# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

**Petition No. 324/TT/2020** 

Coram:

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

Date of Order: 30.11.2021

#### In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of the 2009-14 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, truing-up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Asset-1: 400 kV S/C Uri-I-Uri-II inter connector transmission line along with Bays at NHPC, Asset-2: 400 kV S/C Uri-II-Wagoora Transmission line along with Bays at Wagoora Sub-station and Asset-3: 400 kV 80 MVAR Bus reactor at Kishenpur Sub-station under "URI-II HEP Transmission System" in Northern Region.

#### And in the matter of:

Power Grid Corporation of India Limited, "Saudamini", Plot No. 2, Sector 29, Gurgaon-122001, Haryana

....Petitioner

Vs

- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur – 302005 (Rajasthan),
- Ajmer Vidyut Vitran Nigam Limited,
   132 KV, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur-302017 (Rajasthan)
- Jaipur Vidyut Vitran Nigam Limited,
   132 KV, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar,



# Jaipur-302017 (Rajasthan)

- Jodhpur Vidyut Vitran Nigam Limited,
   132 KV, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar,
   Jaipur-302017 (Rajasthan)
- Himachal Pradesh State Electricity Board,
   Vidyut Bhawan, Kumar House Complex Building II,
   Shimla-171004 (Himachal Pradesh),
- 6. Punjab State Electricity Board, The Mall, Patiala-147001 (Punjab)
- 7. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula- 134109 (Haryana),
- 8. Power Development Department, Government of Jammu & Kashmir, Mini Secretariat, Jammu,
- Uttar Pradesh Power Corporation Limited, (Formerly Uttar Pradesh State Electricity Board), Shakti Bhawan, 14, Ashok Marg, Lucknow - 226001 (Uttar Pradesh),
- Delhi Transco Limited, Sadan, Kotla Road, New Delhi-110002,
- BSES Yamuna Power Limited, BSES Bhawan, Nehru Place, New Delhi-110092,
- BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi-110019,
- Tata Power Delhi Distribution Limited (TPDDL),
   33 kV Substation Building,
   Hudson Lane, Kingsway Camp,
   North Delhi 110009
- Chandigarh Administration, Sector -9, Chandigarh



15. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road,

Dehradun (Uttarakhand)

North Central Railway,
 Allahabad (Uttar Pradesh)

17. New Delhi Municipal Council,

Palika Kendra, Sansad Marg, New Delhi-110002

...Respondents

For Petitioner : Shri S.S. Raju, PGCIL

Shri D.K. Biswal, PGCIL

Shri Ved Prakash Rastogi, PGCIL

Shri A.K. Verma, PGCIL

For Respondents : None

**ORDER** 

The instant petition has been filed by the Petitioner, Power Grid Corporation of

India Limited, a deemed transmission licensee, for truing-up of the transmission tariff

for the period from COD to 31.3.2009 under the Central Electricity Regulatory

Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred

to as "the 2009 Tariff Regulations"), truing up of the transmission tariff for the 2014-19

tariff period under Central Electricity Regulatory Commission (Terms and Conditions

of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations")

and determination of transmission tariff for the period from 1.4.2019 to 31.3.2024

under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff)

Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect

of the following assets (hereinafter referred to as "the transmission assets") under

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"URI-II HEP Transmission System" in Northern Region (hereinafter referred to as "the transmission project):

**Asset-1**: 400 kV S/C Uri-I-Uri-II interconnector Transmission line along with Bays at NHPC;

**Asset-2**: 400 kV S/C Uri-II-Wagoora Transmission line along with Bays at Wagoora Sub-station; and **Asset-3**: 400 kV 80 MVAR Bus reactor at Kishenpur Sub-station.

#### 2. The Petitioner has made the following prayers in this petition:

- "1) Approve the trued up Transmission Tariff for 2009-14 for the assets covered under this petition, as per para 13 and 14 above.
- 2) 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 Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 17.1 and 21.2 above for respective block.
- 3)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.
- 4) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 5)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 beneficiaries.
- 6) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential Interest On Working Capital on that security expenses.
- 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is withdrawn from negative list at any time 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 Hon'ble 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 (I.A.) for the transmission project was accorded by the Board of Directors of the Petitioner company vide letter dated 27.10.2006 at an estimated cost of ₹ 23825 lakh, including IDC of ₹ 2085 lakh based on 2<sup>nd</sup> quarter, 2006 price level. Subsequently, approval for the Revised Cost Estimate for the transmission system was accorded by the Board of Directors of the Petitioner vide Memorandum dated 24.9.2012 at ₹ 27467 lakh, including IDC of ₹ 3347 lakh based on April, 2012 price level.
  - b) Further, the Board of Directors of the Petitioner Company vide letter dated 20.1.2017 accorded investment approval for the Revised Cost Estimate of the transmission project in its 336<sup>th</sup> meeting held on 6.12.2016 at an estimated cost of ₹ 27328 lakhs including IDC of ₹ 3339 lakh based on April, 2016 price level.
  - c) The Scope of the work as per I.A. is as follows:

#### **Transmission lines:**

- (i) 400 kV S/C Uri-II-Wagoora transmission line
- (ii) 400 kV D/C Uri-I-Uri-II transmission line

#### **Sub-stations:**

- (i) 1 No 400 kV bay at Wagoora
- (ii) 1 No 400 kV bay at Uri-II
- (iii) 1 No 400 kV Bus reactor bay at Kishenpur
- d) The complete scope of the work is covered in the instant petition. The date of Commercial operation (COD) of the assets covered in the instant petition is as follows:

Particulars Particulars	COD					
Asset-1: 400 kV S/C Uri-I-Uri-II interconnector	1.1.2012					
Transmission line along with Bays at NHPC.						
Asset-2: 400 kV S/C Uri-II-Wagoora Transmission line	1.1.2012					
along with Bays at Wagoora Sub-station.						



Asset-3: 400 kV 80 MVAR Bus reactor at Kishenpur Sub-	1.6.2012
station.	

- e) The tariff for 2009-14 period was granted from COD to 31.3.2014 vide order dated 24.12.2013 in Petition No. 91/TT/2011 for Asset-1; vide order dated 24.3.2013 in Petition No. 145/TT/2011 for Asset-2; and order dated 19.8.2014 in Petition No. 93/TT/2012 for Asset-3.
- f) The trued-up tariff of 2009-14 tariff period and tariff for 2014-19 tariff in respect of the transmission assets was allowed by the Commission vide order dated 15.3.2016 in Petition No. 562/TT/2014.
- g) AFC based on the Capital Cost as on 31.3.2014 allowed by the Commission vide order dated 15.3.2016 in Petition No. 562/TT/2014 in respect of the transmission assets is as follows:

(in ₹ lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 15.3.2016 in Petition No. 562/TT/2014		4494.17	4370.36	4246.54	4123.03

- h) Vide order dated 15.3.2016 in Petition No. 562/TT/2014, the capital cost of Asset-1 was restricted to ₹ 8707.54 lakh as per the FR cost in the absence of Revised Cost Estimates (RCE). Review Petition No. 30/RP/2017 was filed by the Petitioner seeking review and modification of the order dated 15.3.2016 in Petition No. 562/TT/2014. Vide order dated 28.9.2017 in Review Petition No. 30/RP/2017, the Commission granted the liberty of considering the Capital cost of Asset-1 for revision at the time of truing up of tariff for 2014-19 period on the basis of RCE approved cost. The relevant extract of the order is as follows:
  - "3. We have considered the submissions of PGCIL. The apportioned cost of Asset-1 in Petition No. 562/TT/2014 and of Assets I and II in Petition No. 313/TT/2015 was restricted approved apportioned cost in the FR. With the approval of RCE in both the transmission schemes, the completion cost of the above said assets is within the RCE approved apportioned cost. In the RCE, the expenditure legitimately incurred is included after the payments are settled by PGCIL. Therefore, needs to be considered to recover the actual cost incurred in tariff since the beneficiaries have enjoyed the benefits of the said assets. Accordingly we are view that the capital cost allowed for Asset-1 in Petition No. 562/TT/2014 and Assets I and II in Petition No. 313/TT/2015 are required to be revised so that PGCIL is able to recover its cost.



- 4. We notice that there has been considerable delay in filing these review petitions, PGCIL has submitted that the delay has occurred due to the time taken by the Board of Directors of PGCIL for approving the RCE. We are not satisfied with the reasons given for condonation of delay. Since RCE would have been otherwise considered at the time of truing up, we condone the delay in the filing of the review petitions as an exception.
- 5. The capital cost of the assets covered in the instant petition will be considered for revision at the time of truing up of the 2014-19 tariff on the basis RCE approved apportioned cost subject to prudence check and after taking into account the justification for the increase in the capital cost.
- 6. Accordingly, Petition No. 30/RP/2017 and 31/RP/2017 are disposed at the stage of admission."
- 4. The Petitioner has submitted RCE in the instant true up petition and requested to reopen the capital cost allowed as on 31.3.2014. We observe that vide order dated 28.9.2017 in Review Petition No. 30/RP/2017, the Commission had decided that the capital cost of the transmission assets covered in the Review Petition will be considered for revision (based on RCE) at the time of truing up of the 2014-19 tariff. The tariff for 2009-14 tariff period in respect of Asset-2 and Asset-3 has already been trued up and, therefore, the Petitioner's prayer for reopening of tariff for 2009-14 period has not been considered. However, RCE has been taken into consideration for revision of capital cost for the 2014-19 period as decided in the order dated 28.9.2017 in Review Petition No. 30/RP/2017.
- 5. The Respondents are distribution licensees, power departments, power utilities and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Northern Region.
- 6. The Petitioner has served the petition on the Respondents and notice of this application has also been published in the newspapers in accordance with Section 64 of the Electricity Act 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the aforesaid



notices published in the newspapers by the Petitioner. None of the Respondents have filed their reply in the matter.

- 7. The hearing in this matter was held on 22.6.2021 through video conference and the order was reserved.
- 8. Having heard the representatives of the Petitioner and having perused the materials on record, we proceed to dispose of the petition.
- 9. This order is issued considering the submissions made by the Petitioner in the petition and affidavit dated 14.6.2021.

# Truing-up of Annual Fixed Charges for the 2014-19 tariff period

10. The details of the transmission charges claimed by the Petitioner for Combined Asset, after combining the transmission assets, is as follows:

(₹ in lakh)

Combined Asset							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	1388.84	1386.21	1387.51	1395.28	1402.28		
Interest on Loan	1359.53	1229.64	1103.28	981.66	861.42		
Return on Equity	1567.27	1571.52	1572.17	1580.87	1592.98		
Interest on working capital	111.13	108.57	106.11	104.11	102.21		
O & M Expenses	213.38	220.53	227.87	235.39	243.23		
Total	4640.15	4516.47	4396.94	4297.31	4202.12		

11. The details of the Interest on Working Capital claimed by the Petitioner in respect of the Combined Asset is as follows:

Combined Asset								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Maintenance Spares	17.78	18.38	18.99	19.62	20.27			
O&M Expenses	32.01	33.08	34.18	35.31	36.48			
Receivables	773.36	752.75	732.82	716.22	700.35			
Total	823.15	804.21	785.99	771.15	757.10			
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50			
Interest on Working Capital	111.13	108.57	106.11	104.11	102.21			



# **Capital Cost**

12. The Commission vide order dated 15.3.2016 in Petition No. 562/TT/2014 has allowed the following capital cost as on 31.3.2014 and ACE for 2014-19 tariff period for the transmission assets:

(₹ in lakh)

Asset	Apportioned approved Cost	Capital Cost (as on 1.3.2014)	ACE			Capital Cost (as on 31.3.201 9)
			2014-15	2015-19	Total	
Asset-1	8707.54	8707.54	0.00	0.00	0.00	8707.54
Asset-2	17864.76	17093.20	112.79	0.00	112.79	17205.99
Asset-3	894.23	794.32	94.11	0.00	94.11	888.43

13. The Petitioner in the instant true up petition has claimed Capital Cost as on COD and after adjusting initial spares and actual/ estimated additional capitalization incurred up to 31.3.2024 of assets covered in this petition is summarized as under:

(₹ in lakh)

Asset	Apportioned Cost	Cost as on							Total Cost			
as per RCE	DOCO	DOCO to 2012	2012- 13	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	Estimated 2019-20	0031	
Asset-1	9142.36	8616.33	115.58	69.30	37.13	0.00	0.00	0.00	252.84	0.00	0.00	9091.18
Asset-2	17262.50	14887.70	803.76	738	846.28	(209.8)	17.23	31.76	9.80	2.67	20.74	17148.08
Asset-3	922.68	657.46	0.00	20.19	117	93.11	0.00	0.00	0.00	0.00	0.00	887.76

14. In terms of the order dated 28.9.2017 in Review Petition No. 30/RP/2017, the Petitioner in the instant true up petition has submitted the Revised Cost Estimate of ₹ 27328 lakhs including IDC of ₹ 3339 lakh based on April, 2016 price level, for the transmission project, approved by the Petitioner's Board in its 336<sup>th</sup> meeting held on 6.12.2016. The Petitioner vide affidavit dated 14.6.2021 has submitted the apportionment of capital cost as per RCE and submitted the estimated completion cost and the same is as follows:

Asset	Apportioned Approved Cost as per FR	Apportioned Approved Cost as per RCE	Estimated Completion Cost
Asset-1	8707.54	9142.36	9091.18
Asset-2	17864.76	17262.50	17148.08
Asset-3	894.23	922.68	887.76

- 15. We have considered the submissions of the Petitioner. As compared to apportioned approved FR cost of ₹8707.54, the variation in estimated completion cost in respect of Asset-1 is about ₹383.64 lakhs. The Petitioner has revised the total apportioned approved cost as ₹9142.36 lakh (as per RCE) against the estimated completion cost of Asset-1 ₹9091.18 lakh. The completion cost is within the revised approved apportioned cost. Accordingly, the cost variation is allowed.
- 16. Accordingly, the Commission has considered ₹ 8758.91 as the Capital Cost of Asset-1 as on 1.4.2014 based on the Auditor's Certificate dated 30.7.2019. In respect of Assets-2 and Asset-3, the Commission has considered the trued-up capital cost approved vide order dated 15.3.2016 in Petition No. 562/TT/2014 as on 1.4.2014.
- 17. Accordingly, the capital cost considered by the Commission in respect of Asset-1, Asset-2 and Asset-3 as on 1.4.2014 is as follows:

	(₹ in lakh)
Assets	Admitted Capital Cost (as on 1.4.2014)
Asset-1	8758.91
Asset-2	17093.20
Asset-3	794.32

#### **Time Over-run**

18. The scheduled date of commercial operation (SCOD) of the transmission assets and the actual COD of the transmission assets was as follows:

Asset	SCOD	COD	Time over-run
1	16.6.2011	1.1.2012	7 months
2	16.6.2011	1.1.2012	7 months
3	16.6.2011	1.6.2012	12 months



19. The Commission vide order dated 24.12.2013 in Petition No. 91/TT/2011 had condoned time over-run in respect of Asset-1 and Asset-2. The Commission vide order dated 15.3.2016 in Petition No. 562/TT/2014 had condoned time over run in Asset-3.

# **Effective Date of Commercial Operation (E-COD)**

20. The Petitioner has claimed E-COD of the Combined Asset as 1.1.2012. Based on the trued-up admitted capital and the actual COD of the transmission assets, E-COD has been worked out as follows:

# **Combined Asset**

	Computation of Effective COD							
Assets	Actual COD	Admitted Capital Cost as on 1.4.2014  Weight of the cost (%)		Number of days from last COD	Weighted days			
Asset-1	1.1.2012	8758.91	32.87	152	49.96			
Asset-2	1.1.2012	17093.20	64.15	152	97.51			
Asset-3	1.6.2012	794.32	2.98	0	0.00			
		26646.43			147.47			
		Effective CC	D- 5.1.2012					

21. E-COD is used to determine the elapsed life of Combined Asset which works out to be as two (2) years as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD).

#### Weighted Average Life (WAL)

22. The life as defined in Regulation 27 of the 2014 Tariff Regulations has been considered for determination of WAL. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the project as a whole.



23. 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. The element-wise life as defined in the 2009 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 31 years for Combined Asset as follows:

Particulars	Admitted Capital Cost (as on 1.4.2014) (₹ in lakh) (a)	Life as per 2014 Tariff Regulation (Year) (b)	Weight c= (a) x (b)	Weighted Average Life of Asset (in years) (d)= (c)/(a)
Building	228.06	25	5701.61	
Transmission Line	16468.76	35	576406.55	
Substation	9124.20	25	228104.95	
PLCC	130.14	15	1952.10	
Leasehold land	695.27	25	17381.63	
Total	26646.43		829546.90	31.13 rounded off to 31 years

24. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e., for 2019-24 tariff period. No retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, E-COD of the Combined Asset is 5.1.2012 and lapsed life of the transmission project as a whole, works out as two (2) years as on 1.4.2014 (i.e., the number of completed years as on 1.4.2014 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2014 to be 29 years.

#### **Initial Spares**

25. The Petitioner has submitted that the initial spares under sub-station head worked out by considering the project as a whole is ₹486.86 lakhs and initial spares



under transmission line head worked out by considering the project as a whole is ₹224.66 lakhs. The Petitioner further submitted that the initial spares of ₹79.43 lakhs and ₹48.86 lakhs under sub-station head is reduced from the capital cost of the Asset-1 and Asset-2 and initial spares of ₹101.71 lakhs under transmission line. The Petitioner has prayed that restriction of initial spares may be considered as per the methodology laid down by the APTEL vide judgement dated 14.9.2019 in Appeal No. 74 of 2017.

26. We have considered the submissions of the Petitioner. The transmission assets covered in the transmission project are combined during 2014-19 tariff period and, hence, the initial spares are allowed on the basis of the overall project cost in the terms of the APTEL judgement dated 14.9.2019 in Appeal No. 74 of 2017.

#### **Sub-station**

(₹ in lakh)

Asset	Capital Cost/ P&M cost considered as on cut-off date	Initial Spares claimed ( ₹ in lakh)	Norms as per 2009 Tariff Regulations (%)	Initial Spares allowable as per 2009 Tariff	Initial Spares allowed during 2009-14	Initial Spares (additional) allowed on Combined
	(₹ in lakh)		. ,	Regulations	period	Asset
Asset-1	7088.77	324.76	3.50	245.33	245.33	
Asset-2	2655.23	158.09	3.50	90.57	90.57	18.68
Asset-3	888.43	4.01	2.50	22.69	4.01	
		486.86		358.56	339.91	

#### **Transmission Line**

Asset	Capital Cost/ P&M cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009Tariff Regulations (%)	Initial Spares allowable as per 2009 Tariff Regulations	Initial Spares allowed during 2009-14 period	Initial Spares (additional) allowed on Combined Asset
Asset-1	1780.40	0.00	0.75	13.45	0	
Asset-2	14492.85	224.66	0.75	109.64	109.64	13.45
		224.66		123.09	109.64	



27. Thus, in line with the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, additional initial spares are admissible. Accordingly, the capital cost considered for Combined Asset as on 1.4.2014 is as follows:

(₹ in lakh)

Combined Asset	Total Capital Cost (as on 1.4.2014)	Additional Initial Spares allowed (as on 1.4.2014) in terms of the APTEL's judgement dated 14.9.2019	Total Capital Cost (as on 1.4.2014)	
Combined	26646.43	32.13	26678.56	
Asset				

# Additional Capital Expenditure (ACE) during 2014-19.

28. The Commission vide order dated 15.3.2016 in Petition No. 562/TT/2014 had allowed ACE for the 2014-19 tariff period as under:

(₹ in lakh)

Combined	Additional Capital Expenditure						
Assets	2014-15	2015-16	2016-17	2017-18	2018-19		
	206.90	0.00	0.00	0.00	0.00		

29. The Petitioner in the instant true up petition has claimed the following net ACE in respect of the transmission assets and submitted Auditor's Certificate dated 30.7.2019 in support of its claim:

(₹ in lakh)

0	Additional Capital Expenditure					
Combined Asset	2014-15	2015-16	2016-17	2017-18	2018-19	
	-116.75	17.23	31.76	262.64	2.67	

30. The Petitioner vide affidavit dated 14.6.2021 has submitted that ACE claimed during 2014-19 period is on account of balance and retention payment for work executed prior to cut-off date and is covered under Regulation 14(1)(i) for the 2014-15 period and Regulation 14(3)(v) for the 2015-19 period of the 2014 Tariff Regulations. Further, ACE during 2019-20 for Asset-2 is also claimed by the Petitioner on account of balance and retention payment for works executed prior to cut-off date and is



covered under Regulation 25(1)(d) of the 2019 Tariff Regulations which is dealt in the relevant portion of this order.

31. Package-wise and vendor-wise breakup of ACE claimed during 2014-19 and 2019-24 periods is as under:

Asset-1

Year	Head	Add-cap ( ₹ In lakhs) (Balance & retention)	Party
2017-18	S/s	252.84	M/s NHPC

#### Asset-2

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Year	Head	Add-cap ( ₹ In lakhs)	Party
		(Balance & retention)	
2014-15	T/L	-209.86	Due to movement of Inventory
2015-16	T/L	17.23	VMS Services & various Misc.
			Small Parties
2016-17	T/L	31.76	Various Misc. Small Parties
2017-18	T/L	9.8	Various Misc. Small Parties
2018-19	T/L	2.67	Various Misc. Small Parties
2019-20	T/L	20.74	Various Misc. Small Parties

#### Asset-3

Year	Head	Add-cap (₹ In lakhs)	Party
		(Balance & retention)	
2014-15	S/s	93.11	OMICRON Energy Solutions Pvt.
			Ltd. and Various Misc. Small
			Parties

32. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date and Regulation 14(3)(v) of the 2014 Tariff Regulations on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date during 2015 to 2019 period. The details of ACE allowed are as follows:

					(₹ in lakh)
		ACE			Total ACE allowed
					(as on 31.3.2019)
2014-15	2015-16	2016-17	2017-18	2018-19	
	2010	1	10	2010 10	
-116.75	17.23	31.76	262.64	2.67	197.55
	0		=0=.0.	2.07	

33. It is observed that the Petitioner has deducted an amount of ₹209.86 lakhs due to movement of inventory but the Petitioner has not submitted the details of the same. The Petitioner is directed to submit the details of inventory at the time of truing up of 2019-24 period.

# Capital Cost for 2014-19 tariff period

34. Accordingly, the capital cost considered as on 31.3.2019 in respect of the Combined Asset for the 2014-19 period is as follows:-

						(₹ in lakh)
Capital Cost as on 1.4.2014	2014-15	2015-16	2016-17	2017-18	2018-19	Total Capital Cost as on 31.3.2019
26678.56	-116.75	17.23	31.76	262.64	2.67	26876.11

#### **Debt-Equity Ratio**

35. The Petitioner has considered the debt-equity ratio of 70:30 as on COD and for Additional Capitalization Expenditure post COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during the 2014-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of Debt-Equity ratio in respect of the Combined Asset as on the date of commercial operation and as on 31.3.2019 is as follows:

Funding-I	As on 31.3.2	2014	As on 31.3.2019		
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)	
Debt	18674.99	70.00	18813.28	70.00	
Equity	8003.57	30.00	8062.83	30.00	
Total	26678.56	100.00	26876.11	100.00	



# **Depreciation**

36. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is at Annexure-I. The depreciation for the 2014-19 period is trued-up for the transmission assets as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations and the same is as follows:

(₹ in lakh)

					/
Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	26678.56	26561.81	26579.04	26610.80	26873.44
Additional Capitalisation	-116.75	17.23	31.76	262.64	2.67
Closing Gross Block	26561.81	26579.04	26610.80	26873.44	26876.11
Average Gross Block	26620.18	26570.42	26594.92	26742.12	26874.77
Weighted Average Rate of Depreciation (WAROD) (%)	5.218	5.217	5.218	5.218	5.218
Balance useful life at the beginning of the year	29	28	27	26	25
Aggregated Depreciable Value	23958.16	23913.38	23935.43	24067.91	24187.29
Adjustment of cumulative depreciation pertaining to the de-capitalised asset	23.55	0.00	0.00	0.00	0.00
Cumulative depreciation at the end of the year	4345.25	5731.62	7119.29	8514.72	9917.17
Remaining Aggregated Depreciable Value at the end of the year	19589.36	18181.76	16816.14	15553.18	14270.13
Combined Depreciation during the year	1389.00	1386.37	1387.67	1395.44	1402.44

37. The details of depreciation allowed for the transmission assets vide order dated 15.3.2016 in Petition No. 562/TT/2014 as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.3.2016 in Petition No. 562/TT/2014	1392.96	1398.43	1398.43	1398.43	1398.43
As claimed by the Petitioner	1388.84	1386.21	1387.51	1395.28	1402.28
Approved after Truing Up	1389.00	1386.37	1387.67	1395.44	1402.44

# **Interest on Loan (IoL)**

- 38. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of interest applicable for the project to be claimed/ adjusted over a period of 5 years directly from the beneficiaries. We have considered the submissions of the Petitioner and calculated IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as detailed below: -
  - (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.
  - (ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.
- 39. The details of loL calculated are as follows:

Combined Asset								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Gross Normative Loan	18674.99	18593.27	18605.33	18627.56	18811.41			
Cumulative Repayments up to Previous Year	2979.80	4345.25	5731.62	7119.29	8514.72			
Net Loan-Opening	15695.19	14248.02	12873.71	11508.27	10296.69			
Addition due to Additional Capitalization	-81.73	12.06	22.23	183.85	1.87			
Repayment during the year	1389.00	1386.37	1387.67	1395.44	1402.44			
Adjustment of cumulative repayment pertaining to the de-capitalised asset	23.55	0.00	0.00	0.00	0.00			
Net Loan-Closing	14248.02	12873.71	11508.27	10296.69	8896.11			
Average Loan	14971.60	13560.86	12190.99	10902.48	9596.40			
Weighted Average Rate of Interest on Loan (in %)	9.076	9.063	9.044	8.997	8.969			
Interest on Loan	1358.86	1228.97	1102.59	980.96	860.71			



40. The details of IoL allowed for the transmission assets vide order dated 15.3.2016 in Petition No. 562/TT/2014 as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.3.2016 in Petition No. 562/TT/2014	1362.76	1243.06	1116.22	989.23	862.30
As claimed by the Petitioner	1359.53	1229.64	1103.28	981.66	861.42
Approved after Truing Up	1358.86	1228.97	1102.59	980.96	860.71

# **Return on Equity (RoE)**

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

Year	Claimed effective tax (%)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
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

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

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed-up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758



- 43. The Petitioner also requested to allow it to claim the differential tariff on account of the trued-up RoE based on effective rate calculated on completion of Income tax assessment/ reassessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided under the 2014 Tariff Regulations.
- 44. Accordingly, RoE allowed for the transmission assets is as follows:

(₹ in lakh)

Combined Asset								
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19			
Opening Equity	8003.57	7968.54	7973.71	7983.24	8062.03			
Addition due to Additional Capitalization	-35.03	5.17	9.53	78.79	0.80			
Closing Equity	7968.54	7973.71	7983.24	8062.03	8062.83			
Average Equity	7986.05	7971.12	7978.47	8022.63	8062.43			
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500			
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549			
Rate of Return on Equity(Pre-tax)	19.610	19.705	19.705	19.705	19.758			
Return on Equity (Pre-tax)	1566.06	1570.71	1572.16	1580.86	1592.97			

45. The details of RoE allowed for the transmission assets vide order dated 15.3.2016 in Petition No. 562/TT/2014 as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.3.2016 in Petition No. 562/TT/2014	1570.71	1576.80	1576.80	1576.80	1576.80
As claimed by the Petitioner	1567.27	1571.52	1572.17	1580.87	1592.98
Approved after truing up	1566.06	1570.71	1572.16	1580.86	1592.97

# Operation & Maintenance Expenses (O&M Expenses)

46. The details of the O&M Expenses for the Combined Asset claimed by the Petitioner are as follows:

Combined Asset						
Particulars 2014-15 2015-16 2016-17 2017-18 2018-19						
Sub-station bays						
400 kV GIS Wagoora URI II Bay	1	1	1	1	1	



400 kV GIS URI I - URI II Bay	1	1	1	1	1
400 kV Kishanpur: BR Bay	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV (GIS)	51.54	53.25	55.02	56.84	58.73
400 kV (AIS)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M	163.38	168.80	174.41	180.19	186.17
AC Lines					
AC Twin Conductor Single Circuit	105.480	105.480	105.480	105.480	105.480
Uri II Wagoora Line	103.400	103.400	103.400	105.400	103.400
AC Twin Conductor Double	10.456	10.456	10.456	10.456	10.456
Circuit Uri I Uri-II Line	10.430	10.430	10.430	10.430	10.430
Norm (₹ lakh/ KM)					
S/C (Twin/Triple Conductor)	0.404	0.418	0.432	0.446	0.461
D/C (Twin/Triple Conductor)	0.707	0.731	0.755	0.780	0.806
Total AC Lines O&M	50.01	51.73	53.46	55.20	57.05
Total O&M Expenses	213.39	220.53	227.87	235.39	243.22

- 47. The Petitioner has submitted that there is no additional bay constructed for Asset-3 and bus reactor was charged using Isolator and existing bay and the Commission vide order dated 15.3.2016 in Petition No. 562/TT/2014 had not allowed any O&M for Asset-3. However, inadvertently one number of 400 kV bay has been claimed in Asset-3 in the instant petition. There, it has prayed to condone the inadvertent error in this regard and allow transmission tariff considering nil O&M expenses for Asset-3.
- 48. We have considered the submissions of the Petitioner. The Petitioner inadvertently claimed O&M for Asset-III. Therefore, we are not allowing O&M expenses in respect of Asset-III. The total allowable O&M Expenses for the Combined Asset have been worked out and allowed are as follows:-

Combined Asset							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Sub-station bays							
400 kV GIS Wagoora URI II Bay	1	1	1	1	1		
400 kV GIS URI I- URI II Bay	1	1	1	1	1		
Norm (₹ lakh/bay)							
400 kV (GIS)	51.54	53.25	55.02	56.84	58.73		
Total Sub-station O&M	103.08	106.50	110.04	113.68	117.46		



AC Lines					
AC Twin Conductor Single Circuit	105.480	105.480	105.480	105.480	105.480
Uri II Wagoora Line (KM)	105.460	105.460	105.460	105.460	105.460
AC Twin Conductor Double	10.456	10.456	10.456	10.456	10.456
Circuit Uri I Uri-II Line (KM)	10.450	10.430	10.450	10.436	10.430
Norm (₹ lakh/ KM)					
S/C (Twin/Triple Conductor)	0.404	0.418	0.432	0.446	0.461
D/C (Twin/Triple Conductor)	0.707	0.731	0.755	0.780	0.806
Total AC Lines O&M	50.01	51.73	53.46	55.20	57.05
Total O&M Expenses	153.09	158.23	163.50	168.88	174.51

49. The details of O&M Expenses allowed for the Combined Asset vide order dated 15.3.2016 in Petition No. 562/TT/2014 as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.3.2016 in Petition No. 562/TT/2014	163.92	169.42	175.06	180.84	186.85
As claimed by the Petitioner	213.38	220.53	227.87	235.39	243.23
Approved after truing up	153.09	158.23	163.50	168.88	174.51

# **Interest on Working Capital (IWC)**

- 50. The Petitioner is entitled to claim interest on working capital as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:
  - i. Maintenance spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses specified in Regulation 28.

#### ii. O & M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

#### iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.



- iv. Rate of interest on working capital:
  Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.
- 51. The Interest on Working capital allowed for the transmission assets is as follows:

(₹ in lakh)

Combined Asset							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Working Capital for O&M Expenses (O&M Expenses for One month)	12.76	13.19	13.63	14.07	14.54		
Working Capital for Maintenance Spares (15% of O&M Expenses)	22.96	23.74	24.53	25.33	26.18		
Working Capital for Receivables (Equivalent to Two months of annual fixed cost /annual transmission charges)	762.46	741.56	721.41	704.43	688.17		
Total	798.18	778.49	759.56	743.83	728.89		
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50		
Interest of Working Capital	107.75	105.10	102.54	100.42	98.40		

52. The details of IWC allowed for the Combined Asset vide order dated 15.3.2016 in Petition No. 562/TT/2014 as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

				`	,
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated					
15.3.2016 in Petition No.	108.64	106.46	103.85	101.24	98.65
562/TT/2014					
As claimed by the Petitioner	111.13	108.57	106.11	104.11	102.21
Approved after truing up	107.75	105.10	102.54	100.42	98.40

# Approved Annual Fixed Charges for the 2014-19 Tariff Period

53. Accordingly, the annual fixed charges in respect of Combined Asset after truingup for the 2014-19 tariff period are as follows:

Combined Asset						
Particulars 2014-15 2015-16 2016-17 2017-18 2018-1						
Depreciation	1389.00	1386.37	1387.67	1395.44	1402.44	



Interest on Loan	1358.86	1228.97	1102.59	980.96	860.71
Return on Equity	1566.06	1570.71	1572.16	1580.86	1592.97
O & M Expenses	153.09	158.23	163.50	168.88	174.51
Interest on Working Capital	107.75	105.10	102.54	100.42	98.40
Total	4574.77	4449.38	4328.46	4226.55	4129.04

54. The details of AFC allowed for the transmission assets vide order dated 15.3.2016 in Petition No. 562/TT/2014, as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.3.2016 in Petition No. 562/TT/2014	4598.99	4494.17	4370.36	4246.54	4123.03
As claimed by the Petitioner	4640.15	4516.47	4396.94	4297.31	4202.12
Approved after truing up	4574.77	4449.38	4328.46	4226.55	4129.04

# **Determination of Annual Fixed Charges for the 2019-24 tariff period**

55. The Petitioner has claimed the following transmission charges in respect of the Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	1402.90	1403.45	1403.45	1403.45	1403.45
Interest on Loan	736.62	610.93	484.58	358.28	232.08
Return on Equity	1514.95	1515.54	1515.54	1515.54	1515.54
Interest on Working Capital	61.15	59.64	57.96	56.28	54.48
Operation and Maintenance	142.07	147.01	152.04	157.29	162.76
Total	3857.69	3736.57	3613.57	3490.84	3368.31

56. The Petitioner has claimed the following 'Interest on Working Capital' in respect of the Combined Asset for the 2019-24 tariff period:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	11.84	12.25	12.67	13.11	13.56
Maintenance Spares	21.31	22.05	22.81	23.59	24.41
Receivables	474.30	460.67	445.51	430.38	414.14
Total	507.45	494.97	480.99	467.08	452.11
Rate of Interest on working capital (in %)	12.10	12.10	12.10	12.10	12.10
Interest on Working Capital	61.15	59.64	57.96	56.28	54.48



# **Capital Cost**

- 57. Regulations 19(3) and 19(5) of the 2019 Tariff Regulations provide as follows:
  - "19 Additional Capitalization
  - (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 renovation and modernisation as admitted by this Commission in accordance with these regulations;
    - (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 upto 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.
  - (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."



58. The capital cost of ₹ 26876.11 lakh for the instant transmission asset has been considered as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

# **Additional Capital Expenditure (ACE)**

- 59. Regulation 24 of the 2019 Tariff Regulations provides as follows:
  - "24. Additional Capitalization 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."
- 60. Regulation 25 of the 2019 Tariff Regulations provides as follows:
  - "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."
- 61. The Petitioner has claimed ACE for the 2019-20 in respect of Asset-2 on account of balance and retention payment for work executed prior to cut-off date under Regulation 25(1)(d) of the 2019 Tariff Regulations.
- 62. ACE claimed in respect of Asset-2 on account of balance and retention payment for work is allowed in terms of Regulation 25(1)(d) of the 2019 Tariff Regulations, subject to true-up is as follows:

(₹ in lakh)

Particulars	Regulation	ACE (2019-24)
ACE to extent of Balance & Retention Payments and work deferred for execution before cut-off date/ after cut-off date	Regulation 25 (1) (d) of the 2019 Tariff Regulations	20.74

# Capital Cost for the 2019-24 tariff period

63. Accordingly, the capital cost of the Combined Asset considered for the 2019-24 tariff period, subject to truing-up, is as follows:

(₹ in lakh)

Capital Cost Allowed (as on 1.4.2019)	ACE (2019-24)	Total Estimated Completion Cost (as on 31.3.2024)
26876.11	20.74	26896.85

64. Against the overall apportioned approved capital cost as per RCE of ₹ 27327.54 lakhs, the estimated cost of the Combined Asset including Additional Capital



Expenditure is ₹ 26896.85 lakh which is within the apportioned approved cost as per

RCE. Therefore, there is no cost over-run as per the apportioned approved cost.

#### **Debt-Equity Ratio**

- 65. Regulation 18 of the 2019 Tariff Regulations provides as follows:
  - "18. Debt-Equity Ratio: (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."
- 66. The details of the debt-equity considered for the purpose of tariff for the 2019-24 tariff period are as follows:

(₹ in lakh)

Funding	Capital Cost (₹ in lakh) (as on 1.4.2019)	(in %)	Capital Cost (₹ in lakh) (as on 31.3.2024)	(in %)
Debt	18813.28	70.00	18827.80	70.00
Equity	8062.83	30.00	8069.05	30.00
Total	26876.11	100.00	26896.85	100.00

#### Depreciation

- 67. Regulations 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provide as follows:
  - "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 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:

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 of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that 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 thereof or 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."
- 68. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). WAROD has been worked out at Annexure-II after taking into account the depreciation rates of IT and non-IT assets as specified in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. 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 allowed for the transmission assets is as follows:

Combined Asset								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Opening Gross Block	26876.11	26896.85	26896.85	26896.85	26896.85			
Addition during 2019-24 due								
to Projected Additional	20.74	0.00	0.00	0.00	0.00			
Capitalisation								
Closing Gross Block	26896.85	26896.85	26896.85	26896.85	26896.85			
Average Gross Block	26886.48	26896.85	26896.85	26896.85	26896.85			
Weighted Average Rate of	5.218	5.218	5.218	5.218	5.218			
Depreciation (WAROD)(in %)	3.210	3.210	3.210	3.210	3.210			
Balance Useful life at the	24	23	22	21	20			
beginning of the year	27	20	22		20			
Aggregated Depreciable	24197.83	24207.16	24207.16	24207.16	24207.16			
Value	24107.00	24207.10	24207.10	24207.10	2-1207.10			
Combined Depreciation	1403.06	1403.61	1403.61	1403.61	1403.61			
during the year	1400.00	1403.01	1403.01	1400.01	1400.01			
Cumulative Depreciation	11320.23	12723.83	14127.44	15531.05	16934.66			
Remaining Aggregated	12877.60	11483.33	10079.72	8676.11	7272.51			
Depreciable Value Total	12077.00	11700.00	10019.12	0070.11	1212.01			



# **Interest on Loan (IoL)**

- 69. Regulation 32 of the 2019 Tariff Regulations provides as follows:
  - "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 decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of 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".
- 70. The weighted average rate of loL has been considered on the basis of the 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. In view of the above, loL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. loL allowed is as follows: -



(₹ in lakh)

<b>,</b>							
Combined Asset							
Particular	2019-20	2020-21	2021-22	2022-23	2023-24		
Gross Normative Loan	18813.28	18827.80	18827.80	18827.80	18827.80		
Cumulative Repayments up to Previous Year	9917.17	11320.23	12723.83	14127.44	15531.05		
Net Loan-Opening	8896.11	7507.57	6103.97	4700.36	3296.75		
Addition due to Additional Capitalization	14.52	0.00	0.00	0.00	0.00		
Repayment during the year	1403.06	1403.61	1403.61	1403.61	1403.61		
Net Loan-Closing	7507.57	6103.97	4700.36	3296.75	1893.14		
Average Loan	8201.84	6805.77	5402.16	3998.55	2594.95		
Weighted Average Rate of Interest on Loan (in %)	8.972	8.966	8.956	8.941	8.914		
Interest on Loan	735.90	610.19	483.83	357.52	231.30		

# **Return on Equity (RoE)**

- 71. Regulations 30 and 31 of the 2019 Tariff Regulations provide as follows:
  - "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 cutoff 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 rate 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:

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.

- (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 underrecovery 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."
- 72. RoE allowed for the instant asset under Regulation 30 of the 2019 Tariff Regulation is as follows:

Combined Asset											
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24						
Opening Equity	8062.83	8069.05	8069.05	8069.05	8069.05						
Addition due to Additional Capitalization	6.22	0.00	0.00	0.00	0.00						
Closing Equity	8069.05	8069.05	8069.05	8069.05	8069.05						



Average Equity	8065.94	8069.05	8069.05	8069.05	8069.05
Return on Equity (Base Rate)	15.500				
(in %)	13.300	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	1514.94	1515.53	1515.53	1515.53	1515.53

# **Operation & Maintenance Expenses (O&M Expenses)**

73. Regulations 35(3) and 35(4) of the 2019 Tariff Regulations provide as follows:

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

Norms for sub-station Bays (₹ Lakh per bay)						
Norms for sub-station Bays (₹ Lakh per bay)   765 kV	Particulars	2019-	2020-	2021-	2022-	2023-
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           Norms for Transformers (₹ Lakh per MVA)         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           Norms for AC and HVDC lines (₹ Lakh per km)         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 (Single Conductor)         0.252         0.260         0.270         0.279         0.289           Double Circuit (Single Conductor)         0.252         0.260         0.270         0.279         0.289           Double Circui	T articulars	20	21	22	23	24
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           Norms for Transformers (₹ Lakh per MVA)         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           Norms for AC and HVDC lines (₹ Lakh per km)         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 (Single Conductor)         0.252         0.260         0.270         0.279         0.289           Double Circuit (Single Conductor)         0.252         0.260         0.270         0.279         0.289           Double Circui	Norms for sub-station Bays (₹ Lakh per ba	ıy)			1	
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         Norms for Transformers (₹ Lakh per MVA)       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         Norms for AC and HVDC lines (₹ Lakh per km)       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)       0.503       0.521       0.509       0.837       0.867         Single Circuit (Single Conductor)       0.252       0.260       0.270       0.279       0.289         Double Circuit (Bundled conductor with four or more sub-conductors)       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			46.60	48.23	49.93	51.68
132 kV and below       16.08       16.64       17.23       17.83       18.46         Norms for Transformers (₹ Lakh per MVA)       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         Norms for AC and HVDC lines (₹ Lakh per km)       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 (Twin & Triple Conductor)       0.881       0.912       0.944       0.977       1.011         Double Circuit (Single Conductor)       0.881       0.912       0.944       0.977       1.011         Double Circuit (Single Conductor)       0.377	400 kV	32.15	33.28	34.45	35.66	36.91
Norms for Transformers (₹ Lakh per MVA)         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           Norms for AC and HVDC lines (₹ Lakh per km)         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 (Single Conductor)         0.252         0.260         0.270         0.279         0.289           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 (Single Conductor)         0.377         0.391	220 kV	22.51	23.30	24.12	24.96	25.84
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           Norms for AC and HVDC lines (₹ Lakh per km)         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-conductors)         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.	132 kV and below	16.08	16.64	17.23	17.83	18.46
400 kV       0.358       0.371       0.384       0.398       0.411         220 kV       0.245       0.254       0.263       0.272       0.282         Norms for AC and HVDC lines (₹ Lakh per km)       0.245       0.254       0.263       0.272       0.282         Norms for AC and HVDC lines (₹ Lakh per km)       0.254       0.263       0.272       0.282         Norms for AC and HVDC lines (₹ Lakh per km)       0.881       0.912       0.944       0.977       1.011         Single Circuit (Bundled Conductor with four sub-conductors)       0.881       0.912       0.944       0.977       1.011         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-conductors)       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)       0.377       0.391       0.404       0.419       0.433         Multi Circuit (Twin & Triple Conductor)       1.	Norms for Transformers (₹ Lakh per MVA)					
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         Norms for AC and HVDC lines (₹ Lakh per km)       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-conductors)       1.322       1.368       1.416       1.466       1.517         Double Circuit (Single 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 <t< td=""><td>765 kV</td><td>0.491</td><td>0.508</td><td>0.526</td><td>0.545</td><td>0.564</td></t<>	765 kV	0.491	0.508	0.526	0.545	0.564
132 kV and below         0.245         0.254         0.263         0.272         0.282           Norms for AC and HVDC lines (₹ Lakh per km)         0.881         0.912         0.944         0.977         1.011           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-conductors)         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)         1.544         1.598         1.654         1.713         1.773           Norms for HVDC stations <td< td=""><td>400 kV</td><td>0.358</td><td>0.371</td><td>0.384</td><td>0.398</td><td>0.411</td></td<>	400 kV	0.358	0.371	0.384	0.398	0.411
Norms for AC and HVDC lines (₹ Lakh per km)           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-conductors)         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           Norms for HVDC stations         HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834<	220 kV	0.245	0.254	0.263	0.272	0.282
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-conductors)         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           Norms for HVDC stations         1.544         884         894         925         958	132 kV and below	0.245	0.254	0.263	0.272	0.282
six or more sub-conductors)         0.881         0.912         0.944         0.977         1.011           Single Circuit (Bundled 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-conductors)         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           Norms for HVDC stations         834         864         894         925         958	Norms for AC and HVDC lines (₹ Lakh per	r km)				
Six or more sub-conductors)         0.755         0.781         0.809         0.837         0.867           Single Circuit (Single 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-conductors)         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           Norms for HVDC stations         HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834         864         894         925         958		0.881	0.012	0.044	0.077	1 011
four sub-conductors)         0.785         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-conductors)         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           Norms for HVDC stations         1.544         1.598         1.654         1.713         1.773           HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834         864         894         925         958	six or more sub-conductors)	0.001	0.912	0.944	0.977	1.011
Single Circuit (Twin & Triple Conductor)   0.503   0.521   0.539   0.558   0.578   0.578	,	0.755	0.781	0.800	0.837	0.867
Conductor)         0.503         0.521         0.539         0.538         0.578           Single Circuit (Single Conductor)         0.252         0.260         0.270         0.279         0.289           Double Circuit (Bundled conductor)         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           Norms for HVDC stations         1.544         884         894         925         958           HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834         864         894         925         958	,	0.700	0.701	0.003	0.007	0.007
Single Circuit (Single Conductor)   0.252   0.260   0.270   0.279   0.289		0.503	0.521	0.539	0.558	0.578
Double Circuit (Bundled conductor with four or more sub-conductors)         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           Norms for HVDC stations         1.544         884         884         884         925         958           HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834         864         894         925         958	,					
with four or more sub-conductors)       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         Norms for HVDC stations       HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)       834       864       894       925       958		0.252	0.260	0.270	0.279	0.289
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           Norms for HVDC stations         HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834         864         894         925         958		1.322	1.368	1.416	1.466	1.517
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           Norms for HVDC stations         HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834         864         894         925         958	,	0.881	0.012	0 011	0.077	1 011
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         Norms for HVDC stations       HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)       834       864       894       925       958	,					_
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         Norms for HVDC stations       HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)       834       864       894       925       958		0.377	0.391	0.404	0.419	0.433
Multi Circuit (Twin & Triple Conductor)  Norms for HVDC stations  HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)  1.544 1.598 1.654 1.713 1.773	<b>\</b>	2 319	2 401	2 485	2 572	2 662
Conductor)         1.544         1.598         1.654         1.713         1.773           Norms for HVDC stations         HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)         834         864         894         925         958	,	2.070	2.707	2.700	2.072	2.002
Norms for HVDC stations  HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)  834  864  894  925  958	•	1 544	1 598	1 654	1 713	1 773
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)  834  864  894  925  958	,		7,000	77007		
per 500 MW) (Except Gazuwaka BTB) 834 864 894 925 958						
per 500 MW) (Except Gazuwaka BTB)		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	Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913



Particulars	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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."

# 74. The Petitioner has claimed O&M Expenses for the 2019-24 tariff period as under:

(₹ in lakh)

	Combine	d Asset			III Iakiij
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station bays					
400 kV GIS Wagoora URI II Bay	1	1	1	1	1
400 kV GIS URI I- URI II Bay	1	1	1	1	1
400 kV Kishanpur: BR Bay	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV (GIS)	22.51	23.30	24.12	24.96	25.84
400 kV (AIS)	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M	77.16	79.87	82.68	85.58	88.58
AC Lines					
AC Twin Conductor Single Circuit	105.480	105.480	105.480	105.480	105.480
Uri II Wagoora Line	100.100	100.100	100.100	100.100	100.100
AC Twin Conductor Double	10.456	10.456	10.456	10.456	10.456
Circuit Uri I Uri-II Line	10.100	10.100	10.100	10.100	10.100
Norm (₹ lakh/ KM)					
S/C (Twin/Triple Conductor)	0.503	0.521	0.539	0.558	0.578
D/C (Twin/Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Total AC O&M	62.27	64.49	66.72	69.07	71.54
Communication System (PLCC)					
Project Cost (₹ in lakh)	131.54	131.54	131.54	131.54	131.54
Norm (in %)	2.00	2.00	2.00	2.00	2.00
O&M Expenses PLCC	2.63	2.63	2.63	2.63	2.63
Total O&M Expenses	142.07	147.01	152.04	157.29	162.76

75. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for Sub-station have



been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

76. The O&M Expenses allowed for the Combined Asset in the instant petition are as under:

(₹ in lakh)

	Combine	d Asset			
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station bays					
400 kV GIS Wagoora URI II Bay	1	1	1	1	1
400 kV GIS URI I- URI II Bay	1	1	1	1	1
Norm (₹ lakh/bay)					
400 kV (GIS)	22.51	23.30	24.12	24.96	25.84
Total Sub-station O&M	45.01	46.59	48.23	49.92	51.67
AC Lines					
AC Twin Conductor Single Circuit	105.48	105.48	105.48	105.48	105.48
Uri II Wagoora Line	105.40	105.40	105.40	103.40	105.40
AC Twin Conductor Double	10.456	10.456	10.456	10.456	10.456
Circuit Uri I Uri-II Line	10.430	10.430	10.430	10.430	10.430
Norm (₹ lakh/ KM)					
S/C (Twin/Triple Conductor)	0.50	0.52	0.54	0.56	0.58
D/C (Twin/Triple Conductor)	0.88	0.91	0.94	0.98	1.01
Total AC & HVDC Lines O&M	62.27	64.49	66.72	69.07	71.54
Total O&M Expenses	107.28	111.08	114.95	119.00	123.21

# **Interest on Working Capital (IWC)**

- 77. Regulations 34(1)(c), 34(3) and 34(4) and 3(7) of the 2019 Tariff Regulations specify as follows:
  - "34. Interest on Working Capital:
  - (1) The working capital shall cover:
  - (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
    - (i) Receivables equivalent to 45 days of annual 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. Definition In these regulations, unless the context otherwise requires:-
- (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;"
- 78. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the bank rate as on 1.4.2019.
- 79. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, Rol for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points), whereas Rol for 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest thereon allowed for the transmission asset are as under:

Combined Asset									
Particulars 2019-20 2020-21 2021-22 2022-23 2023-24									
Working Capital for O&M 8.94 9.26 9.58 9.92 10.27									



Expenses					
(O&M expenses for One month)					
Working Capital for					
Maintenance Spares	16.09	16.66	17.24	17.85	18.48
(15% of O&M expenses)					
Working Capital for					
Receivables (Equivalent to 45	469.77	455.49	439.76	424.50	408.14
days of annual fixed cost /	409.77	455.49			400.14
annual transmission charges)					
Total	494.80	481.41	466.58	452.26	436.89
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on working capital	59.62	54.16	48.99	47.49	45.87

# **Annual Fixed Charges for the 2019-24 Tariff Period**

80. The various components of the annual fixed charges for the Combined Asset for the 2019-24 tariff period are summarized as follows:

(₹ in lakh)

Combined Asset										
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24					
Depreciation	1403.06	1403.61	1403.61	1403.61	1403.61					
Interest on Loan	735.90	610.19	483.83	357.52	231.30					
Return on Equity	1514.94	1515.53	1515.53	1515.53	1515.53					
Operation and Maintenance	107.28	111.08	114.95	119.00	123.21					
Interest on Working Capital	59.62	54.16	48.99	47.49	45.87					
Total	3820.80	3694.57	3566.91	3443.14	3319.52					

# Filing Fee and Publication Expenses

- 81. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses.
- 82. 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 and RLDC Fees and Charges**

83. 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**

84. 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 Respondents 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.

85. We have considered the submission of the Petitioner. Since, GST is not levied on transmission services at present, we are of the view that Petitioner's prayer is premature.

# **Security Expenses**

86. The Petitioner has submitted that security expenses in respect of transmission assets/ Combined Asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

87. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. accordingly, the Petitioner's prayer in the instant petition for allowing it

to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

#### **Capital Spares**

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

#### **Sharing of Transmission Charges**

89. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

#### 90. To summarise:

a) The trued-up Annual Fixed Charges approved for the Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

Combined Asset										
Particulars 2014-15 2015-16 2016-17 2017-18 2018-19										
AFC	4574.77	4449.38	4328.46	4226.55	4129.04					

b) The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in the instant order are as follows:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	3820.80	3694.57	3566.91	3443.14	3319.52

- 91. Annexure-I and Annexure-II given hereinafter shall form part of the order.
- 92. This order disposes of Petition No. 324/TT/2020 in terms of the above discussions and findings.

sd/-sd/-(P. K. Singh)(I. S. Jha)(P. K. Pujari)MemberMemberChairperson

2014-19
Combined
Annexure-I

Asset -

True-Up (₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)			ACE 2014-19			Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Rate of Depreciation (%)	Α	Annual Depreciation as per Regulations (₹ in lakh)			
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building	228.06	0.00	0.00	0.00	0.00	0.00	228.06	3.34	7.62	7.62	7.62	7.62	7.62
Transmission Line	16482.21	-116.75	17.23	31.76	9.80	2.67	16426.92	5.28	867.18	864.55	865.84	866.94	867.27
Sub Station	9142.88	0.00	0.00	0.00	252.84	0.00	9395.72	5.28	482.74	482.74	482.74	489.42	496.09
PLCC	130.14	0.00	0.00	0.00	0.00	0.00	130.14	6.33	8.24	8.24	8.24	8.24	8.24
Leasehold Land	695.27	0.00	0.00	0.00	0.00	0.00	695.27	3.34	23.22	23.22	23.22	23.22	23.22
IT Equipment & Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00
Total	26678.56	-116.75 17.23 31.76 262.64 2.67					26876.11		1389.00	1386.37	1387.67	1395.44	1402.44
Weighted Average Rate of Depreciation (%)						5.22%	5.22%	5.22%	5.22%	5.22%			
Average Gross Blo	ock (₹ in lakh)								26620.18	26570.42	26594.92	26742.12	26874.77



2019-24

Combined Asset - Determination

Annexure-II
(₹ lakh)

		ACE 2019-24			Annual Depreciation as per Regulations (₹ in lakh)				
Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	2019-20	Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (%)	2019-20	2020-21	2021-22	2022-23	2023-24
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building	228.06	0.00	228.06	3.34	7.62	7.62	7.62	7.62	7.62
Transmission Line	16426.92	20.74	16447.66	5.28	867.89	868.44	868.44	868.44	868.44
Sub Station	9395.72	0.00	9395.72	5.28	496.09	496.09	496.09	496.09	496.09
PLCC	130.14	0.00	130.14	6.33	8.24	8.24	8.24	8.24	8.24
Leasehold Land	695.27	0.00	695.27	3.34	23.22	23.22	23.22	23.22	23.22
IT Equipment & Software	0.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00
Total	26876.11	20.74	26896.85		1403.06	1403.61	1403.61	1403.61	1403.61
Weighted Average Rate of Depreciation (%)					5.22%	5.22%	5.22%	5.22%	5.22%
Average Gross Block (₹ in lakh)						26896.85	26896.85	26896.85	26896.85

