitted ACE has been considered in the debt-equity ratio of 70:30, subject to truing up. Accordingly, the details of debt-equity considered in respect of the assets under consideration,



subject to truing up, is as under:

(₹ in lakh)			
Particulars	%	As on COD	As on 31.03.2019
Asset-1			
Debt	70.00	1217.01	1753.79
Equity	30.00	521.58	751.62
Total	100.00	1738.59	2505.41
Asset-2			
Debt	70.00	2398.53	3270.05
Equity	30.00	1027.94	1401.45
Total	100.00	3426.47	4671.50
Asset-3A			
Debt	70.00	2474.78	1531.18
Equity	30.00	1060.62	656.22
Total	100.00	3535.40	2187.40
Asset-3B			
Debt	70.00	215.08	161.51
Equity	30.00	92.18	69.22
Total	100.00	307.25	230.72
Asset-4A			
Debt	70.00	36.73	45.90
Equity	30.00	15.74	19.67
Total	100.00	52.48	65.57
Asset-4B			
Debt	70.00	305.04	352.46
Equity	30.00	130.73	151.05
Total	100.00	435.78	503.51
Asset-5A			
Debt	70.00	466.26	437.95
Equity	30.00	199.83	187.69
Total	100.00	666.08	625.64
Asset-5B			
Debt	70.00	760.92	824.42
Equity	30.00	326.11	353.32
Total	100.00	1087.03	1177.74
Asset-5C			
Debt	70.00	479.64	493.50
Equity	30.00	205.56	211.50
Total	100.00	685.19	704.99



Return on equity

49. 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:

Rate of pre-tax return on equity = 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.”

50. The petitioner has claimed RoE considering rate of 19.610% after grossing up the RoE of 15.5% (base rate) with MAT rate of 20.961% in terms of 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.

51. 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.

52. ROE has been computed at the rate of 19.610% for the period 2014-19 after grossing up the ROE with MAT rate in terms of the above Regulations. 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. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity. This is however subject to truing up based on the actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, ROE has been allowed, subject to truing up, as under:

Particulars	(₹ in lakh)			
	2015-16	2016-17	2017-18	2018-19
Asset-1				
Opening Equity	521.58	531.83	611.39	751.62
Addition due to ACE	10.25	79.57	140.23	0.00
Closing Equity	531.83	611.39	751.62	751.62
Average Equity	526.70	571.61	681.51	751.62
Return on Equity (Pre-tax)	* 54.18	112.09	133.64	147.39



Asset-2				
Opening Equity	-	1027.94	1135.50	1322.07
Addition due to ACE	-	107.56	186.57	79.38
Closing Equity	-	1135.50	1322.07	1401.45
Average Equity	-	1081.72	1228.79	1361.76
Return on Equity (Pre-tax)	-	* 94.15	240.97	267.04
Asset-3A				
Opening Equity	-	-	1060.62	635.76
Addition due to ACE	-	-	-424.86	20.46
Closing Equity	-	-	635.76	656.22
Average Equity	-	-	848.19	645.99
Return on Equity (Pre-tax)	-	-	* 55.60	126.68
Asset-3B				
Opening Equity	-	-	-	92.18
Addition due to ACE	-	-	-	-22.96
Closing Equity	-	-	-	69.22
Average Equity	-	-	-	80.70
Return on Equity (Pre-tax)	-	-	-	* 11.88
Asset-4A				
Opening Equity	-	-	15.74	15.74
Addition due to ACE	-	-	0.00	3.93
Closing Equity	-	-	15.74	19.67
Average Equity	-	-	15.74	17.71
Return on Equity (Pre-tax)	-	-	* 1.03	3.47
Asset-4B				
Opening Equity	-	-	-	130.73
Addition due to ACE	-	-	-	20.32
Closing Equity	-	-	-	151.05
Average Equity	-	-	-	140.89
Return on Equity (Pre-tax)	-	-	-	* 20.74
Asset-5A				
Opening Equity	-	-	199.83	183.90
Addition due to ACE	-	-	-15.92	3.79
Closing Equity	-	-	183.90	187.69
Average Equity	-	-	191.86	185.80
Return on Equity (Pre-tax)	-	-	* 34.53	36.43
Asset-5B				
Opening Equity	-	-	326.11	334.25
Addition due to ACE	-	-	8.14	19.07
Closing Equity	-	-	334.25	353.32
Average Equity	-	-	330.18	343.78
Return on Equity (Pre-tax)	-	-	* 37.61	67.42
Asset-5C				
Opening Equity	-	-	205.56	196.65



Addition due to ACE	-	-	-8.91	14.85
Closing Equity	-	-	196.65	211.50
Average Equity	-	-	201.10	204.07
Return on Equity (Pre-tax)	-	-	* 3.35	40.02

* pro-rata

Interest on loan

53. Regulation 26 of the 2014 Tariff Regulations 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 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 decapitalisation 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 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.”



54. In terms of the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:

(i) Gross normative loan of ₹1217.01 lakh, ₹2398.53 lakh, ₹2474.78 lakh, ₹215.08 lakh, ₹36.73 lakh, ₹305.04 lakh, ₹466.26 lakh, ₹760.92 lakh and ₹479.64 lakh has been considered as on COD of Asset-1, Asset-2, Asset-3A, Asset-3B, Asset-4A, Asset-4B, Asset-5A, Asset-5B and Asset-5C, respectively.

(ii) The gross opening loan as on COD as stated at Form-9C is at variance with the amount of loan used for computing the IDC as shown at "Statement showing IDC Discharged upto DOCO". Further, the petitioner has not furnished the applicable rate of interest for loans carrying floating rates. Accordingly, for the present the weighted average rate of interest as claimed by the petitioner has been considered, subject to truing up, for the purpose of tariff.

(iii) The normative repayment for the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for that period.

55. Based on the above, interest on loan has been calculated, subject to truing up, as follows:



(₹ in lakh)

Particulars	2015-16	2016-17	2017-18	2018-19
Asset-1				
Gross Normative Loan	1217.01	1240.93	1426.59	1753.79
Cumulative Repayment upto previous Year	0.00	58.30	178.91	322.71
Net Loan-Opening	1217.01	1182.63	1247.68	1431.08
Addition due to ACE	23.92	185.65	327.20	0.00
Repayment during the year	58.30	120.61	143.80	158.59
Net Loan-Closing	1182.63	1247.68	1431.08	1272.49
Average Loan	1199.82	1215.16	1339.38	1351.78
Weighted Average Rate of Interest	8.969%	8.846%	8.745%	8.747%
Interest on Loan	* 56.45	107.50	117.13	118.25
Asset-2				
Gross Normative Loan	-	2398.53	2649.50	3084.83
Cumulative Repayment upto previous Year	-	0.00	101.30	360.58
Net Loan-Opening	-	2398.53	2548.20	2724.26
Addition due to ACE	-	250.98	435.33	185.21
Repayment during the year	-	101.30	259.27	287.33
Net Loan-Closing	-	2548.20	2724.26	2622.14
Average Loan	-	2473.36	2636.23	2673.20
Weighted Average Rate of Interest	-	8.825%	8.749%	8.745%
Interest on Loan	-	* 96.87	230.64	233.76
Asset-3A				
Gross Normative Loan	-	-	2474.78	1483.44
Cumulative Repayment upto previous Year	-	-	0.00	59.82
Net Loan-Opening	-	-	2474.78	1423.62
Addition due to ACE	-	-	-991.33	47.73
Repayment during the year	-	-	59.82	136.30
Net Loan-Closing	-	-	1423.62	1335.05
Average Loan	-	-	1949.20	1379.34
Weighted Average Rate of Interest	-	-	8.140%	8.150%
Interest on Loan	-	-	* 53.03	112.42
Asset-3B				
Gross Normative Loan	-	-	-	215.08
Cumulative Repayment upto previous Year	-	-	-	0.00
Net Loan-Opening	-	-	-	215.08
Addition due to ACE	-	-	-	-53.57
Repayment during the year	-	-	-	12.78
Net Loan-Closing	-	-	-	148.72
Average Loan	-	-	-	181.90
Weighted Average Rate of Interest	-	-	-	8.288%
Interest on Loan	-	-	-	* 11.32
Asset-4A				
Gross Normative Loan	-	-	36.73	36.73
Cumulative Repayment upto previous Year	-	-	0.00	1.11



Net Loan-Opening	-	-	36.73	35.62
Addition due to ACE	-	-	0.00	9.16
Repayment during the year	-	-	1.11	3.74
Net Loan-Closing	-	-	35.62	41.05
Average Loan	-	-	36.18	38.34
Weighted Average Rate of Interest	-	-	7.996%	7.995%
Interest on Loan	-	-	* 0.97	3.07
Asset-4B				
Gross Normative Loan	-	-	-	305.04
Cumulative Repayment upto previous Year	-	-	-	0.00
Net Loan-Opening	-	-	-	305.04
Addition due to ACE	-	-	-	47.41
Repayment during the year	-	-	-	22.32
Net Loan-Closing	-	-	-	330.14
Average Loan	-	-	-	317.59
Weighted Average Rate of Interest	-	-	-	7.879%
Interest on Loan	-	-	-	* 18.78
Asset-5A				
Gross Normative Loan	-	-	466.26	429.10
Cumulative Repayment upto previous Year	-	-	0.00	37.16
Net Loan-Opening	-	-	466.26	391.95
Addition due to ACE	-	-	-37.16	8.85
Repayment during the year	-	-	37.16	39.20
Net Loan-Closing	-	-	391.95	361.59
Average Loan	-	-	429.10	376.77
Weighted Average Rate of Interest	-	-	8.226%	8.156%
Interest on Loan	-	-	* 32.39	30.73
Asset-5B				
Gross Normative Loan	-	-	760.92	779.91
Cumulative Repayment upto previous Year	-	-	0.00	40.46
Net Loan-Opening	-	-	760.92	739.45
Addition due to ACE	-	-	18.99	44.51
Repayment during the year	-	-	40.46	72.54
Net Loan-Closing	-	-	739.45	711.41
Average Loan	-	-	750.18	725.43
Weighted Average Rate of Interest	-	-	8.228%	8.208%
Interest on Loan	-	-	* 35.85	59.54
Asset-5C				
Gross Normative Loan	-	-	479.64	458.85
Cumulative Repayment upto previous Year	-	-	0.00	3.60
Net Loan-Opening	-	-	479.64	455.24
Addition due to ACE	-	-	-20.79	34.65
Repayment during the year	-	-	3.60	43.06
Net Loan-Closing	-	-	455.24	446.83



Average Loan	-	-	467.44	451.04
Weighted Average Rate of Interest	-	-	8.047%	8.020%
Interest on Loan	-	-	* 3.19	36.17

* pro-rata

Depreciation

56. Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

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) 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.

(4) 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."



57. The depreciation has been calculated annually based on Straight Line Method at the rates specified in **Appendix-II** of the 2014 Tariff Regulations. Based on the above, the depreciation has been considered and allowed, subject to truing up, as under:

(₹ in lakh)				
Particulars	2015-16	2016-17	2017-18	2018-19
Asset-1				
Average Capital Cost	1755.68	1905.37	2271.70	2505.41
Rate of Depreciation	6.3300%	6.3300%	6.3300%	6.3300%
Depreciable Value	1580.11	1714.83	2044.53	2254.87
Remaining Depreciable Value	1580.11	1656.53	1865.62	1932.16
Depreciation	* 58.30	120.61	143.80	158.59
Asset-2				
Average Capital Cost	-	3605.74	4095.96	4539.20
Rate of Depreciation	-	6.3300%	6.3300%	6.3300%
Depreciable Value	-	3245.16	3686.36	4085.28
Remaining Depreciable Value	-	3245.16	3585.06	3724.70
Depreciation	-	* 101.30	259.27	287.33
Asset-3A				
Average Capital Cost	-	-	2827.30	2153.30
Rate of Depreciation	-	-	6.3300%	6.3300%
Depreciable Value	-	-	2544.57	1937.97
Remaining Depreciable Value	-	-	2544.57	1878.15
Depreciation	-	-	* 59.82	136.30
Asset-3B				
Average Capital Cost	-	-	-	268.99
Rate of Depreciation	-	-	-	6.3300%
Depreciable Value	-	-	-	242.09
Remaining Depreciable Value	-	-	-	242.09
Depreciation	-	-	-	* 12.78
Asset-4A				
Average Capital Cost	-	-	52.48	59.02
Rate of Depreciation	-	-	6.3300%	6.3300%
Depreciable Value	-	-	47.23	53.12
Remaining Depreciable Value	-	-	47.23	52.01
Depreciation	-	-	* 1.11	3.74
Asset-4B				
Average Capital Cost	-	-	-	469.64
Rate of Depreciation	-	-	-	6.3300%



Depreciable Value	-	-	-	422.68
Remaining Depreciable Value	-	-	-	422.68
Depreciation	-	-	-	* 22.32
Asset-5A				
Average Capital Cost	-	-	639.54	619.32
Rate of Depreciation	-	-	6.3300%	6.3300%
Depreciable Value	-	-	575.59	557.39
Remaining Depreciable Value	-	-	575.59	520.24
Depreciation	-	-	* 37.16	39.20
Asset-5B				
Average Capital Cost	-	-	1100.59	1145.95
Rate of Depreciation	-	-	6.3300%	6.3300%
Depreciable Value	-	-	990.53	1031.35
Remaining Depreciable Value	-	-	990.53	990.89
Depreciation	-	-	* 40.46	72.54
Asset-5C				
Average Capital Cost	-	-	670.34	680.24
Rate of Depreciation	-	-	6.3300%	6.3300%
Depreciable Value	-	-	603.31	612.22
Remaining Depreciable Value	-	-	603.31	608.62
Depreciation	-	-	* 3.60	43.06

* pro-rata

Operation and Maintenance Expenses (O&M Expenses)

58. The petitioner has claimed O&M Expenses as under:

Name of Assets	(₹ in lakh)			
	2015-16	2016-17	2017-18	2018-19
Asset-1	* 73.43	144.50	149.30	154.26
Asset-2	-	* 123.12	285.07	294.54
Asset-3A	-	-	* 105.73	324.99
Asset-3B	-	-	-	* 20.19
Asset-4A	-	-	* 1.49	4.58
Asset-4B	-	-	-	* 27.55
Asset-5A	-	-	* 49.16	55.41
Asset-5B	-	-	* 52.01	92.12
Asset-5C	-	-	* 4.74	48.97

* pro-rata

59. Sub-clause (c) of clause (4) of Regulation 29 of the 2014 Tariff Regulations provides as follows:



“The operation and maintenance expenses of communication system forming part of inter-state transmission system shall be derived on the basis of the actual O&M expenses for the period of 2008-09 to 2012-13 based on audited accounts excluding abnormal variations if any after prudence check by the Commission. The normalized O&M expenses after prudence check, for the years 2008-09 to 2012-13 shall be escalated at the rate of 3.02% for computing base year expenses for FY 2012-13 and 2013-14 and at the rate of 3.32% for escalation from 2014-15 onwards.”

60. The petitioner has submitted that O&M Expenses for the period 2014-19 has been calculated @ 7.5% of the capital cost in line with order dated 9.5.206 in Petition No.139/2005 for NRULDC (communication portion) with escalation of 3.32% per annum in line with 2014 Tariff Regulations.

61. However, in the absence of actual O&M expense details, the O&M Expenses for periods 2015-16, 2016-17, 2017-18 and 2018-19 are not being considered for the purpose of tariff, subject to furnishing of actual O&M Expenses details at the time of truing up.

62. 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.

63. As regards impact of wage revision, we would like to clarify that any



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

Interest on Working Capital (IWC)

64. 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)(c)(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”

“(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;”

65. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner’s entitlement to interest thereon are discussed hereunder:

(i) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.



(ii) **Maintenance spares**

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

(iii) **O & M expenses**

O&M expenses have been considered for one month as a component of working capital.

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

The rate of interest on working capital, considered is as under:

Name of Assets	SBI Base Rate as on 1st April of the year of COD	Margin over Base Rate	Rate of interest on working capital
Asset-1	10.00%	350 bps	13.50%
Asset-2	9.30%	350 bps	12.80%
Asset-3A	9.10%	350 bps	12.60%
Asset-3B	8.70%	350 bps	12.20%
Asset-4A	9.10%	350 bps	12.60%
Asset-4B	8.70%	350 bps	12.20%
Asset-5A	9.10%	350 bps	12.60%
Asset-5B	9.10%	350 bps	12.60%
Asset-5C	9.10%	350 bps	12.60%

66. The interest on working capital, subject to truing up, has been worked out and allowed as under:

Particulars	(₹ in lakh)			
	2015-16	2016-17	2017-18	2018-19
Asset-1				
Maintenance Spares	0.00	0.00	0.00	0.00
O&M expenses	0.00	0.00	0.00	0.00
Receivables	28.80	58.01	67.28	72.33
Total	28.80	58.01	67.28	72.33
Interest on Working Capital	* 3.89	7.83	9.08	9.76



Asset-2				
Maintenance Spares	-	0.00	0.00	0.00
O&M expenses	-	0.00	0.00	0.00
Receivables	-	49.78	124.47	134.22
Total	-	49.78	124.47	134.22
Interest on Working Capital	-	* 6.37	15.93	17.18
Asset-3A				
Maintenance Spares	-	-	0.00	0.00
O&M expenses	-	-	0.00	0.00
Receivables	-	-	28.68	63.91
Total	-	-	28.68	63.91
Interest on Working Capital	-	-	* 3.61	8.05
Asset-3B				
Maintenance Spares	-	-	-	0.00
O&M expenses	-	-	-	0.00
Receivables	-	-	-	6.12
Total	-	-	-	6.12
Interest on Working Capital	-	-	-	* 0.75
Asset-4A				
Maintenance Spares	-	-	0.00	0.00
O&M expenses	-	-	0.00	0.00
Receivables	-	-	0.53	1.75
Total	-	-	0.53	1.75
Interest on Working Capital	-	-	* 0.07	0.22
Asset-4B				
Maintenance Spares	-	-	-	0.00
O&M expenses	-	-	-	0.00
Receivables	-	-	-	10.52
Total	-	-	-	10.52
Interest on Working Capital	-	-	-	* 1.28
Asset-5A				
Maintenance Spares	-	-	0.00	0.00
O&M expenses	-	-	0.00	0.00
Receivables	-	-	17.72	18.11
Total	-	-	17.72	18.11
Interest on Working Capital	-	-	* 2.23	2.28
Asset-5B				
Maintenance Spares	-	-	0.00	0.00
O&M expenses	-	-	0.00	0.00
Receivables	-	-	19.39	33.96
Total	-	-	19.39	33.96
Interest on Working Capital	-	-	* 2.44	4.28
Asset-5C				
Maintenance Spares	-	-	0.00	0.00



O&M expenses	-	-	0.00	0.00
Receivables	-	-	1.73	20.30
Total	-	-	1.73	20.30
Interest on Working Capital	-	-	* 0.22	2.56

* pro-rata

Annual Transmission charges

67. In view of the above, the transmission charges allowed for the instant assets are as follows:

(₹ in lakh)

Asset-1				
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	58.30	120.61	143.80	158.59
Interest on Loan	56.45	107.50	117.13	118.25
Return on Equity	54.18	112.09	133.64	147.39
Interest on Working Capital	3.89	7.83	9.08	9.76
O&M Expenses	0.00	0.00	0.00	0.00
Total	172.82	348.03	403.66	434.00

(₹ in lakh)

Asset-2			
Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	101.30	259.27	287.33
Interest on Loan	96.87	230.64	233.76
Return on Equity	94.15	240.97	267.04
Interest on Working Capital	6.37	15.93	17.18
O&M Expenses	0.00	0.00	0.00
Total	298.70	746.81	805.32

(₹ in lakh)

Asset-3A		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	59.82	136.30
Interest on Loan	53.03	112.42
Return on Equity	55.60	126.68
Interest on Working Capital	3.61	8.05
O&M Expenses	0.00	0.00
Total	172.06	383.45



(₹ in lakh)

Asset-3B	
Particulars	2018-19 (pro-rata)
Depreciation	12.78
Interest on Loan	11.32
Return on Equity	11.88
Interest on Working Capital	0.75
O&M Expenses	0.00
Total	36.72

(₹ in lakh)

Asset-4A		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	1.11	3.74
Interest on Loan	0.97	3.07
Return on Equity	1.03	3.47
Interest on Working Capital	0.07	0.22
O&M Expenses	0.00	0.00
Total	3.18	10.49

(₹ in lakh)

Asset-4B	
Particulars	2018-19 (pro-rata)
Depreciation	22.32
Interest on Loan	18.78
Return on Equity	20.74
Interest on Working Capital	1.28
O&M Expenses	0.00
Total	63.12

(₹ in lakh)

Asset-5A		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	37.16	39.20
Interest on Loan	32.39	30.73
Return on Equity	34.53	36.43
Interest on Working Capital	2.23	2.28
O&M Expenses	-	-
Total	106.32	108.65



(₹ in lakh)

Asset-5B		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	40.46	72.54
Interest on Loan	35.85	59.54
Return on Equity	37.61	67.42
Interest on Working Capital	2.44	4.28
O&M Expenses	0.00	0.00
Total	116.37	203.77

(₹ in lakh)

Asset-5C		
Particulars	2017-18 (pro-rata)	2018-19
Depreciation	3.60	43.06
Interest on Loan	3.19	36.17
Return on Equity	3.35	40.02
Interest on Working Capital	0.22	2.56
O&M Expenses	0.00	0.00
Total	10.37	121.81

Filing fee and the publication expenses

68. 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.

License fee and RLDC Fees and Charges

69. The petitioner has prayed to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents.



We are of the view that the petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 of the 2014 Tariff Regulations.

Goods and Services Tax

70. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. The petitioner has submitted that the Commission should allow to recover GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. We are of the view that petitioner's prayer is premature.

Sharing of Transmission Charges

Central Portion (i.e. for Asset-1, Asset-2, Asset-3A, Asset-3B, Asset-5A, Asset-5B and Asset-5C):

71. 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.

State Portion (i.e. for Asset-4A and Asset-4B):

72. The billing, collection and disbursement of the transmission charges



approved shall be borne by the Respondent No. 2 (MPPTCL).

73. This order disposes of Petition No. 5/TT/2018.

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(P. K. Pujari)
Chairperson

